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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

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I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina 28801.

William H. Haggard

Director, National Climatic Center

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

JANUARY 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

Lucius W. Dye, Climatologist

HIGHLIGHTS:

1. January averaged warmer than normal from the Pacific Northwest to New England; colder than normal elsewhere.

2. The variety of weather included snow, sleet, freezing rain, freezing drizzle, gales in the Far West, blizzards in the Great Plains, and tornadoes in the South.

TEMPERATURE--January temperatures averaged warmer than normal from the Pacific Northwest to New England. Northern Montana averaged more than 8° warmer than normal. In the central and eastern portions of the Nation the Missouri River and the Ohio River seemed to mark the boundary between the positive and negative departures. The western slope of the Central Rocky Mountains was intensely cold, averaging 6° to 12° colder than normal. In general, cold weather persisted over almost the entire Nation during the first half of January. The "January thaw" came in the third week. The last week was cold southwest of a line from Portland, Oreg., to Mobile, Ala., and mild northeast of that line.

PRECIPITATION--Stormy weather persisted over much of the Nation in the first week of January. Variable weather occurred in the second week. It included rain along the Pacific Coast early in the week, snow flurries in the Great Lakes Region, and mixtures of snow, sleet, freezing rain, and freezing drizzle over much of the South at midweek, and more rain in the Pacific Northwest with snow in the higher elevations and light to heavy rainshowers over the Deep South at midmonth. Gales accompanied heavy precipitation in the Far West in the third week of January. At midweek, snow began over the central and southern Rocky Mountains and continued through the rest of the week. Another Pacific storm brought more rain to the western coast. Freezing rain fell in the central Great Plains, and tornadoes and severe thunderstorms occurred from Texas to Arkansas and Mississippi. The last week of January was stormy along the Pacific Coast. Heavy snow fell shortly after midweek from the Pecos River to the Hill Country in Texas. Precipitation spread eastward. Snow fell in the Northeast, blizzards occurred in the Great Plains, and a few tornadoes struck central Florida.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

JANUARY 1973

STATE	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	2 Stations	76	18+	2 Stations	9	13+	Geneva	10.95	Mobile WSO AP	1.96
Alaska	2 Stations	50	28+	Tok	-68	17+	Little Port Walter	17.99	Barrow WSO AP	.07
Arizona	Tucson Univ of Arizona	85	14	Fredonia	-20	6	Fredonia	D 3.44	2 Stations	.00
Arkansas	2 Stations	75	19+	Gravette	- 4	12	Arkansas City	7.77	Subiaco	2.75
California	3 Stations	85	14+	Bodie	-19	5	Strawberry Valley	27.24	5 Stations	.00
Colorado	2 Stations	69	15	3 Stations	-36	11+	Mesa Lakes	3.00	2 Stations	T
Connecticut	Colchester 2 W	65	18	Falls Village	-10	30	Prospect	5.85	Hartford WSO AP	3.28
Delaware	Milford 2 WSW	68	19	Wilmgton Porter Resvr	10	9	Wilmgton Porter Resvr	5.08	Newark University Farm	1.55
Florida	Canal Point USDA	89	6	Fountain 3 SSE	17	30	Chipley 3 E	8.97	Miami Bayfront Park	1.42
Georgia	Folkston 9 SW	82	4	Blairsville Exp Sta	8	14	Morgan 5 NW	13.12	Quitman 2 SW	3.10
Hawaii	Lualualei 804, Oahu	90	23	Mauna Loa Slope Obs, Hawaii	28	30	Paakea 350, Maui	17.32	Mauna Kea Obs 111.2,Hawaii	.00
Idaho	Grangeville 11 SE	60	15	Island Park Dam	-38	4	Deadwood Dam	5.56	Challis	.14
Illinois	2 Stations	66	26+	Stockton	- 6	9	Brookport Dam 52	4.25	Moweaqua	.67
Indiana	4 Stations	66	19+	2 Stations	- 2	11+	Shoals Hiway 50 Bridge	3.04	Auburn 2 SSE	1.11
Iowa	3 Stations	59	25+	Sanborn	-23	9	Ottumwa FAA AP	3.27	Cherokee	.52
Kansas	2 Stations	68	18+	4 Stations	-14	9+	Thayer	5.48	Leoti 2 S	.10
Kentucky	4 Stations	69	19+	Monticello	- 1	12+	Murray	5.77	Mount Sterling	D 1.00
Louisiana	2 Stations	78	18+	Many	13	12	Bienville 3 NE	10.66	2 Stations	2.36
Maine	2 Stations	58	20	Squa Pan Dam	-35	10+	Jonesboro	5.65	Bingham Wyman Dam	1.93
Maryland	2 Stations	69	17+	2 Stations	0	13+	Cambridge 4 W	4.23	Westernport UPRC	1.86
Massachusetts	Chester 2	68	18	Chester 2	-20	31	New Salem	5.58	Secreganset	1.15
Michigan	East Lansing 3 SE	61	18	2 Stations	-32	7	Tahquamenon Falls Park	D 3.53	Saint Charles	.39
Minnesota	Pine River Dam	57	25	Tower 3 S	-46	8	Austin 3 S	3.68	8 Stations	T
Mississippi	2 Stations	76	22+	2 Stations	11	13	Greenwood	12.40	Bay Saint Louis	2.24
Missouri	2 Stations	69	26+	Edgerton	-15	9	Bloomfield	5.71	Conception	1.08
Montana	Geraldine	68	15	2 Stations	-39	9	Troy 18 N	3.93	15 Stations	.00
Nebraska	4 Stations	66	16+	Agate 3 E	-30	9	Roca	2.86	Alma	.10
Nevada	Lathrop Wells 16 SSE	75	14	North Fork 13 N	-26	3	Mount Rose-Sky Tavern	5.68	Mina	.12
New Hampshire	2 Stations	62	18	Colebrook 2 E	-38	9	Mount Washington	11.74	Gilmanton 2 E	2.19
New Jersey	2 Stations	67	19	Newton	- 1	8	Greenwood Lake	6.53	2 Stations	2.87
New Mexico	Jal	73	19+	Eagle Nest	-19	11	Sandia Crest	3.72	Grenville	T
New York	New York Laurel Hill	67	18	Old Forge	-32	9	Hooker 4 N	6.66	Troupsburg 4 NE	.52
North Carolina	Elizabethtown Lock 2	77	22	Transou	- 8	13	Lake Toxaway 2 SW	9.21	Clayton 3 W	1.90
North Dakota	Medora	58	24	Upham 3 N	-35	9+	Forbes 9 NNW	.75	5 Stations	.00
Ohio	Ironton	69	18	Chardon	- 4	8	Clarington Lock 14	3.13	Ottawa NWR	.84
Oklahoma	2 Stations	73	15	Taloga	-11	12	Grove	5.22	Kenton	.49
Oregon	Pilot Rock 1 SE	66	16	Ukiah	-23	9+	Port Orford 5 E	19.93	Alkali Lake	.16
Pennsylvania	Waynesburg 1 E	74	1	3 Stations	- 5	11+	Long Pond 2 W	6.61	Greenville	.38
Puerto Rico & VI	San Sebastian 2 WNW, P.R.	95	26+	Adjuntas Substation, P.R.	48	15	Pico Del Este, P.R.	8.84	2 Stations	.00
Rhode Island	Providence WSO AP	64	1	North Scituate 4 W	- 2	31	Kingston	4.01	Block Island WSO AP	2.30
South Carolina	McClellanville	77	22	Longcreek 1 N	10	30	Caesars Head 1 NE	6.99	Woodruff	2.95
South Dakota	Fort Meade	70	24	2 Stations	-33	9	Wagner	1.43	3 Stations	T
Tennessee	Newport 1 NW	76	1	Mountain City No 2	- 8	13	Bolivar Wtr Wks	6.42	Rogersville 1 NE	1.40
Texas	Encinal 3 NW	90	21	Lipscomb	-10	12	Valley Junction	8.77	Bakersfield	.12
Utah	2 Stations	57	14	Soldier Creek	-41	5	Alta	4.87	Garrison	T
Vermont	Rutland	60	19	2 Stations	-35	10+	Mount Mansfield	8.17	Montpelier FAA AP	1.31
Virginia	Grundy	76	2	2 Stations	- 7	13+	Woolwine 4 S	4.12	Clinchco	.58
Washington	Walla Walla WSO CI	67	15	Mazama	-22	7	Forks 1 E	21.52	Ellensburg	.23
West Virginia	2 Stations	78	1	Canaan Valley	- 9	13	Richwood	D 4.35	Bluefield FAA AP	.84
Wisconsin	Milwaukee N Side	59	26	Drummond 6 W	-41	7	Sturgeon Bay Exp Farm	2.26	Viroqua	.34
Wyoming	2 Stations	65	15	Bondurant 3 NW	-41	5	Bondurant 3 NW	3.00	3 Stations	T

+ And also on an earlier date or dates.

NOTE: Dates in the above table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See indivdual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

METRIC UNITS

JANUARY 1973

State and Station	Elevation ground	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Ice pellets				Fastest mile (1 6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear 0 3	Partly cloudy 4-7	Cloudy 8 10		
ALABAMA	M	Mb	Mb.	C	C	C	C	C		C				C	%	Mm	Mm.	Mm			Mm	Mm	M p.s.		M.p s							%
BIRMINGHAM	189	998.0	1021.0	10.1	- 0.5	4.8	- 3.2	20.6	18	-10.0	13	0	18	- 0.6	70	174	46	43	10	3	T	0	0.5	1	16.1	SE	21	8	3	20	7.0	43
HUNTSVILLE	190	997.6	1021.4	9.5	- 0.6	4.4	- 1.6	20.6	18	- 8.9	13	0	17	- 0.6	73	161	28	41	10	1	5	T	0.5	3	14.3	21	18	9	4	18	6.5	
MOBILE	64	1011.9	1020.1	15.6	5.0	10.3	- 1.4	22.8	3	- 5.6	13	0	7	5.6	77	50	- 68	10	12	2	T	T	1.1	2	15.6	21	21	9	2	20	6.9	
MONTGOMERY	56	1013.2	1020.8	13.6	2.2	7.9	- 1.0	23.3	18	- 6.7	13	0	12	1.7	68	96	- 7	37	13	3	T	0	0.9	34	13.0	W	28	8	6	17	6.5	48
ALASKA												B															B					
ANCHORAGE	35	1001.0	1006.2	-11.9	-20.4	-16.2	- 5.1	3.9	28	-32.8	26+	0	31	-18.3	78	18	- 2	6	9	0	206	406	1.2	1	13.9	15	28	9	8	14	6.2	55
ANNETTE	34	1003.1	1007.0	3.4	- 2.1	0.7	- 0.7	7.8	22	- 7.8	10+	0	23	- 2.8	77	248	- 40	47	21	0	523	127	1.8	13	17.9	14	22+	7	2	22	7.5	
BARROW	9			-21.9	-28.7	-25.3	1.5	- 3.3	8+	-41.7	30	0	31			2	- 3	1	4	0	18	178			16.5	23	6					
BARTER ISLAND	12	1009.8	1011.9	-20.6	-28.7	-24.6	2.5	0.6	5+	-42.2	23	0	31	-27.8	75	9	- 1	8	4	0	94	305	3.9	25	23.2	27	29					
BETHEL	38	1004.7	1010.7	-15.7	-24.6	-20.2	- 4.4	2.2	7	-43.3	21	0	31	-22.8	77	20	- 9	9	10	0	292	152	0.6	15	18.3	18	28	13	3	15	5.3	
BETTLES	196			-26.5	-36.5	-31.5		- 0.6	8	-53.3	18	0	31			87		36	13	0	1417	1803			13.0	22	29	10	4	17	6.3	
BIG DELTA	386			-22.3	-31.6	-26.9		1.7	29+	-47.8	14	0	31			5			4	0	155											
COLD BAY	29	1003.7	1007.3	- 2.2	- 7.9	- 5.1	- 2.7	10.0	28	-18.9	21	0	30	- 7.2	82	50	- 9	14	15	0	269	178	1.3	6	24.1	16	27+	3	6	22	7.7	
FAIRBANKS	133	995.9	1014.5	-23.6	-32.2	-27.9	- 3.9	0.6	29	-46.1	16	0	31	-32.8	65	11	- 11	5	7	0	361	483	0.3	33	10.3	27	29	6	8	17	7.3	
GULKANA	479			-21.5	-31.0	-26.3		1.1	29	-48.3	17+	0	31			10		3	5	0	119	178			15.6	6	13	4	10	17	6.9	
HOMER	20			- 7.4	-15.1	-11.2		5.6	28	-26.1	25+	0	30			21	- 31	6	11	0	244	229			11.2	14	28	11	6	14	5.5	
JUNEAU	4	1005.8	1006.7	- 3.7	-10.8	- 7.3	- 3.4	4.4	22	-22.2	15	0	31	-10.6	76	111	9	28	19	0	1621	660	1.7	10	14.3	12	22	7	2	22	7.5	33
KING SALMON	15	1006.4	1008.5	-12.1	-21.5	-16.8	- 6.4	5.6	28	-36.1	22	0	30	-21.7	66	16	- 11	6	7	0	76	102	1.7	3	17.4	17	28	16	5	10	4.2	
KODIAK	34			- 2.9	- 7.8	- 5.4	4.9	5.6	7	-18.9	25+	0	27			8	-119	5	5	0	48	25			24.6	32	29	14	4	13	5.1	
KOTZEBUE	3	1009.1	1009.6	-19.6	-26.9	-23.2	- 2.3	1.1	7	-40.0	25+	0	31			45	35	12	11	0	607	889	4.1	12	21.9	11	31+	11	5	15	6.0	
MC GRATH	105	999.3	1013.1	-21.9	-33.9	-27.9	- 5.2	4.4	28+	-51.7	21	0	30			32	T	12	9	0	340	406	0.1	27	8.0	18	28	16	3	12	4.6	
NOME	4	1008.1	1009.0	-16.1	-25.3	-20.7	- 5.4	1.7	7	-39.4	21	0	31			43	17	18	14	0	500	381	2.5	12	17.4	11	31	11	1	19	6.2	54
ST. PAUL ISLAND	7	1006.1	1007.0	- 2.0	- 7.9	- 4.9	- 1.3	3.9	1	-17.8	20	0	29	- 7.2	83	45	- 1	8	24	0	330	178	1.9	8	22.8	20	31	3	11	17	7.7	
SHEMYA	37	998.6	1002.4	0.2	- 3.2	- 1.5	- 1.1	3.9	3	-12.2	7	0	25	- 4.4	79	33	- 31	14	21	0	157	51	0.8	12	29.5	20	2	3	9	19	8.0	
SUMMIT	732	917.0	1013.2	-19.0	-25.8	-22.4		- 3.3	29+	-38.3	15	0	31	-26.1	70	32		17	11	0	754	889	6.6	5	20.6	6	18	12	5	13	5.5	
TALKEETNA	105			-12.9	-25.8	-19.4	- 6.8	0.0	8+	-42.8	25	0	31			44	- 1	18	10	0	1049	991			13.0	2	12	11	7	13	5.5	
UNALAKLEET	5			-18.4	-24.9	-21.7		3.3	7	-42.8	21	0	31			20		7	9	0	203	457			20.6	10	27	14	4	13	5.1	
YAKUTAT	9	1002.4	1003.3	- 2.7	-10.3	- 6.5	- 3.9	4.4	22	-19.4	15	0	30	- 8.9	82	181	- 94	31	20	0	1801	1473	1.9	9	21.9	22	24	4	4	23	8.2	
ARIZONA																																
FLAGSTAFF	135	785.3	1019.7	2.1	-12.3	- 5.1	- 2.4	11.1	12	-24.4	5	0	31	-11.7	63	48	2	19	10	0	533	330	0.7	23	13.4	SW	19	10	7	14	5.6	73
PHOENIX	40	978.0	1017.7	17.5	3.8	10.7	0.8	25.6	14	- 0.6	21	0	2	0.6	54	3	- 15	1	5	0	0	0	0.8	12	16.5Y	NW	19	12	8	11	4.9	85
TUCSON	8	927.2	1016.6	15.6	1.7	8.7	- 1.2	24.4	14	- 3.3	21	0	10	- 2.8	50	2	- 19	1	4	0	T	0	1.1	16	16.1	SE	29	10	11	10	5.4	75
WINSLOW	1 [illegible]	852.4	1021.2	5.3	- 5.3	0.0	0.6	17.2	30	-10.0	28	0	30	- 6.1	69	6	- 5	2	5	0	53	25	1.0	25	12.5	22	19	8	9	14	6.2	
YUMA	59	1010.8	1018.1	18.6	5.1	11.8	- 0.1	24.4	14	- 1.1	7	0	2	- 2.2	42	1	- 9	1	2	0	0	0	1.7	35	14.8	N	22	15	9	7	3.8	87
ARKANSAS																																
FORT SMITH	136	1003.4	1020.4	7.8	- 2.7	2.6	- 1.8	18.3	18+	-13.3	12	0	22	- 2.2	73	90	23	28	11	3	112	102	0.6	34	13.4	E	21	6	5	20	7.2	41
LITTLE ROCK	78	1010.8	1020.6	8.9	- 0.4	4.3	- 0.5	22.2	18	- 9.4	12	0	21	- 1.7	69	143	11	63	12	3	66	51	0.6	34	16.1	SW	21	5	7	19	7.2	64
CALIFORNIA																																
BAKERSFIELD	145	1002.7	1020.7	13.7	3.9	8.8	0.3	21.7	29	- 2.8	7+	0	4	5.0	80	53	23	22	8	0	T	0	1.2	10	14.3	14	28	8	9	14	6.0	
BISHOP	1252	872.7		6.8	- 7.2	- 0.2	- 2.8	15.0	14	-15.6	5	0	30			77	52	57	5		152	102										
BLUE CANYON	1609			3.7	- 3.1	0.3	- 2.6	13.9	14	-10.0	4+	0	26			492	195	116	19		2029	914			19.2	18	16	7	8	16	6.9	
EUREKA U	13			11.8	5.1	8.5	- 0.1	18.3	13	- 0.6	4	0	2			164	- 6	35	18		0	0			15.2	5	28	5	6	22	8.1	47
FRESNO	100	1008.8	1020.7	12.2	2.4	7.3	- 0.6	18.3	15	- 4.4	7+	0	10	5.0	87	49	- 3	15	11	0	0	0	0.8	10	13.9	NW	19	9	8	14	6.1	59
LONG BEACH	8	1018.0	1019.4	18.0	5.9	11.9	0.2	25.6	28	- 0.6	5	0	1	3.9	61	86	36	38	7	0	0	0	0.4	31	11.2	15	18	13	10	8	4.7	
LOS ANGELES	30	1015.2	1018.7	17.1	8.1	12.6	0.1	25.0	14	2.8	5	0	0	4.4	62	80	13	43	5	0	0	0	0.2	31	20.6Y	N	19	11	11	9	4.8	
LOS ANGELES C	82			19.0	8.1	13.6	0.3	28.9	13	2.8	5	0	0			112	34	70	5		0	0			10.3	NW	19+	13	11	7	4.1	68
MT SHASTA R	1080	892.0	1018.9	4.2	- 4.3	- 0.1	- 0.8	13.3	14	-12.2	7+	0	27	- 4.4	76	181	20	75	14		861	203	0.9	12								
OAKLAND	2	1019.6	1020.0	11.2	5.7	8.4	- 0.4	15.0	14+	0.0	7	0	1	5.6	83	187	90	45	16	0	0	0	1.0	14	13.9	15	18	7	8	16	6.5	
RED BLUFF	104	1006.8	1019.6	10.2	1.4	5.8	- 1.7	16.7	16+	- 5.0	7+	0	11	1.1	78	195	86	39	17	1	122	76	0.8	32	18.8	5	16	10	2	19	6.5	54
SACRAMENTO	5	1019.0	1019.8	10.9	2.8	6.8	- 0.5	15.6	16+	- 3.3	7+	0	13	3.9	82	174	94	41	17	0	0	0	0.7	16	13.9	SE	18+	6	9	16	6.7	53
SANDBERG R	1377	862.5		6.1	- 1.3	2.4	- 2.0	13.9	14	- 6.7	5	0	22	- 5.0	68	98	33	52	7		86	51	1.4	1	21.0	35	19	9	3	19	6.4	
SAN DIEGO	4	1018.0	1019.1	17.7	8.4	13.1	0.3	24.4	13	3.3	5	0	0	3.9	58	43	- 8	12	8	0	0	0	0.9	29	13.4	5	18	12	7	12	5.1	78
SAN FRANCISCO	2	1019.3	1019.9	12.6	5.2	8.9	- 0.3	16.7	12	- 0.6	7	0	2	5.6	81	211	109	60	17	0	0	0	0.6	19	15.6	18	18	8	7	16	6.6	
SAN FRANCISCO J	16			12.6	7.6	10.1	- 0.3	16.7	1	3.9	7	0	0			238	123	71	17		0	0			13.4	SE	16					48
SANTA MARIA	72			14.6	2.4	8.5	1.6	23.3	14	- 5.6	5	0	12			122	50	50	10		0	0						12	7	12	5.4	
STOCKTON	7	1019.0	1020.0	11.3	3.4	7.4	0.3	16.7	12	- 3.9	7+	0	9	3.9	81	160	96	31	16	0	0	0	1.5	16	15.6	15	18	4	7	20	7.4	

See footnotes at end of table.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity %	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average max mum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
COLORADO	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm.	Mm.	Mm.			Mm.	Mm	M.p.s.		M.p s							%
ALAMOSA	2297	769.7		-4.1	-25.3	-14.7	-6.6	2.2	17	-31.1	23+	0	31			4	-3	2	5		99	127						11	13	7	4.9	
COLORADO SPRINGS	1873	808.3	1019.4	1.5	-8.8	-3.7	-1.8	14.4	30	-22.2	9	0	30	-12.8	52	2	-6	1	4	0	99	51	2.4	1	18.3	35	27	10	11	10	5.6	
DENVER	1610	834.1	1017.3	4.3	-9.6	-2.6	-0.7	17.2	16+	-21.7	9	0	27	-11.1	55	33	19	23	8	0	307	178	0.7	20	14.3	N	27	11	9	11	5.5	78
GRAND JUNCTION	1476	854.7	1027.4	-5.6	-17.2	-11.4	-8.1	2.8	20	-24.4	8+	0	31	-13.9	85	20	4	11	8	0	325	254	0.6	3	8.9	SE	28	11	8	12	6.1	62
PUEBLO	1428	854.0	1018.2	5.3	-8.1	-1.4	-0.3	18.9	30	-20.6	9	0	30	-8.3	65	3	-5	1	5	0	97	51	1.7	35	21.9	N	27	9	13	9	5.6	61
CONNECTICUT																																
BRIDGEPORT	2	1016.9	1017.7	3.3	-5.1	-0.9	0.1	12.8	1	-13.3	8	0	27	-7.8	61	121	27	44	8	1	109	102	4.2	29	17.0	33	20	8	10	13	5.9	
HARTFORD	52	1009.8	1016.6	3.8	-6.8	-1.4	1.9	17.2	18	-17.2	31+	0	27	-8.3	62	83	-8	33	8	1	358	254	2.1	28	15.2	NW	20	8	9	14	5.9	68
DELAWARE																																
WILMINGTON	23	1016.3	1019.2	6.9	-2.9	2.0	1.2	18.3	1	-10.6	9	0	23	-5.0	60	97	10	37	7	1	T	T	2.3	30	13.4	31	20	8	8	15	6.7	
DIST.OF COLUMBIA																																
WASHINGTON DULLES	88	1008.1	1020.2	7.0	-5.2	0.9		18.3	26	-13.3	13+	0	23	-4.4	71	57		19	8	0	T	0	1.5	30	12.5	31	29	6	7	18	7.1	
WASHINGTON NATIONAL	3	1017.6	1020.0	8.1	-1.8	3.1	0.4	17.8	1	-8.3	10	0	22	-5.0	58	57	-20	19	8	0	T	T	1.7	31	15.2	NW	29	6	10	15	6.8	54
FLORIDA																																
APALACHICOLA U	4			16.4	9.1	12.8	-0.1	24.4	4	0.0	30	0	1			123	43	39	14	3	0	0			13.0	NW	28	5	9	17	7.0	74
DAYTONA BEACH	9	1018.6	1020.1	20.3	9.6	14.9	-0.2	28.9	4	-0.6	30	0	1	10.0	76	118	69	33	8	1	0	0	1.3	31	9.8	29	29	4	7	20	7.5	
FORT MYERS	5	1019.0	1019.3	24.4	13.4	18.9	1.4	30.0	3+	2.8	14	0	0	14.4	80	80	41	44	9	0	0	0	1.1	4	10.3	30	29+	6	10	15	6.6	
JACKSONVILLE	8	1019.6	1020.5	18.5	6.1	12.3	-0.9	27.8	4	-3.3	14	0	5	7.2	77	118	56	52	10	1	0	0	1.1	35	12.1	NW	29	6	7	18	7.0	50
KEY WEST	1	1017.6	1018.3	24.9	19.8	22.4	1.5	27.8	27+	12.8	30+	0	0	17.8	77	63	24	54	8	1	0	0	2.2	7	13.0	NW	29+	7	9	15	6.3	73
LAKELAND U	65			21.4	11.4	16.4	-0.1	28.3	2	1.1	30	0	0			109	57	42	9		0	0						5	12	14	6.5	63
MIAMI	2	1018.3	1018.7	25.2	17.4	21.3	1.9	29.4	28	5.6	30	0	0	16.1	73	87	35	68	8	1	0	0	0.6	6	11.2	30	28	4	17	10	6.2	
ORLANDO	33	1015.6	1019.9	22.2	11.6	16.9	1.1	28.9	4+	1.7	30	0	0	11.7	76	122	72	35	9	1	0	0	0.9	33	10.3	29	29	4	8	19	7.3	
PENSACOLA	34	1015.9	1020.2	16.1	6.3	11.2	-0.7	23.3	4	-3.9	13	0	5	7.2	78	100	-7	29	12	1	T	0	1.5	2	13.0	23	21	7	5	19	6.8	
TALLAHASSEE	17	1018.0	1020.3	18.1	4.3	11.2	-1.0	27.2	4	-7.8	14	0	9	6.7	78	126	39	36	12	1	0	0	0.9	3	10.3	15	21	5	8	18	7.1	
TAMPA	6	1020.0	1020.1	22.2	11.0	16.6	0.4	28.3	3	-1.1	14	0	2	11.1	75	95	41	29	8	2	0	0	1.0	4	11.2	32	29	6	6	19	7.2	49
WEST PALM BEACH	5	1018.0	1018.7	25.3	15.4	20.4	1.0	30.6	23	3.3	30	0	0	15.0	73	67	4	23	10	1	0	0	0.4	1	14.8	29	29	7	9	15	6.8	
GEORGIA																																
ATHENS	244	990.9	1020.6	11.6	0.8	6.2	-0.8	21.1	20	-7.2	30+	0	15	0.6	72	109	-15	35	12	1	69	76	0.8	29	9.4	7	21	9	5	17	6.4	
ATLANTA	308	982.7	1020.3	10.3	0.1	5.2	-1.8	19.4	18	-8.9	13	0	16	-0.6	71	226	113	99	12	2	25	25	1.0	33	15.2	W	19	9	3	19	6.7	50
AUGUSTA	41	1014.9	1020.4	13.3	1.2	7.3	-1.4	20.6	20+	-8.3	14	0	15	0.6	68	132	56	40	11	1	10	T	0.9	31	9.4	29	29+	8	7	16	6.5	
COLUMBUS	117	1006.4		13.5	2.4	8.0	-0.8	21.1	18	-6.1	13	0	12	2.8	74	153	50	43	11	2	T	T	1.1	1	10.3	12	21	9	3	19	6.7	
MACON	108	1007.5	1020.8	14.2	2.1	8.1	-1.4	23.3	18	-6.7	14	0	13	2.2	72	155	69	77	13	1	T	0	1.0	34	13.0	S	19	8	4	19	6.8	52
ROME	194			9.6	-1.6	4.0	-1.6	19.4	18	-11.1	13	0	18			117	-23	35	9		T	T										
SAVANNAH	14	1019.0	1020.7	15.7	4.1	9.9	-1.1	22.2	22+	-5.0	14	0	10	3.9	72	92	21	24	12	0	T	0	0.9	32	11.6	NW	29+	7	7	17	6.8	45
HAWAII																																
HILO	8	1016.3	1017.4	26.8	17.8	22.3	0.8	30.0	6	15.6	15	0	0	17.8	79	88	-213	18	18	1	0	0	0.3	20	7.2	E	5	3	18	10	6.2	52
HONOLULU	2	1016.6	1017.0	27.1	18.3	22.7	0.2	29.4	3	12.8	1	0	0	16.1	69	17	-78	15	3	0	0	0	2.7	5	14.8	NE	27	13	12	6	4.6	72
KAHULUI	15	1014.2	1016.7	25.7	16.4	21.1	-1.2	28.9	3	13.3	22+	0	0	17.2	80	54	-25	23	10	0	0	0	3.4	5	12.1	NE	25	17	8	6	4.0	68
LIHUE	31	1013.2	1018.3	25.5	17.7	21.6	0.0	27.2	25	12.8	1	0	0	17.2	77	26	-114	11	11	0	0	0	2.5	3	12.5	NE	28	7	18	6	5.2	51
IDAHO																																
BOISE	865	917.7	1020.9	3.4	-4.9	-0.7	0.9	11.1	15	-11.7	27	0	27	-5.6	69	29	-5	11	10	0	185	76	1.2	14	15.2	SE	18	6	4	21	7.7	44
LEWISTON	431			4.2	-4.0	0.1	0.8	13.9	13	-18.3	8	0	22			18	-10	8	7		91	51			21.5Y		1	5	4	22	7.7	
POCATELLO	1358	864.2	1023.2	-1.4	-12.1	-6.8	-1.4	10.6	15	-25.6	4	0	27	-12.2	65	26	-4	5	12	0	328	102	1.0	21	16.1	SW	16	0	7	24	8.5	34
ILLINOIS																																
CAIRO U	96			6.1	-1.3	2.4	-0.6	16.1	17	-11.1	10	0	18			85	-28	41	9		23	25			16.1	SE	21+	8	7	16	6.5	42
CHICAGO O HARE	201	992.9	1018.4	1.8	-6.1	-2.1	2.2	13.9	26+	-17.8	10	0	25	-6.1	75	31	-15	16	6	0	13	T	2.3	24	15.6	25	1	8	3	20	6.9	
CHICAGO MIDWAY	185	995.6	1019.0	2.1	-5.8	-1.8	1.5	13.9	26	-17.8	10	0	25	-6.7	70	38	-9	17	9	0	20	T	1.9	23	13.0	SW	3	8	5	18	6.9	47
MOLINE	177	996.6	1019.2	1.4	-6.9	-2.7	2.5	13.9	16	-18.9	10+	0	25	-7.8	71	64	23	24	6	0	10	T	1.8	26	13.9	W	3	6	6	19	7.0	47
PEORIA	199	994.6	1019.7	1.8	-6.9	-2.6	0.9	13.9	25	-18.9	10	0	28	-6.1	78	45	-3	25	6	0	20	25	1.3	23	13.0	N	28	6	4	21	7.4	47
ROCKFORD	221	990.5	1018.6	0.9	-7.2	-3.2	2.4	12.2	25	-18.9	10	0	27	-7.2	77	42	-8	24	9	0	10	T	1.7	26	11.2	36	28+	7	4	20	6.9	
SPRINGFIELD	179	997.0	1019.9	3.1	-5.7	-1.3	0.7	15.0	17	-17.8	10	0	26	-5.6	77	33	-15	19	5	1	15	T	1.5	23	14.8	N	28	8	5	18	6.6	57
INDIANA																																
EVANSVILLE	116	1006.4	1021.1	4.7	-3.9	0.4	-0.8	17.2	18	-13.3	12	0	27	-3.9	75	62	-39	23	8	0	15	T	0.6	23	14.8	SW	3	7	4	20	7.2	37

See footnotes at end of table

State and Station	Elevation (ground)	Pressure																														
		Station O	Sea level																													
INDIANA	M	Mb.	Mb																													
FORT WAYNE	241	988.5	1019.5																													
INDIANAPOLIS	241	989.8	1020.1																													
SOUTH BEND	236	989.5	1018.3																													
IOWA																																
BURLINGTON	211																															
DES MOINES	286	983.4	1019.6	-																												
DUBUQUE	322			-																												
SIOUX CITY	334	978.3	1020.1	-																												
WATERLOO	265	985.8	1019.3	-																												
KANSAS																																
CONCORDIA	448	964.8	1019.7																													
DODGE CITY	787	925.2	1019.1																													
GOODLAND	1114	887.2	1018.6																													
TOPEKA	267	987.5	1020.6																													
WICHITA	403	970.2	1019.9																													
KENTUCKY																																
COVINGTON	265	987.8	1020.4	4.3	- 4.7	- 0.2	0.1	17.2	18	-15.6	12	0	25	- 4.4	74	45	- 45	17	9	0	13	T	1.7	23	13.9	21	18	6	7	18	7.4	
LEXINGTON	294	984.4	1021.0	6.3	- 2.9	1.7	0.3	19.4	18	-12.8	12	0	21	- 3.9	69	39	- 87	20	9	0	25	T	1.6	21	11.2	14	22+	8	3	20	7.2	
LOUISVILLE	145	1002.7	1020.8	5.9	- 2.6	1.7	0.0	17.8	18+	-11.7	12	0	22	- 3.9	69	50	- 54	15	9	0	28	25	1.1	23	14.8	Sw	3	6	6	19	7.3	46
LOUISIANA																																
ALEXANDRIA	28	1016.3	1020.6	12.4	1.4	6.9	- 3.3	22.8	18	- 7.8	13	0	13			170	35	39	14	4	61	25	0.9	36	11.2	18	31	9	4	18	6.6	
BATON ROUGE	20	1017.6	1020.2	15.1	4.1	9.6	- 2.0	23.9	18+	- 5.0	13	0	8	5.0	77	102	- 20	33	13	2	15	25	0.8	5	13.4	14	20	8	5	18	6.8	
LAKE CHARLES	3	1019.0	1020.0	14.2	4.4	9.3	- 2.7	23.9	20	- 3.9	13	0	7	6.1	83	105	- 8	25	15	5	102	102	1.4	5	13.9	13	31+	9	4	18	6.6	
NEW ORLEANS	1	1019.0	1020.0	15.6	4.8	10.2	- 2.4	23.9	18	- 6.1	13	0	6	6.1	78	68	- 29	17	14	1	T	T	1.3	2	10.3	12	25	7	6	18	7.1	
SHREVEPORT	77	1010.5	1020.1	12.2	1.9	7.1	- 1.6	24.4	18	- 6.7	12	0	12	0.6	68	144	22	38	14	2	15	25	0.3	1	10.7	31	28	8	3	20	6.9	43
MAINE																																
CARIBOU	190	986.8		- 6.8	-17.9	-12.4	- 0.4	5.0	23	-35.6	10	0	31			66	12	17	12		516	762						9	6	16	6.5	
PORTLAND	13	1011.5	1014.0	0.1	- 9.9	- 4.9	0.7	8.3	1	-24.4	9	0	30	-11.7	61	66	- 45	20	7	0	244	406	2.4	29	16.1	N	20	14	7	10	4.9	66
MARYLAND																																
BALTIMORE	45	1014.2	1020.0	6.9	- 4.1	1.4	- 0.1	18.9	17	-11.1	13	0	24	- 5.6	61	71	- 16	24	7	1	T	0	2.2	29	13.9	Nw	29	9	6	16	6.5	61
MASSACHUSETTS																																
BLUE HILL OBS R	192			3.1	- 6.1	- 1.5	1.3	16.7	18	-18.9	8	0	25			98	- 16	45	8		155	76			25.9	Nw	20					66
BOSTON	5	1014.2	1015.2	3.9	- 4.6	- 0.3	0.8	16.1	18+	-17.2	8	0	23	- 8.9	56	79	- 21	39	7	1	91	51	4.4	28	15.2	Nw	20	11	9	11	5.1	62
WORCESTER	301	977.3	1015.3	1.4	- 8.1	- 3.3	1.2	15.0	18	-20.6	30+	0	26	-10.6	59	103	8	37	9	1	455	356	4.2	28	17.9	30	20	11	8	12	5.5	
MICHIGAN																																
ALPENA	210	989.8	1016.2	- 0.3	-10.1	- 5.2	1.7	11.1	18	-23.3	7	0	29	- 8.3	77	26	- 24	6	11	0	244	254	1.3	26	13.9	SE	3	9	9	13	6.3	51
DETROIT	189			2.2	- 4.7	- 1.3	1.6	13.3	18+	-12.2	10	0	26	- 7.2	66	36	- 16	18	4	0	5		3.0	24	13.0	24	4					
DETROIT METRO.	193	993.2	1018.2	1.9	- 5.5	- 1.8	1.4	14.4	18	-13.9	12	0	27	- 6.1	75	42	- 7	19	11	0	61	25	2.6	24	14.8	Sw	4	4	10	17	7.1	50
FLINT	235	988.5	1017.3	1.8	- 5.4	- 1.8	2.4	15.0	18	-12.8	12+	0	27	- 7.2	69	35	- 8	16	6	0	33	T	2.9	25	13.4	26	1	3	8	20	7.7	
GRAND RAPIDS	239	987.8	1017.9	0.8	- 5.9	- 2.6	1.9	13.3	26	-14.4	7	0	28	- 6.1	77	42	- 6	16	15	0	178	102	2.3	23	19.7	Sw	4+	3	4	24	8.2	44
HOUGHTON LAKE	350	972.9	1016.8	- 1.1	- 9.9	- 5.5	1.6	11.7	26	-28.3	7	0	29	- 8.3	80	31	- 7	12	9	0	211	203	2.0	26	13.0	27	4	7	8	16	6.6	
LANSING	256	985.1	1017.8	1.3	- 6.3	- 2.5	1.8	15.0	18	-15.0	7	0	28	- 7.2	71	30	- 20	17	13	0	48	25	2.7	24	18.8	Sw	4	3	9	19	7.7	43
MARQUETTE J	206			- 1.8	- 9.2	- 5.5	1.4	8.9	25+	-19.4	10	0	30			37	- 11	13	13		376	559			15.2	Sw	16	4	7	20	7.6	36
MUSKEGON	191	994.2	1018.2	0.8	- 5.4	- 2.3	1.1	11.1	18	-15.6	7	0	28	- 6.1	76	34	- 19	16	14	0	201	76	2.1	24	13.0	23	10+	1	4	26	8.8	
SAULT STE MARIE	220	987.5	1015.1	- 3.1	-11.2	- 7.1	1.9	7.2	18	-25.0	6	0	28	- 9.4	82	44	- 8	14	13	0	353	584	0.7	26	13.4	[illegible]	31	7	4	20	7.4	45
MINNESOTA																																
DULUTH	435	963.1	1017.1	- 6.6	-16.2	-11.3	1.6	8.3	25	-35.0	7	0	31	-13.9	81	17	- 12	10	8	0	234	559	1.4	27	14.3	E	30+	7	8	16	6.4	49
INTERNATIONAL FALLS	359	971.6	1017.1	- 6.2	-18.8	-12.5	3.6	8.9	24	-40.6	7	0	31	-17.2	67	3	- 19	1	4	0	58	305	1.3	24	10.3	31	22	8	6	17	6.9	
MINNEAPOLIS	254	986.5	1018.5	- 3.3	-12.9	- 8.1	2.8	7.8	25	-28.9	6	0	30	-12.8	68	23	6	15	2	0	295	203	0.9	26	13.4	Sw	2	11	6	14	5.9	53
ROCHESTER	395	968.8	1019.2	- 4.7	-13.4	- 9.0	1.2	6.1	26+	-29.4	9+	0	30	-11.7	78	27	4	20	5	0	305	254	2.0	26	14.3	20	15+	7	7	17	6.4	
ST CLOUD	313	979.7	1019.0	- 4.8	-16.8	-10.8	1.3	8.3	25	-32.2	6	0	31			13	- 5	7	5		147	279						8	8	15	6.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation ground	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Stat on O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
MISSISSIPPI	M	Mb	Mb	C	C	C	C	C		C.				C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s		M.p.s							%
JACKSON	94	1008.5	1020.7	12.8	0.8	6.8	- 2.0	23.3	18+	-10.6	13	0	12	2.8	79	117	- 15	28	12	2	T	T	0.4	3	15.2	SE	31	10	4	17	6.5	45
MERIDIAN	88	1009.5	1020.9	13.4	1.4	7.4	- 1.5	22.2	18+	- 8.3	13	0	11	1.7	71	128	9	43	10	1	T	0	1.2	4	8.0	32	28+	8	4	19	6.9	
MISSOURI																																
COLUMBIA REGIONAL	270	986.8	1020.3	3.2	- 5.6	- 1.2	0.3	16.1	16	-19.4	10+	0	21	- 6.1	73	79	36	22	9	0	173	102	0.8	26	13.9	SW	3	7	7	17	6.9	53
KANSAS CITY	309	981.7	1020.1	1.6	- 6.8	- 2.6	- 1.2	16.1	17	-22.2	9	0	24	- 7.8	67	52	20	22	9	0	277	127	1.0	24	16.1	NW	28	7	9	15	6.4	68
ST JOSEPH	247			1.9	- 8.3	- 3.2	- 0.5	15.0	17	-25.0	9	0	28			53	23		6				0.6	28	13.0	33	28	9	6	16	6.2	
ST LOUIS	163	999.3	1020.2	5.3	- 4.7	0.3	0.4	19.4	17	-17.2	10	0	26	- 3.9	79	36	- 15	11	9	1	56	25	1.2	24	13.9	E	21+	5	11	15	6.8	54
SPRINGFIELD	386	973.2	1020.0	5.8	- 4.5	0.7	- 0.2	18.3	16	-20.6	12	0	22	- 5.0	69	112	62	36	14	2	188	127	0.8	20	15.2	SE	20	7	7	17	6.8	48
MONTANA																																
BILLINGS	1087	890.6	1019.3	- 0.9	- 9.1	- 4.9	- 0.1	12.8	16	-28.3	4	0	25	-12.8	57	33	19	15	9	0	338	178	5.0	24	15.2	SW	1	7	4	20	7.3	42
GLASGOW	696	933.0	1018.5	- 2.8	-12.7	- 7.7	4.6	11.1	24	-28.9	9+	0	30	-12.2	71	T	- 12	T	0	0	T	127	0.4	36	13.9	33	2	10	6	15	5.9	
GREAT FALLS	1116	886.9	1019.0	0.9	- 8.8	- 3.9	1.6	15.6	15	-27.8	8	0	24	-13.3	50	8	- 7	7	5	0	84	76	6.4	22	18.8	SW	1	4	7	20	7.2	48
HAVRE	788	922.5	1017.7	1.9	-11.1	- 4.6	5.5	16.1	15	-28.9	8	0	27	-11.7	61	T	- 12	T	0	0	T	51	3.9	25	14.8	SW	23+	7	4	20	6.8	51
HELENA	1167	881.5	1022.6	- 2.1	-13.8	- 7.9	- 0.5	13.3	15	-31.1	10+	0	30	-14.4	61	6	- 6	4	4	0	81	51	2.2	26	13.9	W	16+	6	5	20	7.5	58
KALISPELL	904	913.0	1021.7	- 1.8	-12.2	- 7.0	- 0.2	8.3	13	-29.4	9+	0	30	-11.7	70	18	- 17	7	9	0	165	178	0.4	23	15.6	2	3	6	3	22	7.6	
MILES CITY	801	922.1	1019.1	- 1.2	-11.9	- 6.5	2.1	11.7	24	-29.4	9	0	29	-11.1	72	4	- 8		1	0	43		1.3	24								
MISSOULA	972	905.9	1022.4	- 1.4	-10.2	- 5.8	1.3	6.7	17	-28.3	10	0	30	- 9.4	79	11	- 12	3	9	0	76	76	0.2	32	11.6	E	3	5	6	20	7.6	45
NEBRASKA																																
GRAND ISLAND	561	950.9	1019.9	0.1	- 9.2	- 4.6	0.6	13.3	25	-23.9	9	0	28	-10.0	68	20	4	9	7	0	66	152	1.4	29	15.6	35	27	10	6	15	6.1	
LINCOLN	360	975.6	1020.0	0.6	-10.2	- 4.8	0.6	12.8	25	-24.4	9	0	29	- 9.4	71	28	13	10	7	0	170	127	0.8	31	18.8	N	27	9	4	18	6.7	58
NORFOLK	471			- 0.8	-11.2	- 6.0	1.0	10.0	26	-26.1	9	0	30			28	9	21	5		183	152						10	7	14	6.1	
NORTH PLATTE	846	918.4	1020.4	0.7	-12.4	- 5.8	- 1.4	15.0	25	-27.2	9	0	31	-10.0	73	10	- 1	9	6	0	97	102	1.5	33	17.0	N	22	10	9	12	5.9	64
OMAHA	298	982.7	1019.9	- 0.2	-10.3	- 5.2	0.2	11.7	17	-25.0	6	0	27	- 8.3	77	37	16	15	7	0	401	178	0.7	33	17.4	NW	27	9	7	15	6.1	60
SCOTTSBLUFF	1206	878.8	1019.9	2.6	-10.8	- 4.1	- 0.4	18.9	15	-28.3	9	0	29	-11.1	62	15	7	8	6	0	175	76	2.5	32	13.4	32	22	9	7	15	6.1	
VALENTINE	789			1.3	-13.3	- 6.0	0.7	15.6	16	-31.1	9	0	31			18	7	12	3		234	178			16.1	N	27	12	9	10	5.1	67
NEVADA																																
ELKO	1539	844.9	1021.9	- 0.7	-12.7	- 6.7	- 1.4	10.0	13	-25.0	4	0	29	-11.7	69	30	T	12	11	0	267	76	0.2	34	10.3	21	16	8	11	12	6.1	
ELY	1906	807.3	1020.1	2.6	-15.6	- 6.5	- 1.4	15.0	14	-26.7	20	0	30	-12.2	68	34	14	14	8	0	371	127	2.3	20	18.8	SE	18	10	6	15	6.2	68
LAS VEGAS	659	941.8	1020.1	10.3	- 0.5	4.9	- 1.2	17.2	14	- 7.8	6+	0	19	- 6.1	49	12	- 1	6	3	0	8	T	1.4	30	16.5	NW	19	15	7	9	4.3	69
RENO	1342	866.2	1019.8	4.2	- 8.2	- 2.0	- 1.1	15.0	15	-20.0	5	0	30	- 6.7	74	39	9	14	12	0	302	127	0.3	21	16.1	S	16	6	8	17	6.9	59
WINNEMUCCA	1311	869.6	1021.0	3.1	- 9.1	- 3.0	- 0.3	13.9	13	-20.0	8+	0	30	- 5.6	83	34	8	12	13	0	251	102	0.8	18	10.3	SE	18	7	5	19	7.3	48
NEW HAMPSHIRE																																
CONCORD	104	1002.0	1015.2	- 0.2	-12.0	- 6.1	- 0.1	12.2	19	-27.8	31	0	30	-11.1	71	62	- 20	19	8	0	333	406	2.5	30	14.3	NW	29	10	11	10	5.2	67
MT WASHINGTON OBS	1909			- 9.6	-19.3	-14.4	- 0.2	3.9	19	-37.2	31	0	31			298	160	68	20	0	1791	483			68.0Y	NW	7	6	3	22	7.6	34
NEW JERSEY																																
ATLANTIC CITY	20	1016.6	1018.9	7.5	- 2.9	2.3	0.8	17.2	17+	-11.1	13	0	22	- 7.2	51	83	- 8	34	7	1	0	0	2.5	29	13.4	5	27+	7	10	14	6.5	44
ATLANTIC CITY U	3			7.4	0.4	3.9	1.7	17.2	1	- 7.2	9+	0	16			73	- 22	27	7						20.1	NW	29					
NEWARK	2	1016.9	1018.1	6.3	- 2.4	1.9	1.8	18.3	18	-11.1	9+	0	18	- 5.6	59	93	8	31	7	2	18	25	3.0	27	14.8	29	20	10	5	16	6.4	
TRENTON U	17			5.7	- 2.4	1.6	1.0	17.2	19	-11.1	8	0	18			98	19	37	8		5	T			16.1	NW	20	9	8	14	6.0	62
NEW MEXICO																																
ALBUQUERQUE	1619	837.5	1018.9	5.6	- 5.8	- 0.1	- 1.8	12.8	19	-10.0	28	0	31	- 7.2	64	22	11	13	6	0	241	127	1.5	1	22.4	E	1	12	7	12	5.3	64
CLAYTON	1515			6.2	- 6.6	- 0.2	- 0.9	19.4	30	-16.7	9	0	29			11	2	6	7		145	76						9	10	12	5.8	
ROSWELL	1112	889.9		10.3	- 2.5	3.9	- 0.9	21.1	17	-12.2	3	0	21	- 5.0	61	19	8	9	7	0	173	51	0.6	26	21.0	NW	31	11	9	11	5.5	57
NEW YORK																																
ALBANY	84	1006.8	1017.7	2.8	- 8.4	- 2.8	2.4	15.0	18	-22.8	31	0	28	- 7.8	71	55	- 8	24	7	0	284	203	2.5	28	15.6	NW	29	5	12	14	6.6	47
BINGHAMTON	485	956.7	1017.5	0.6	- 7.5	- 3.4	1.1	13.3	1	-20.0	31	0	28	- 8.3	70	41	- 23	13	8	0	173	102	2.9	26	14.8	NW	20	2	10	19	7.9	51
BUFFALO	215	991.5	1018.2	1.2	- 6.2	- 2.4	1.7	14.4	18	-16.7	31	0	27	- 6.7	76	52	- 21	13	14	0	251	127	4.5	26	17.0	W	19+	1	6	24	8.3	41
NEW YORK U	40	1014.6	1017.9	5.6	- 1.8	1.9	1.3	18.9	18	-12.2	9	0	17	- 6.7	57	115	31	39	9	1	46	51	2.5	29	13.4	NW	29					59
NEW YORK KENNEDY	4	1017.3	1018.0	6.1	- 1.0	2.6	2.7	16.1	1	-10.0	9	0	15	- 6.1	56	86	4	33	8	0	20	T	4.2	29	15.6	32	29	8	11	12	6.0	
NEW YORK LA GUARDIA	3	1016.9	1018.1	5.3	- 1.9	1.7	0.8	17.8	18	-11.7	9+	0	17	- 6.7	56	88	4	31	8	2	23	25	3.5	29	15.6	NW	29	9	6	16	6.3	
ROCHESTER	167	997.3	1018.2	2.7	- 6.4	- 1.8	1.9	15.6	18	-18.3	31	0	25	- 6.1	76	33	- 28	15	13	0	226	127	3.9	26	14.8	SW	1	1	11	19	8.1	46
SYRACUSE	125	1002.0	1017.5	2.3	- 6.4	- 2.0	2.4	16.1	18	-21.7	31	0	25	- 6.7	73	47	- 33	21	16	1	302	102	2.7	26	13.4	W	2	1	12	18	8.0	41

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy 8-10		
NORTH CAROLINA	M	Mb.	Mb.	C.	C.	C.	C	C		C.				C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s		M.p s							%
ASHEVILLE	652	942.4	1020.4	8.9	-2.9	3.1	-0.1	16.7	25+	-15.6	13	0	20	-2.8	73	108	2	39	13	1	180	152	2.1	33	13.0	33	29	10	9	12	5.9	61
CAPE HATTERAS R	2	1019.6	1020.0	11.8	3.9	7.8	-0.3	20.0	22+	-1.7	30+	0	10	3.9	77	101	2	23	13	0	48	51	2.2	34	13.0	26	29+	8	6	17	6.8	41
CHARLOTTE	224	992.2	1020.5	9.7	-1.3	4.2	-1.7	20.6	1	-10.6	9	0	19	-2.2	66	105	15	27	11	0	140	127	0.4	32	10.7	SW	23	11	6	14	6.0	61
GREENSBORO	273	987.8	1020.5	8.2	-3.7	2.3	-2.0	18.9	1	-15.0	9	0	23	-3.3	69	89	3	24	12	0	152	127	0.7	28	11.2	NW	29	7	8	16	6.3	58
RALEIGH	132	1004.1	1020.5	9.9	-1.9	4.1	-1.3	21.7	22	-11.1	9	0	21	-3.3	63	68	-14	21	10	0	163	152	1.0	29	10.3	24	23+	11	6	14	6.0	55
WILMINGTON	9	1019.0	1020.2	13.6	2.4	8.1	-0.8	22.8	22	-5.6	14+	0	14	2.2	71	111	39	58	14	0	48	51	1.0	33	11.2	S	22	9	5	17	6.6	54
NORTH DAKOTA																																
BISMARCK	502	956.0	1019.0	-3.6	-14.7	-9.2	3.1	7.8	24	-33.9	7	0	31	-11.7	79	2	-9	2	2	0	23	102	1.7	30	15.2	NW	22	5	10	16	6.7	70
FARGO	273	984.1	1018.9	-7.2	-16.9	-12.1	1.7	3.3	25	-35.0	5	0	31	-13.9	82	3	-10	2	6	0	43	330	1.0	25	17.4	N	22	9	8	14	6.6	60
WILLISTON	579	946.8	1018.6	-2.8	-14.0	-8.4	4.8	9.4	24	-33.3	8	0	31	-11.7	78	1	-13	1	1	0	15	127	1.9	25	13.9	NW	22	8	6	17	6.5	45
OHIO																																
AKRON	368	973.6	1019.5	3.3	-5.8	-1.2	0.8	15.0	18	-15.0	30+	0	27	-6.7	68	42	-30	16	12	0	99	25	2.6	23	11.2	24	23	4	7	20	7.6	
CINCINNATI ABBE OB.	232			4.8	-3.2	0.8	-0.1	17.8	18	-12.8	10	0	23			47	-46	18	10		T	0			10.3	SW	22					48
CLEVELAND	237	989.2	1019.2	3.1	-4.9	-0.9	1.1	15.6	17	-13.3	10	0	26	-6.7	66	41	-27	15	15	0	249	127	3.1	22	15.6	SW	4	3	6	22	7.9	41
COLUMBUS	247	989.5	1020.5	4.0	-4.9	-0.4	0.7	16.1	18	-13.3	30+	0	26	-6.1	66	62	-18	20	8	0	112	76	2.0	22	13.0	N	28+	5	9	17	7.4	39
DAYTON	305	982.7	1020.1	4.3	-5.1	-0.4	0.9	18.3	18	-16.7	10	0	26	-5.6	71	41	-39	13	10	0	61	51	2.2	21	13.4	SW	3	4	7	20	7.6	52
MANSFIELD	395			3.4	-5.7	-1.1	0.7	15.6	26	-15.6	10	0	26	-5.6	75	46	-35	14	11	0	81	51	3.5	22	14.3	21	4	4	4	23	7.6	
TOLEDO	204	992.9	1019.0	2.2	-6.5	-2.1	1.1	15.6	18	-15.6	10	0	27	-7.8	66	41	-18	17	9	0	76	25	2.6	24	15.2	SW	4	5	4	22	7.5	44
YOUNGSTOWN	359	975.3	1019.3	1.8	-6.9	-2.6	0.1	15.0	18	-15.0	12+	0	27	-6.1	77	46	-35	16	12	0	135	76	2.7	24	12.1	24	4	2	8	21	7.9	
OKLAHOMA																																
OKLAHOMA CITY	392	972.2	1020.1	5.2	-3.8	0.7	-2.1	18.9	17	-18.3	12	0	21	-3.3	76	86	53	27	11	2	211	152	1.0	35	18.8	NW	27	7	4	20	6.9	46
TULSA	198	995.3	1020.5	5.9	-3.7	1.1	-1.2	17.2	18	-18.3	12	0	23	-2.8	77	86	43	29	13	2	109	51	0.2	34	13.9	S	17	9	4	18	6.7	45
OREGON																																
ASTORIA	2	1014.9	1015.6	7.9	1.5	4.7	-0.1	13.3	15+	-7.2	7	0	13	-0.6	72	145	-152	27	22	1	T	0	2.3	14	11.6	24	18+	2	6	23	8.2	
BURNS U	1265			1.4	-8.6	-3.6	0.4	8.3	15+	-15.0	27	0	31			35	-6	9	13		257	152						2	10	19	8.0	
EUGENE	109	1003.1	1016.9	6.7	0.2	3.5	-0.4	14.4	13	-5.6	8	0	19	1.1	87	157	-3	40	17	0	28	25	0.9	19	13.0	19	18	0	1	30	9.5	
MEACHAM	1234	875.4	1019.7	-1.6	-7.4	-4.4	-1.1	8.9	13	-22.2	8	0	28			55	-52	9	19		432	279			8.0	9	18	3	4	24	8.4	
MEDFORD	396	969.5	1018.2	7.6	-1.1	3.3	1.4	17.8	28	-6.7	8	0	22	0.0	81	50	-29	15	15	0	69	51	0.1	23	13.0	15	28	0	5	26	9.0	
PENDLETON	452	964.1	1019.5	3.8	-4.7	-0.4	-0.5	16.1	15+	-20.6	9+	0	24	-7.2	63	13	-23	4	7	0	56	51	0.8	23	12.5	22	18	4	4	23	8.3	
PORTLAND	6	1016.3	1017.4	7.2	0.5	3.9	0.3	15.0	13	-5.6	7	0	15	-1.1	75	94	-43	30	16	0	10	T	4.1	12	20.6	E	9	2	8	21	8.4	33
SALEM	60	1009.1	1016.7	7.6	-0.1	3.8	0.2	15.6	13	-7.2	7	0	18	0.0	77	143	-27	39	19	0	18	T	1.2	19	11.2	22	18	2	3	26	8.7	
SEXTON SUMMIT R	1169	881.1	1016.6	3.1	-2.4	0.3	-0.8	13.9	14	-7.8	7+	0	24			169	27	39	17		638	203	4.8	17	19.7	19	18	0	4	27	9.0	
PACIFIC AREA																																
GUAM TAGUAC R	110			28.6	19.7	24.2	-1.5	30.0	12	14.4	29	0	0			53	-64	27	16	0	0	0			13.0	E	3					59
JOHNSTON	2	1013.9	1014.4	25.9	22.4	24.2	-0.9	27.2	26	20.6	5+	0	0	19.4	75	21	-78	6	14	0	0	0	8.0	6	16.1	NE	25	7	19	5	5.4	61
KOROR R	29	1007.1	1010.9	30.9	23.7	27.3	0.5	32.2	19	22.2	29	1	0	22.8	80	54	-244	35	15	0	0	0	4.2	6	8.0	NE	20	1	14	16	7.3	69
KWAJALEIN	2	1009.8	1010.6	29.8	24.7	27.3	0.6	31.1	30	22.2	6	0	0	22.2	75	13	-78	8	11	0	0	0	7.2	6	13.9	5	5	1	6	24	8.9	
MAJURO	3	1009.8	1010.0	29.1	25.2	27.2	0.4	30.0	30+	23.3	6	0	0	22.2	75	20	-157	6	12	0	0	0	6.5	5	12.5	E	6	0	6	25	9.0	66
PAGO PAGO	4	1006.4	1006.7	30.2	24.9	27.6		32.2	25	21.1	5	1	0	24.4	82	562		222	24	0	0	0	1.4	4	25.5	NE	1	0	10	21	8.3	56
PONAPE R	37	1004.4	1009.6	30.2	24.2	27.2	0.3	31.7	31+	20.6	31+	0	0	22.2	76	84	-197	21	20	0	0	0	4.2	6	9.8	NE	5	0	12	19	8.2	80
TRUK MOEN ISLAND	2	1010.2	1010.4	29.7	25.3	27.6	0.5	30.0	29+	23.9	9+	0	0	22.8	77	35	-179	11	13	0	0	0	5.4	6	11.2	NE	20	0	7	24	8.5	62
WAKE	3	1015.6	1015.8	27.6	21.9	24.7	-0.5	28.9	29+	20.0	11+	0	0	19.4	76	55	26	21	17	0	0	0	4.9	8	15.2	NE	3	10	17	4	4.7	71
YAP R	13			30.0	22.9	26.5	-0.4	30.6	29+	20.6	29	0	0			54	-146	13	13	0	0	0			8.9	NE	4	6	18	7	5.5	87
PENNSYLVANIA																																
ALLENTOWN	118	1004.4	1018.9	4.2	-5.6	-0.7	0.9	16.7	18	-13.9	13	0	26	-7.2	62	91	10	28	7	1	48	51	3.0	28	13.9	32	29	9	6	16	6.2	
ERIE	223	991.2	1018.8	2.2	-4.9	-1.3	2.3	16.7	18	-12.8	8	0	25	-6.7	71	44	-24	10	11	1	201	51	3.2	23	15.6	16	22	2	6	23	8.4	
HARRISBURG	103	1006.4	1019.4	5.7	-3.8	0.9	1.3	16.7	26+	-11.1	9	0	24	-7.8	56	82	12	22	7	0	T	T	2.2	29	14.3	N	20	11	6	14	5.7	57
PHILADELPHIA	2	1018.0	1019.0	5.9	-3.2	1.3	1.2	16.7	19+	-10.6	9	0	23	-5.0	64	100	15	38	8	1	T	T	2.5	29	16.5	S	22	8	6	17	6.7	58
PITTSBURGH	347	974.6	1019.9	3.3	-5.9	-1.3	0.4	15.6	22+	-15.0	12	0	26	-5.6	74	52	-24	19	12	0	86	51	2.6	25	12.5	25	4	3	10	18	7.5	40
SCRANTON	283	982.7	1018.2	2.4	-6.3	-1.9	0.4	16.1	1	-16.1	9	0	28	-7.8	65	54	-4	12	8	0	127	102	2.3	26	17.0	SE	22	5	8	18	7.1	62
WILLIAMSPORT	160	999.7	1019.4	2.8	-6.6	-1.9	-0.1	12.8	1	-16.7	9	0	27	-7.8	68	69	2	26	8	0	38	25	2.4	29	12.1	31	6	6	8	17	6.9	
RHODE ISLAND																																
BLOCK ISLAND	34			4.2	-3.1	0.6	0.5	12.8	19	-13.9	8	0	18			58	-39	32	7		8	0										
PROVIDENCE	16	1013.5	1016.1	4.8	-5.8	-0.5	1.1	17.8	1	-15.6	31	0	25	-7.2	62	78	-19	26	8	0	51	51	3.0	30	12.5	33	29+	9	9	13	5.5	69

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation ground	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy 8-10		
SOUTH CAROLINA	M	Mb	Mb	C.	C	C	C	C		C				C	%	Mm.	Mm	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
CHARLESTON	12	1018.6	1020.6	14.6	3.2	8.9	- 1.0	23.9	22	- 6.1	14	0	12	3.3	72	117	52	27	11	0	T	T	1.4	33	16.5Y	S	22	6	10	15	6.7	49
CHARLESTON U	3			13.6	5.7	9.7	- 1.2	22.8	22	- 2.8	9	0	6			127	66	42	11		0	0			16.1	W	28					
COLUMBIA	65	1012.5	1020.7	13.5	0.8	7.2	- 1.1	21.7	20+	- 7.8	14	0	17	0.6	68	133	57	49	11	0	56	51	0.8	31	8.0	30	15+	9	6	16	6.1	54
GRNVLLE-SPRTNBRG	292	984.8	1020.3	10.8	- 0.8	5.1	- 1.4	22.8	1	-10.0	30	0	16	- 1.7	68	110	1	29	13	0	117	102	0.6	31	13.0	N	29	11	8	12	5.6	61
SOUTH DAKOTA																																
ABERDEEN	395	969.9	1019.1	- 2.9	-13.8	- 8.3	3.4	6.7	24	-30.6	5	0	31	-11.7	77	5	- 11	4	4	0	109	178	1.3	31	13.0	36	27+	8	12	11	5.7	
HURON	390	970.2	1019.0	- 2.3	-12.3	- 7.3	3.6	8.3	16	-28.3	9	0	31	-11.7	72	19	7	13	4	0	272	203	0.9	30	15.2	NW	27	9	9	13	6.0	66
RAPID CITY	964	903.8	1018.3	4.1	- 9.9	- 2.9	2.7	20.0	16	-26.1	9	0	28	-12.2	52	3	- 6	1	6	0	51	25	2.5	33	18.8	NW	27+	7	13	11	5.9	75
SIOUX FALLS	432	965.5	1019.3	- 3.0	-12.1	- 7.5	1.8	7.2	25	-28.9	9	0	30	-11.7	70	11	- 5	8	5	0	140	127	1.2	28	14.3	34	27	8	10	13	6.0	
TENNESSEE																																
BRISTOL	459	965.1	1020.7	7.1	- 2.8	2.1	- 1.4	16.7	18	-14.4	13	0	20	- 3.3	70	46	- 48	14	8	0	107	102	0.8	28	14.8	26	19	8	4	19	7.0	
CHATTANOOGA	203	995.9	1021.2	7.4	- 3.0	2.2	- 3.2	16.7	18	-11.7	13	0	21	- 2.8	71	129	- 13	31	10	1	58	51	0.7	32	13.4	S	22	9	6	16	6.6	45
KNOXVILLE	299	985.1	1021.0	7.9	- 1.3	3.3	- 1.9	18.9	18	-11.7	13	0	18	- 2.2	69	82	- 42	23	10	0	229	178	0.9	33	14.3	SW	22+	5	10	16	7.0	48
MEMPHIS	79	1010.5	1021.0	8.2	- 0.8	3.7	- 1.6	19.4	17	- 9.4	12	0	21	- 2.2	67	117	- 37	58	9	2	36	25	0.4	12	11.2	12	21+	7	6	18	7.1	51
NASHVILLE	180	998.6	1021.0	8.4	- 1.8	3.3	- 1.1	20.6	18	-13.3	13	0	19	- 2.8	66	86	- 53	20	8	1	122	127	0.7	25	13.0	SW	22	6	7	18	7.0	45
OAK RIDGE R	276			7.9	- 2.0	3.0	- 1.4	16.7	18	-12.2	13	0	21			107	- 44	26	11		203	152			17.0Y		22	9	5	17	6.8	
TEXAS																																
ABILENE	544	955.0	1019.6	8.3	- 2.2	3.1	- 3.9	22.2	19	-18.3	12	0	21	- 1.7	75	89	67	35	10	1	343	203	0.8	25	17.9	W	21	8	7	16	6.2	53
AMARILLO	1098	890.6	1017.6	6.8	- 5.3	0.8	- 1.8	20.0	30	-16.7	11+	0	24	- 7.2	65	14	- 2	5	6	0	178	127	1.1	29	22.8	NW	27	8	7	16	6.4	52
AUSTIN	182	997.6	1020.0	12.7	2.7	7.7	- 2.5	24.4	20+	- 7.8	12	0	9	1.1	68	87	27	25	14	1	20	25	1.9	35	17.0	NW	28	12	3	16	5.6	49
BROWNSVILLE	6	1018.3	1018.8	17.9	7.1	12.5	- 3.8	27.8	27	- 2.8	29+	0	5	8.3	79	53	18	33	11	0	0	0	1.3	32	15.2	S	31	6	7	18	6.9	44
CORPUS CHRISTI	12	1018.0	1019.4	16.6	5.3	10.9	- 3.2	28.3	18	- 3.9	12	0	7	6.7	80	55	14	13	14	1	5	0	2.0	2	17.0	W	21+	8	7	16	6.7	52
DALLAS	147	1002.4	1020.1	10.6	1.4	6.0	- 1.7	22.8	20+	-10.0	12	0	13	0.6	73	103	44	32	12	2	79	76	0.4	29	18.8	NW	28	9	3	19	6.4	44
DEL RIO	313	982.7	1019.6	15.1	2.3	8.7	- 2.0	24.4	20+	- 6.7	12	0	11	0.6	64	19	- 3	11	10	0	T	T	1.0	2	16.5	30	20	10	7	14	5.6	
EL PASO	1194	883.2	1017.5	12.9	- 0.8	6.1	0.0	22.2	19	- 7.8	29	0	19	- 3.3	60	31	20	13	8	0	135	102	1.3	29	21.5	SW	31	13	5	13	5.4	76
FORT WORTH	164	999.3	1020.3	10.7	1.0	5.8	- 1.7	22.8	20+	-13.3	12	0	12	0.6	73	83	31	33	12	1	58	51	1.2	30	15.6	34	28	10	2	19	6.6	
GALVESTON U	2			13.7	7.6	10.6	- 2.1	21.7	18	- 2.2	12	0	3			81	- 7	29	16		64	51			19.2	W	3					41
HOUSTON INTERCON	29	1016.6	1020.3	14.3	2.8	8.6	- 2.2	25.6	18	- 7.2	12	0	9	5.0	82	127	27	29	15	3	51	51	0.8	36	13.0	33	28	8	4	19	7.1	40
LUBBOCK	992	904.2	1018.2	7.6	- 4.4	1.6	- 2.4	20.0	19	-17.8	11	0	26	- 4.4	73	37	19	15	9	1	239	102	1.2	29	18.3	35	27	10	4	17	6.1	58
MIDLAND	869	917.7	1018.3	9.6	- 2.0	3.8	- 2.8	21.1	17	-11.1	11	0	21	- 2.8	73	24	3	11	11	1	74	25	0.9	32	16.5	26	31	13	3	15	5.5	
PORT ARTHUR	5	1019.3		13.8	3.4	8.6	- 3.4	24.4	18	- 6.7	12	0	9	5.6	86	121	13	26	15	2	76	76	0.9	4	15.2	SE	20	10	3	18	6.6	42
SAN ANGELO	580	951.2	1019.6	11.1	- 1.1	5.0	- 3.3	23.9	20+	-12.8	12	0	20	- 0.6	74	47	23	20	10	1	196	127	0.9	27	14.3	27	20	12	5	14	5.7	
SAN ANTONIO	240	991.5	1020.1	14.9	1.9	8.4	- 2.7	26.7	20	- 7.8	12	0	13	1.7	68	70	26	27	13	1	20	25	1.5	35	15.6	NW	28	12	2	17	5.8	52
VICTORIA	32	1015.6	1019.5	15.4	4.1	9.8	- 3.2	26.7	18	- 6.1	12	0	8	5.0	77	61	2	19	11	1	30	25	1.7	1	21.5Y	S	31	7	5	19	7.0	
WACO	153	1001.7	1020.2	10.6	0.8	5.7	- 3.2	23.9	20	-15.6	12	0	15	1.1	76	88	31	39	13	2	66	76	1.1	30	13.4	33	28	10	6	15	6.3	
WICHITA FALLS	303			8.3	- 2.0	3.2	- 2.8	21.1	19+	-12.8	12	0	20			70	41	26	8	2	79	25			15.6	32	27+	7	11	13	6.2	
UTAH																																
MILFORD	1533	846.9		- 2.9	-16.8	- 9.8	- 5.7	3.3	18+	-30.6	7	0	31			18	4	10	7		241	406			17.0	NE	19	11	5	15	6.1	54
SALT LAKE CITY	1286	873.7	1023.7	- 1.6	-12.2	- 6.9	- 4.2	7.2	16	-25.0	4	0	29	-10.6	75	38	4	16	11		531	254	0.7	16	12.5	S	18	6	4	21	7.4	44
WENDOVER	1291	873.0	1023.5	- 1.7	- 8.8	- 5.2	- 2.4	8.9	17	-15.6	7	0	31	- 8.3	82	4	- 4	1	9		61	25						7	9	15	6.5	
VERMONT																																
BURLINGTON	101	1003.1	1016.0	- 1.4	-10.3	- 5.8	2.9	11.1	19	-27.2	31	0	27	-10.6	71	54	5	29	12	0	290	127	1.1	25	14.3	N	20	4	5	22	7.7	46
VIRGINIA																																
LYNCHBURG	279			8.1	- 3.7	2.2	- 0.9	19.4	17	-15.6	9	0	23			77	- 6	26	9		58	51			10.7	W	23	10	7	14	6.1	58
NORFOLK	7	1019.0	1020.1	9.2	0.3	4.7	- 0.4	21.1	19	-11.1	9	0	14	- 2.2	62	65	- 20	20	12	1	231	203	1.4	32	14.8	25	19	9	6	16	6.4	61
RICHMOND	50	1013.5	1020.1	9.5	- 3.3	3.1	- 0.6	22.2	1	-15.0	10	0	22	- 3.3	66	68	- 20	21	11	1	109	102	0.4	30	11.2	NW	29	7	11	13	6.4	57
ROANOKE	350	977.0	1020.2	8.5	- 2.7	2.9	- 0.4	18.9	18+	-13.3	9	0	23	- 6.1	54	66	- 13	19	8	0	61	51	2.3	30	10.7	30	29	8	8	15	6.3	
WALLOPS ISLAND	3			7.0	- 1.2	2.9		20.6	1	- 8.9	10+	0	19			68		35	9		58	51			20.1Y	SSE	22					
WASHINGTON																																
OLYMPIA	59	1008.5	1016.0	6.4	- 1.4	2.5	- 0.9	14.4	14	-13.9	7	0	17	- 1.1	79	144	- 56	45	19	1	74	25	1.7	19	12.5	20	20	4	2	25	8.3	
QUILLAYUTE	55	1006.4	1013.9	6.7	1.0	3.9	0.2	11.7	18	-10.0	7	0	11	0.6	81	439	51	63	23	0	30	25	1.8	13	13.0	SE	15	6	1	24	8.1	20
SEATTLE-TACOMA	122	999.0	1015.8	6.4	1.1	3.7	0.2	13.9	14	- 9.4	6	0	9	- 2.8	64	109	- 37	33	18	0	69	51	1.7	14	14.8	SW	24	4	7	20	7.9	23
SEATTLE	6			7.4	0.9	4.2	- 0.9	14.4	14	- 8.9	8	0	11			117	- 12	22	18		94	102			15.6	19	18					
SPOKANE	718	932.3	1018.7	0.7	- 6.3	- 2.8	0.9	10.6	15	-18.9	7	0	27	- 6.7	75	52	- 10	12	14	0	165	102	1.0	15	14.3	SW	1	8	7	16	6.5	53

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
WASHINGTON	M	Mb.	Mb.	C.	C	C	C	C		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
STAMPEDE PASS R	1206	876.1		- 3.7	- 7.6	- 5.7	- 0.9	6.1	14	-18.3	7	0	30			202	-103	60	22		1110	1600						4	4	23	7.7	
WALLA WALLA U	289			4.7	- 3.2	0.8	0.1	19.4	15	-17.8	8	0	19			25	- 23	9	12		130	76			13.9	S	18	4	5	22	8.0	45
YAKIMA	321	980.0	1020.0	2.2	- 7.1	- 2.4	0.1	8.9	1	-17.8	8+	0	31	- 6.1	77	30	0	12	7	0	221	102	1.4	30	11.2	30	1	5	3	23	7.7	
WEST INDIES																																
SAN JUAN P.R.	4	1015.2	1017.6	29.0	23.1	26.1	2.5	30.6	24+	21.7	12+	0	0	20.0	71	58	- 62	16	16	0	0	0	3.1	10	11.2	NE	27	8	19	4	4.8	49
WEST VIRGINIA																																
BECKLEY	763	928.9	1020.6	4.5	- 5.3	- 0.4	- 1.3	17.8	18	-16.1	10	0	24	- 6.1	68	44	- 48	14	12	0	140	76	1.8	24	17.9	13	21	6	6	19	7.1	
CHARLESTON	286	985.4	1020.7	6.9	- 4.3	1.3	- 1.3	19.4	22+	-15.0	9	0	23	- 6.1	62	39	- 71	10	12	1	86	25	1.3	25	11.2	23	22	7	5	19	7.2	
ELKINS	594	947.2		5.6	- 7.5	- 0.9	- 1.2	18.9	22	-17.8	9	0	26			52	- 40	18	13		117	25						4	7	20	7.5	
HUNTINGTON	252	989.8	1021.1	6.2	- 3.8	1.2	- 1.3	20.0	18	-15.0	12	0	22	- 5.0	65	38	- 55	15	11	0	66	25	1.3	23	10.3	24	23+	5	5	21	7.6	
PARKERSBURG U	187			5.3	- 4.2	0.6	- 0.8	17.2	22+	-12.2	30+	0	25			56	- 28	17	9		81	51			13.0	W	22					50
WISCONSIN																																
GREEN BAY	208	990.9	1017.4	- 1.9	-10.1	- 6.0	2.4	8.9	18	-25.0	6	0	29	-10.0	73	47	18	18	8	0	173	152	2.3	25	13.4	W	1	10	6	15	6.3	53
LA CROSSE	198	993.9	1019.5	- 2.1	-11.2	- 6.6	2.0	11.1	26	-30.0	6	0	30	-10.6	77	22	- 9		5	0	185		0.5	23								
MADISON	262	985.4	1018.1	- 0.4	- 9.1	- 4.8	3.3	11.7	26+	-22.2	6	0	28	- 8.3	77	39	4	19	10	0	48	25	1.8	25	13.0	N	28	8	3	20	6.7	49
MILWAUKEE	205	991.9	1017.9	- 0.4	- 7.7	- 4.1	2.3	11.1	26+	-20.0	6+	0	27	- 8.3	74	28	- 18	13	7	0	5	T	3.0	26	15.2	NW	28	8	4	19	6.8	53
WYOMING																																
CASPER	1627	835.8	1020.4	- 2.2	-12.0	- 7.1	- 2.3	10.0	15	-31.1	9	0	28	-12.2	66	16	2	8	9	0	244	102	5.7	22	17.9	21	16	5	7	19	7.0	
CHEYENNE	1867	808.7	1018.6	0.9	-10.1	- 4.6	- 0.9	13.9	15	-25.0	9+	0	28	-13.3	54	6	- 7	3	7	0	117	51	4.0	30	20.6	NW	27	9	9	13	5.9	57
LANDER	1696	827.6	1024.2	- 6.7	-18.4	-12.6	- 5.5	7.2	14	-32.2	5	0	31	-17.2	71	23	11	12	7	0	653	508	0.6	22	7.6	N	3	8	6	17	6.5	57
SHERIDAN	1208	877.8	1020.4	0.3	-13.3	- 6.5	- 0.6	14.4	15	-33.3	8	0	30			9	- 7	6	7	0	198	178	1.6	29	12.1	NW	21+	8	6	17	6.5	62

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

HEATING DEGREE DAYS

(Base 65°F.)

JANUARY 1973

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	[illegible]	1913	1609
HUNTSVILLE	767	2077	1922
MOBILE	442	1067	1099
MONTGOMERY	575	1417	1468
ALASKA			
ANCHORAGE	1925	6930	6429
ANNETTE	981	4072	3930
BARROW	[illegible]	10241	11028
BARTER ISLAND	2397	10399	10796
BETHEL	2149	7351	7570
BETTLES	2783	9503	
BIG DELTA	2528	8482	
COLD BAY	1295	5511	5389
FAIRBANKS	2582	8574	8794
GULKANA	2490	8947	
HOMER	1645	6156	
JUNEAU	1423	5450	[illegible]
KING SALMON	1962	6728	[illegible]
KODIAK	[illegible]	5347	5772
KOTZEBUE	[illegible]	8249	8846
MC GRATH	2585	8442	8680
NOME	2180	7548	7918
ST. PAUL ISLAND	1292	6057	6006
SHEMYA	[illegible]	5319	5300
SUMMIT	2276	8652	
TALKEETNA	[illegible]	7405	6925
UNALAKLEET	[illegible]	[illegible]	
YAKUTAT	1381	5510	5124
ARIZONA			
FLAGSTAFF	1297	4607	3982
PHOENIX	422	1060	1145
TUCSON	533	1476	1133
WINSLOW	[illegible]	2905	3024
YUMA	355	859	830
ARKANSAS			
FORT SMITH	873	2594	2074
LITTLE ROCK	777	2193	2073
CALIFORNIA			
BAKERSFIELD	521	1599	1367
BISHOP	1028	2992	2537
BLUE CANYON	1001	3503	2761
EUREKA U	542	2539	2573
FRESNO	610	1897	1561
LONG BEACH	352	886	871
LOS ANGELES	314	715	906
LOS ANGELES U	266	607	708
MT SHASTA R	1022	3668	3169
OAKLAND	547	1700	1592
RED BLUFF	693	2076	1531
SACRAMENTO	636	1957	1647
SANDBERG R	885	2876	2181
SAN DIEGO	286	688	745
SAN FRANCISCO	521	1796	1638
SAN FRANCISCO U	455	1807	1648
SANTA MARIA	542	1772	1554
STOCKTON	602	1863	1658
COLORADO			
ALAMOSA	1839	5898	5043
COLORADO SPRINGS	1221	4238	3607
DENVER	1162	3922	3546
GRAND JUNCTION	1651	4152	[illegible]
PUEBLO	1093	3790	[illegible]
CONNECTICUT			
BRIDGEPORT	1066	3147	3053
HARTFORD	1097	3524	3516
DIST.OF COLUMBIA			
WASHINGTON DULLES	964	2895	
WASHINGTON NATIONAL	[illegible]	2326	2474
DELAWARE			
WILMINGTON	902	2580	2816
FLORIDA			
APALACHICOLA U	310	725	935
DAYTONA BEACH	226	427	534
FORT MYERS	94	201	279
JACKSONVILLE	351	734	798
KEY WEST	16	24	68
LAKELAND U	172	378	416
MIAMI	41	74	139
ORLANDO	160	319	[illegible]
PENSACOLA	390	945	967
TALLAHASSEE	409	925	961
TAMPA	166	361	[illegible]
WEST PALM BEACH	56	98	158
GEORGIA			
ATHENS	669	1677	1806
ATLANTA	725	1840	1824
AUGUSTA	613	1460	1512
COLUMBUS	572	1293	1515
MACON	562	1264	1375
ROME	794	2019	2070
SAVANNAH	462	[illegible]	1167
IDAHO			
BOISE	1056	3692	3469
LEWISTON	1007	[illegible]	3278
POCATELLO	1394	4546	4055
ILLINOIS			
CAIRO U	882	2587	2360
CHICAGO MIDWAY	1118	3734	3482
CHICAGO O HARE	1135	3830	3748
MOLINE	1170	3867	3712
PEORIA	1161	3863	[illegible]
ROCKFORD	1193	4029	3920
SPRINGFIELD	1089	3512	3217
INDIANA			
EVANSVILLE	997	3026	2743
FORT WAYNE	1102	[illegible]	3588
INDIANAPOLIS	1059	3284	3293
SOUTH BEND	1080	3635	3612
IOWA			
BURLINGTON	1190	3878	3577
DES MOINES	1326	4345	3937
DUBUQUE	1311	4511	4262
SIOUX CITY	1342	4268	4029
WATERLOO	1428	4662	4262
KANSAS			
CONCORDIA	1171	3711	3224
DODGE CITY	1122	3538	2940
GOODLAND	1177	4135	3517
TOPEKA	1158	3480	3101
WICHITA	1159	3399	2808
KENTUCKY			
COVINGTON	1025	3082	3053
LEXINGTON	920	2668	[illegible]
LOUISVILLE	927	2662	2731
LOUISIANA			
ALEXANDRIA	633	1621	1231
BATON ROUGE	479	1088	1025
LAKE CHARLES	498	1251	951
NEW ORLEANS	447	1082	896
SHREVEPORT	[illegible]	1735	1373
MAINE			
CARIBOU	1711	5960	5480
PORTLAND	1292	4326	4129
MARYLAND			
BALTIMORE	935	2718	2738
MASSACHUSETTS			
BLUE HILL OBS R	1101	3620	3464
BOSTON	1033	3154	3059
WORCESTER	1200	[illegible]	3854
MICHIGAN			
ALPENA	1306	4670	4610
DETROIT	1085	3519	3454
DETROIT METRO	1115	3737	3620
FLINT	1116	3856	3806
GRAND RAPIDS	1162	3986	3885
HOUGHTON LAKE	1324	4710	4574
LANSING	1158	4129	3835
MARQUETTE U	1323	4878	4522
MUSKEGON	1147	3828	3619
SAULT STE MARIE	1414	5115	4903
MINNESOTA			
DULUTH	1654	6135	5599
INTERNATIONAL FALLS	1720	6120	6126
MINNEAPOLIS	1474	5067	4846
ROCHESTER	1525	5197	4755
ST CLOUD	1624	5586	5116
MISSISSIPPI			
JACKSON	634	1575	1398
MERIDIAN	602	1521	1481
MISSOURI			
COLUMBIA REGIONAL	1080	3374	3072
KANSAS CITY	1160	3459	3068
ST JOSEPH	1194	3649	3270
ST LOUIS	997	3165	[illegible]
SPRINGFIELD	981	3052	2718
MONTANA			
BILLINGS	1296	4744	4022
GLASGOW	[illegible]	5347	5237
GREAT FALLS	1240	4685	4321
HAVRE	1273	5039	4998
HELENA	1465	5464	4690
KALISPELL	1410	5157	4785
MILES CITY	1379	4918	4460
MISSOULA	[illegible]	4903	[illegible]
NEBRASKA			
GRAND ISLAND	1273	4181	3815
LINCOLN	1281	4099	3736
NORFOLK	1353	4416	4038
NORTH PLATTE	1343	4644	3891
OMAHA	1307	4102	3670
SCOTTSBLUFF	1245	[illegible]	3832
VALENTINE	1356	4724	4253
NEVADA			
ELKO	1386	4725	4264
ELY	1379	4803	4328
LAS VEGAS	744	2032	1770
RENO	1127	3945	3724
WINNEMUCCA	1184	4196	[illegible]
NEW HAMPSHIRE			
CONCORD	1357	4675	4158
MT WASHINGTON OBS	1830	7819	7709
NEW JERSEY			
ATLANTIC CITY	885	2639	2655
ATLANTIC CITY U	796	2360	2502
NEWARK	906	2659	2856
TRENTON U	925	2750	2810
NEW MEXICO			
ALBUQUERQUE	1020	2946	2681
CLAYTON	1025	3470	2966
ROSWELL	800	2474	2106
NEW YORK			
ALBANY	1168	3969	3879
BINGHAMTON	1210	4172	4030
BUFFALO	1152	3802	3826
NEW YORK U	907	2712	2691
NEW YORK KENNEDY	876	2499	[illegible]
NEW YORK LA GUARDIA	920	2816	2638
ROCHESTER	1118	3590	3687
SYRACUSE	1128	3711	3749
NORTH CAROLINA			
ASHEVILLE	846	2344	2670
CAPE HATTERAS R	578	1231	1452
CHARLOTTE	780	2032	1950
GREENSBORO	889	2417	2300
RALEIGH	790	2117	2076
WILMINGTON	567	1346	1432
NORTH DAKOTA			
BISMARCK	1528	5466	5115
FARGO	1688	5696	5323
WILLISTON	1488	5651	5323
OHIO			
AKRON	1082	3337	3420
CINCINNATI ABBE OB	969	2943	2805
CLEVELAND	1067	3395	3397
COLUMBUS	1041	3247	3278
DAYTON	1038	3303	3232
MANSFIELD	1078	3393	3283
TOLEDO	1135	3759	3669
YOUNGSTOWN	1157	3795	3601
OKLAHOMA			
OKLAHOMA CITY	975	2803	2311
TULSA	954	2754	2378
OREGON			
ASTORIA	755	2873	2854
BURNS U	1211	4463	4000
EUGENE	825	2982	2670
MEACHAM	1268	4853	4294
MEDFORD	835	3041	2917
PENDLETON	1036	3465	3073
PORTLAND	799	2676	2659
SALEM	803	3043	2662
SEXTON SUMMIT R	999	3734	3274
PENNSYLVANIA			
ALLENTOWN	1055	3321	3297
ERIE	[illegible]	3678	3733
HARRISBURG	964	2936	3046
PHILADELPHIA	940	2750	2950
PITTSBURGH	1087	3309	3397
SCRANTON	1124	3741	[illegible]
WILLIAMSPORT	1125	3564	3407
RHODE ISLAND			
BLOCK ISLAND	984	2898	2917
PROVIDENCE	1044	3261	3277
SOUTH CAROLINA			
CHARLESTON	520	1123	1299
CHARLESTON U	475	1010	[illegible]
COLUMBIA	618	1489	1576
GRNVLLE-SPRTNBRG	734	1922	1878
SOUTH DAKOTA			
ABERDEEN	1484	[illegible]	[illegible]
HURON	1428	4811	4768
RAPID CITY	1181	4586	4082
SIOUX FALLS	1440	4876	[illegible]
TENNESSEE			
BRISTOL	898	2408	2516
CHATTANOOGA	890	2394	2049
KNOXVILLE	828	2232	2147
MEMPHIS	809	2342	2022
NASHVILLE	830	2223	2193
OAK RIDGE R	848	2277	2312
TEXAS			
ABILENE	844	2271	1693
AMARILLO	972	3129	2467
AUSTIN	586	1520	1112
BROWNSVILLE	339	700	420
CORPUS CHRISTI	415	906	631
DALLAS	682	1861	1508
DEL RIO	531	1264	1081
EL PASO	679	1812	1831
FORT WORTH	690	1879	1539
GALVESTON U	424	961	758
HOUSTON INTERCON	540	1322	1075
LUBBOCK	928	2676	2249
MIDLAND	804	2192	1711
PORT ARTHUR	532	1319	942
SAN ANGELO	738	1853	1489
SAN ANTONIO	551	1371	1026
VICTORIA	476	1130	770
WACO	696	1853	1305
WICHITA FALLS	839	2382	1810
UTAH			
MILFORD	1570	4599	3802
SALT LAKE CITY	1400	3925	3603
WENDOVER	1308	3927	3511
VERMONT			
BURLINGTON	1344	4637	4592
VIRGINIA			
LYNCHBURG	893	2489	2485
NORFOLK	752	1845	1980
RICHMOND	843	2246	2344
ROANOKE	852	2497	2488
WALLOPS ISLAND	855	2199	
WASHINGTON			
OLYMPIA	874	3453	2982
QUILLAYUTE	800	3431	3158
SEATTLE-TACOMA	807	3006	2882
SEATTLE	783	2829	2515
SPOKANE	1171	4076	3887
STAMPEDE PASS R	1334	5357	5131
WALLA WALLA U	972	3205	2907
YAKIMA	1153	3830	3636
WEST VIRGINIA			
BECKLEY	1036	3143	3131
CHARLESTON	945	2698	2653
ELKINS	1068	3229	3298
HUNTINGTON	950	2824	2641
PARKERSBURG U	981	2799	2777
WISCONSIN			
GREEN BAY	1350	4591	4487
LA CROSSE	1389	4611	4388
MADISON	1279	4520	4446
MILWAUKEE	1242	4221	4239
WYOMING			
CASPER	1415	4902	4139
CHEYENNE	1275	4696	4056
LANDER	1720	5442	4520
SHERIDAN	1380	4883	4317

Data from airport unless otherwise specified
U indicates Urban, R indicates Rural, sites.

COOLING DEGREE DAYS

(Base 65°F.)

State and station	Current season: This month	Current season: Period January through this month	Normals January through this month
ALABAMA			
BIRMINGHAM	0	0	
HUNTSVILLE	0	0	
MOBILE	0	0	
MONTGOMERY	0	0	
ALASKA			
ANCHORAGE	0	0	
ANNETTE	0	0	
BARROW	0	0	
BARTER ISLAND	0	0	
BETHEL	0	0	
BETTLES	0	0	
BIG DELTA	0	0	
COLD BAY	0	0	
FAIRBANKS	0	0	
GULKANA	0	0	
HOMER	0	0	
JUNEAU	0	0	
KING SALMON	0	0	
KODIAK	0	0	
KOTZEBUE	0	0	
MC GRATH	0	0	
NOME	0	0	
ST. PAUL ISLAND	0	0	
SHEMYA	0	0	
SUMMIT	0	0	
TALKEETNA	0	0	
UNALAKLEET	0	0	
YAKUTAT	0	0	
ARIZONA			
FLAGSTAFF	0	0	
PHOENIX	0	0	
TUCSON	0	0	
WINSLOW	0	0	
YUMA	[illegible]	0	
ARKANSAS			
FORT SMITH	0	0	
LITTLE ROCK	0	0	
CALIFORNIA			
BAKERSFIELD	0	0	
BISHOP	0	0	
BLUE CANYON	0	0	
EUREKA U	0	0	
FRESNO	0	0	
LONG BEACH	0	0	
LOS ANGELES	1	1	
LOS ANGELES U	9	9	
MT SHASTA R	0	0	
OAKLAND	0	0	
RED BLUFF	0	0	
SACRAMENTO	0	0	
SANDBERG R	0	0	
SAN DIEGO	0	0	
SAN FRANCISCO	[illegible]	0	
SAN FRANCISCO U	0	0	
SANTA MARIA	0	0	
STOCKTON	0	0	
COLORADO			
ALAMOSA	0	0	
COLORADO SPRINGS	0	0	
DENVER	0	0	
GRAND JUNCTION	0	0	
PUEBLO	0	0	
CONNECTICUT			
BRIDGEPORT	0	0	
HARTFORD	0	0	
DELAWARE			
WILMINGTON	0	0	
DIST.OF COLUMBIA			
WASHINGTON DULLES	0	0	
WASHINGTON NATIONAL	0	0	
FLORIDA			
APALACHICOLA U	7	7	
DAYTONA BEACH	45	45	
FORT MYERS	131	131	
JACKSONVILLE	23	23	
KEY WEST	249	249	
LAKELAND U	70	70	
MIAMI	212	212	
ORLANDO	88	88	
PENSACOLA	0	0	
TALLAHASSEE	15	15	
TAMPA	75	75	
WEST PALM BEACH	177	177	
GEORGIA			
ATHENS	0	0	
ATLANTA	0	0	
AUGUSTA	0	0	
COLUMBUS	0	0	
MACON	0	0	
ROME	0	0	
SAVANNAH	0	0	
HAWAII			
HILO	233	233	
HONOLULU	252	252	
KAHULUI	160	160	
LIHUE	191	191	
IDAHO			
BOISE	0	0	
LEWISTON	0	0	
POCATELLO	0	0	
ILLINOIS			
CAIRO U	0	0	
CHICAGO O HARE	0	0	
CHICAGO MIDWAY	0	0	
MOLINE	0	0	
PEORIA	0	0	
ROCKFORD	0	0	
SPRINGFIELD	0	0	
INDIANA			
EVANSVILLE	0	0	
FORT WAYNE	0	0	
INDIANAPOLIS	[illegible]	0	
SOUTH BEND	0	0	
IOWA			
BURLINGTON	0	0	
DES MOINES	0	0	
DUBUQUE	0	0	
SIOUX CITY	0	0	
WATERLOO	0	0	
KANSAS			
CONCORDIA	0	0	
DODGE CITY	0	0	
GOODLAND	0	0	
TOPEKA	0	0	
WICHITA	0	0	
KENTUCKY			
COVINGTON	0	0	
LEXINGTON	0	0	
LOUISVILLE	0	0	
LOUISIANA			
ALEXANDRIA	0	0	
BATON ROUGE	0	0	
LAKE CHARLES	0	0	
NEW ORLEANS	0	0	
SHREVEPORT	0	0	
MAINE			
CARIBOU	0	0	
PORTLAND	0	0	
MARYLAND			
BALTIMORE	0	0	
MASSACHUSETTS			
BLUE HILL OBS R	0	0	
BOSTON	0	0	
WORCESTER	0	0	
MICHIGAN			
ALPENA	0	0	
DETROIT	0	0	
DETROIT METRO.	0	0	
FLINT	0	0	
GRAND RAPIDS	0	0	
HOUGHTON LAKE	0	0	
LANSING	0	0	
MARQUETTE U	0	0	
MUSKEGON	0	0	
SAULT STE MARIE	0	0	
MINNESOTA			
DULUTH	0	0	
INTERNATIONAL FALLS	0	0	
MINNEAPOLIS	0	0	
ROCHESTER	0	0	
ST CLOUD	0	0	
MISSISSIPPI			
JACKSON	1	1	
MERIDIAN	0	0	
MISSOURI			
COLUMBIA REGIONAL	[illegible]	0	
KANSAS CITY	0	0	
ST JOSEPH	0	0	
ST LOUIS	0	0	
SPRINGFIELD	0	0	
MONTANA			
BILLINGS	0	0	
GLASGOW	0	0	
GREAT FALLS	0	0	
HAVRE	0	0	
HELENA	0	0	
KALISPELL	0	0	
MILES CITY	0	0	
MISSOULA	0	0	
NEBRASKA			
GRAND ISLAND	0	0	
LINCOLN	0	0	
NORFOLK	0	0	
NORTH PLATTE	0	0	
OMAHA	0	0	
SCOTTSBLUFF	0	0	
VALENTINE	0	0	
NEVADA			
ELKO	0	0	
ELY	0	0	
LAS VEGAS	0	0	
RENO	0	0	
WINNEMUCCA	0	0	
NEW HAMPSHIRE			
CONCORD	0	0	
MT WASHINGTON OBS	0	0	
NEW JERSEY			
ATLANTIC CITY	0	0	
ATLANTIC CITY U	0	0	
NEWARK	0	0	
TRENTON U	0	0	
NEW MEXICO			
ALBUQUERQUE	0	0	
CLAYTON	0	0	
ROSWELL	0	0	
NEW YORK			
ALBANY	0	0	
BINGHAMTON	0	0	
BUFFALO	0	0	
NEW YORK U	0	0	
NEW YORK KENNEDY	0	0	
NEW YORK LA GUARDIA	0	0	
ROCHESTER	0	0	
SYRACUSE	0	0	
NORTH CAROLINA			
ASHEVILLE	0	0	
CAPE HATTERAS R	0	0	
CHARLOTTE	0	0	
GREENSBORO	0	0	
RALEIGH	0	0	
WILMINGTON	1	1	
NORTH DAKOTA			
BISMARCK	0	0	
FARGO	0	0	
WILLISTON	0	0	
OHIO			
AKRON	0	0	
CINCINNATI ABBE OB.	0	0	
CLEVELAND	0	0	
COLUMBUS	0	0	
DAYTON	0	0	
MANSFIELD	0	0	
TOLEDO	0	0	
YOUNGSTOWN	0	0	
OKLAHOMA			
OKLAHOMA CITY	0	0	
TULSA	0	0	
OREGON			
ASTORIA	0	0	
BURNS U	0	0	
EUGENE	0	0	
MEACHAM	0	0	
MEDFORD	0	0	
PENDLETON	0	0	
PORTLAND	0	0	
SALEM	0	0	
SEXTON SUMMIT R	0	0	
PACIFIC AREA			
GUAM TAGUAC R	331	331	
JOHNSTON	330	330	
KOROR R	506	506	
KWAJALEIN	509	509	
MAJURO	498	498	
PAGO PAGO	525	525	
PONAPE R	504	504	
TRUK MOEN ISLAND	520	520	
WAKE	367	367	
YAP R	461	461	
PENNSYLVANIA			
ALLENTOWN	0	0	
ERIE	0	0	
HARRISBURG	0	0	
PHILADELPHIA	0	0	
PITTSBURGH	0	0	
SCRANTON	0	0	
WILLIAMSPORT	0	0	
RHODE ISLAND			
BLOCK ISLAND	0	0	
PROVIDENCE	0	[illegible]	
SOUTH CAROLINA			
CHARLESTON	1	1	
CHARLESTON	0	0	
COLUMBIA	0	0	
GRNVLLE-SPRTNBRG	0	0	
SOUTH DAKOTA			
ABERDEEN	0	0	
HURON	0	0	
RAPID CITY	0	0	
SIOUX FALLS	0	0	
TENNESSEE			
BRISTOL	0	0	
CHATTANOOGA	0	0	
KNOXVILLE	0	0	
MEMPHIS	0	0	
NASHVILLE	0	0	
OAK RIDGE R	0	0	
TEXAS			
ABILENE	0	0	
AMARILLO	0	0	
AUSTIN	1	1	
BROWNSVILLE	19	19	
CORPUS CHRISTI	13	13	
DALLAS	0	0	
DEL RIO	0	0	
EL PASO	0	0	
FORT WORTH	1	1	
GALVESTON U	1	1	
HOUSTON INTERCON	1	1	
LUBBOCK	0	0	
MIDLAND	0	0	
PORT ARTHUR	0	0	
SAN ANGELO	0	0	
SAN ANTONIO	8	8	
VICTORIA	3	3	
WACO	0	0	
WICHITA FALLS	0	0	
UTAH			
MILFORD	0	0	
SALT LAKE CITY	0	0	
WENDOVER	0	0	
VERMONT			
BURLINGTON	0	0	
VIRGINIA			
LYNCHBURG	0	0	
NORFOLK	0	0	
RICHMOND	0	0	
ROANOKE	0	0	
WALLOPS ISLAND	0	0	
WASHINGTON			
OLYMPIA	0	0	
QUILLAYUTE	0	0	
SEATTLE-TACOMA	0	0	
SEATTLE	0	0	
SPOKANE	0	0	
STAMPEDE PASS R	0	0	
WALLA WALLA U	0	0	
YAKIMA	0	0	
WEST INDIES			
SAN JUAN P.R.	438	438	
WEST VIRGINIA			
BECKLEY	0	0	
CHARLESTON	0	0	
ELKINS	0	0	
HUNTINGTON	0	0	
PARKERSBURG U	0	0	
WISCONSIN			
GREEN BAY	0	0	
LA CROSSE	0	0	
MADISON	0	0	
MILWAUKEE	0	0	
WYOMING			
CASPER	0	0	
CHEYENNE	0	0	
LANDER	0	0	
SHERIDAN	0	0	

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

JANUARY 1973

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				Ø ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS
Alabama	1	1			4																	1	?	°7	C				
Alaska											2	3																	
Arizona*																													
Arkansas	1	1			2																			4	5				
California												5														1	1	7	6
Colorado*																													
Connecticut												4								4				4					
Delaware*																													
Florida	8	4		32	6							4				4													
Georgia																						2	?	7					
Hawaii*																													
Idaho																				3								5	
Illinois	1	1			?																							6	
Indiana*																													
Iowa																				6				6					
Kansas																		1		4				5					
Kentucky*																													
Louisiana	3	2	1	6	5						4	4								6	5			6	6				
Maine											1	4								4									
Maryland*																													
Massachusetts											2	5								4								4	
Michigan																										3		4	
Minnesota*																													
Mississippi	2	1		8	5							?	2										1	6	?			?	
Missouri	2	1		2	5			4				5												7					
Montana*																													
Nebraska												?	?					1	?	?	?		?	?	?				
Nevada																										1			
New Hampshire												4								4									
New Jersey*																													
New Mexico																								°5	C				
New York												4																	
North Carolina												5						1	2	6	5			5	4				
North Dakota*																													
Ohio*																													
Oklahoma	1	1		4	5							4												7	?	3			
Oregon												5	3											5				5	
Pacific Area																												°5	C
Pennsylvania*																													
Puerto Rico*																													
Rhode Island*																													
South Carolina																				6	7								
South Dakota*																													
Tennessee												5				4				5				3				5	
Texas	14	3		4	6					1	5	4								6	8								
Utah*																													
Vermont																				4				4					
U.S. Virgin Is.*																													
Virginia																				4									
Washington												6																	
West Virginia*																													
Wisconsin*																													
Wyoming*																													

° Includes crop damage.
C Crop damage.
* No occurrence of storms or unusual weather phenomena reported.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
Ø For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
† Storm damages are placed in categories varying from 1 to 9 as follows:

1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5 Million
7 $5 Million to $50 Million
8 $50 Million to $500 Million
9 $500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1973

Elmer R. Nelson, Office of Hydrology

The most damaging floods in the nation during January occurred in the central Coastal Basins in California. Heavy flooding occurred along the lower Russian River in the Guerneville area. The heaviest damage occurred in portions of Marin County where water backed up into low-lying areas due to heavy runoff and high tides. Damage estimates range up to $10 million.

Date (January)	Flood Event	Lives Lost	Preliminary estimate of damage (thousands of dollars)
	Lake Michigan and Huron		
Dec. 30-4	Heavy snowmelt and excessive rains during the last week in December caused flooding and rises on some rivers in south-central and lower Michigan. Flood damage was confined to rural and low-lying land areas. Farm fields and crops were damaged. Rural and low-lying roads were damaged. Numerous basements of homes and buildings in low areas were flooded.	0	$20
	Lake Erie		
4	The high water on Lake Erie and the upper Niagara River caused some shore flooding. A section of Lake Shore Road, south of Hamburg, N.Y., was under water for a short period. The Niagara River flooded the scenic Niagara Parkway, between Fort Erie and Niagara Falls, Ontario, up to a depth of 1 foot. The Robert Moses Parkway near Niagara Falls, N.Y., was flooded at the North Grand Island bridge by the rising Niagara River.	0	NA
	Lake Michigan		
1-8	Rapid snowmelt and rain over New Year's weekend caused flooding on the Grand River at Ionia and Grand Rapids, Mich. This is the earliest flooding of the Grand River since records began in 1904 and 1905.	0	NA
	ATLANTIC SLOPE DRAINAGE		
29-30	Rain on the 27th-28th caused minor flooding on some small streams in New Jersey. The Millstone River at Blackwells Mills and Assunpink Creek at Trenton, N.J., crested nearly 3 feet above flood stage.	0	Minor
Dec. 17-1/	The Lumber River at Lumberton, N.C., continued above flood stage all month. A secondary crest on the 24th-25th was 2.2 feet above flood stage. The losses at Lumberton were due to persistent flooding.	0	4
	EAST GULF OF MEXICO DRAINAGE		
1-31	Heavy widespread rains on Dec. 31 brought higher stages and increased flows to Alabama and northwest Florida rivers during early January. Higher water levels and saturated soils were sustained through the first week of January by recurring periods of rainfall. Toward the close of the first week more rain brought rivers into flood	0	80

Date (January)	Flood Event	Lives Lost	Preliminary estimate of damage (thousands of dollars)
	EAST GULF OF MEXICO DRAINAGE-Cont'd. across western Alabama and northwest Florida. Moderate lowland flooding resulted on the Black Warrior River at Warrior Lock and Dam, Ala., on the 8th-13th. Moderate to severe lowland flooding accompanied the high water on the Tombigbee River as crests passed downstream. The total damages along the Tombigbee River were estimated at $735,000.		
Dec. 15-1/	Widespread lowland flooding occurred on farm and timber lands adjacent to the Pearl River in Mississippi and Louisiana. A crest of 30.4 feet was reached at Jackson, Miss., on the 12th. Levees contained most of the water, but there was some flooding in low areas of the city. Some residences in Byram, Miss., south of Jackson could only be reached by boat, but no one had to be evacuated.	0	$138
	MISSISSIPPI SYSTEM		
	Upper Mississippi Basin		
17-22	Much above normal temperatures on the 13th-31st caused snowmelt rises and minor flooding on the Whitewater River in Minnesota and the upper Iowa River in Iowa. Ice jams on the Root River caused 1.5 to 3.5 feet of flooding at Houston and Hokah, Minn.	0	Minor
Dec. 31- Feb. 4	Much of the overflow of streams in Iowa, Illinois, and Wisconsin that began in late December froze and remained intact until Jan. 13. A warming trend at that time caused fluctuations in the river levels to above flood stage due to ice action. Precipitation at the same time caused rapid rises and some local flash flooding.	0	NA
11-16	A combination of ice jams and precipitation caused a rapid rise and flooding on the Fox River, a tributary of the Illinois. In the Elgin, Ill., area, flooding of the Richardson subdivision caused 20 families to be evacuated from their homes. Urban damage occurred in Montgomery and Algonquin Counties in the Chicago, Ill., area.	0	NA
	Missouri Basin		
17-21	Unseasonably warm temperatures in northern Nebraska during the week of the 14th-20th caused a breakup of ice on rivers and streams and diminished the ice on reservoirs from 100 percent to 20 percent to 50 percent coverage. Several ice jams caused higher stages and minor flooding on the lower reaches of Turkey Creek in the Wilber, Neb., area.	0	Minor
11-20	Widespread flooding occurred along streams in	0	Minor

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

JANUARY 1973

Date (January)	Flood Event	Lives Lost	Preliminary estimate of damage (thousands of dollars)
	MISSISSIPPI SYSTEM-Cont'd.		
	Missouri Basin - Continued		
	the northwestern quadrant of Missouri. The longest period of flooding was on the Missouri River at Rulo, Nebr., which was above flood stage between the 11th and 18th. Damage was minimal as the flooding was more local due to ice jams.		
	Ohio Basin		
2-12	Flooding in the Wabash Basin in Indiana was a continuation of the overflow that began in the upper Wabash during the latter part of December. All flooding was lowland agricultural. Due to the very late harvest, some crops remained in the fields and were a total loss.	0	$39
Dec. 11-29	Flooding along the mainstem of the lower Ohio River was a continuation of the flooding that began during mid-December. Damage, as in December, was mainly agricultural.	0	1,791
	White Basin		
Oct. 29-1/	The Cache River continued above flood stage at Patterson, Ark., for the third consecutive month. The Black River at Black Rock, Ark., was above flood stage most of January with the higher crest 19.5 feet (flood stage 14 feet) occurring on the 23d. The White River at St. Charles, Ark., was above flood stage the first 2 days and the last 3 days of the month. Efforts to complete harvesting of crops in areas that have flooded several times since harvesting began were further delayed.	0	Light
	Arkansas Basin		
3-5	Minor flooding occurred on Bird Creek in Oklahoma due to 1.5 inches of rain on the 3d. The runoff was heavy, as soil moisture was above normal.	0	Minor
21-Feb. 3	Two to 3 inches of rain on the 18th, 21st, and 22d produced up to 3.5 feet of overflow on streams in the basin. Streams remained above flood level from a few hours on the Spring River to 12 days on the Arkansas River at Van Buren, Ark.	0	Minor
	Red Basin		
24-1/	One to 3.5 inches of rain on the 20th and 21st, caused nearly 5 feet of overflow on the Ouachita River at Camden, Ark. Efforts to complete harvesting of crops in areas that have been flooded several times since harvesting began were further delayed.	0	Light

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

Date (January)	Flood Event	Lives Lost	Preliminary estimate of damage (thousands of dollars)
	MISSISSIPPI SYSTEM		
	Lower Mississippi		
Dec. 16-1/	Widespread lowland flooding occurred on farm and timber lands adjacent to the Tallahatchie, Yazoo, and Big Black Rivers in Mississippi. The crests averaged about 9.5 feet above flood stage.	0	NA
21	Heavy rains (4.5 inches) in a short period of time on the 21st caused a breach in the levee on Big Sand Creek at Greenwood, Miss. A large section of the northeast portion of the city was inundated. Sixty-five families were evacuated.		
1-31	High water in the Mississippi River caused lowland flooding in the Long Lake area just north of Vicksburg, Miss. Some roads were inundated. Boats were used to get to some residences, no one was evacuated, although this condition prevailed most of the month. Three feet of overflow along the Mississippi River at Caruthersville, Mo., between Dec. 16 and Jan. 11 caused heavy crop damage.	0	NA
	PACIFIC SLOPE DRAINAGE		
	Central Coastal Basins		
11-13 16-17 18-19	Heavy flooding occurred along the lower Russian River in the Guerneville, Calif., area. Rainfall averaged 12 inches over the lower basin on the 8th-12th and over 11 inches on the 15th-18th. The Russian River was above flood stage at Summerhome for 93 hours and at Guerneville bridge for 70 hours. Damage was confined mostly to summer cabins. The heaviest damage occurred in parts of Marin County where water backed up into the low-lying areas due to heavy runoff and very high tides. Considerable damage also occurred in Santa Clara and San Mateo Counties, with the greatest amount reported along Colma Creek in northern San Mateo County. Estimates of damage range up to $10 million.	0	$5,000
	Columbia Basin		
10	Ice jammed the Lemhi River just above its confluence with the main Salmon River, flooding some homes in Salmon, Idaho. Water rose to 1.5 feet in the affected homes. One chicken ranch lost some 425 laying hens and the production of some 1,000 others of his laying brood.	0	NA
14	Ice jams caused flooding on Willow and Sand Creeks northeast of Idaho Falls, Idaho. Some basements along North Boulevard and Beacon Streets were flooded.	0	Minor

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

JANUARY 1973

Date (January)	Flood Event	Lives Lost	Preliminary estimate of damage (thousands of dollars)
	PACIFIC SLOPE DRAINAGE-Cont'd.		
	Columbia Basin - Cont'd.		
5-13	An ice jam caused the Portneuf River to overflow at Pocatello, Idaho. The river level rose over 2 feet above flood stage.	0	NA
16-17	Locally heavy rains on the 15th-17th caused the Weiser River to overflow near Weiser, Idaho.	0	NA
15-18	Near record high tides caused inundation of lowlands in numerous Oregon coastal estuaries. A high tide of 11.9 feet was reported at Astoria, Oreg., on the 16th which was 0.2 foot below the highest observed tide of 12.1 feet recorded on Dec. 17, 1933. The peak streamflows on rivers and creeks draining into these estuaries had passed by the time these tides were having their full effect.	0	$34
14-19	Heavy precipitation caused the Pudding River at Aurora, Oreg., to rise slightly over 1 foot above flood stage on the 15th.	0	2

1/ Flooding continued at the end of the month.
N.A. Not available.

FLOOD STAGE DATA

(All dates in January unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–	Above flood stages -dates To–	Crest * Stage	Crest * Date
	Ft			Ft.	
ST LAWRENCE DRAINAGE					
Lake Michigan					
Red Cedar:					
Williamston, Mich.	7	Dec 31	4	8.9	Dec 31
East Lansing, Mich.	7	Dec 31	3	8.1	1
Lake Huron					
Shawassee:					
Owosso, Mich.	[illegible]	Dec 30	1	8.3	Dec 31
Flint:					
Flint, Mich.	11	Dec 31	1	13.0	Dec 31
Cass:					
Vassar, Mich.	14	1	3	15.3	1
Saginaw, Mich.	19	2	4	19.3	3
Lake Erie					
St. Joseph:					
Montpelier, Ohio	10	Dec 31	7	11.5	2
Tiffin:					
Stryker, Ohio	11	1	6	11.5	4
ATLANTIC SLOPE DRAINAGE					
Millstone:					
Blackwells Mills, N.J.	7	29	30	9.9	29
Raritan:					
Manville, N.J.	12	29	29	12.2	29
Bound Brook, N.J.	8	29	29	9.15	29
Assunpink Creek:					
Nottingham Way, N.J.	[illegible]	29	29	7.7	29
Trenton, N.J.	[illegible]	29	29	6.1	29
Neshaminy Creek:					
Langhorne, Pa.	9	29	29	9.05	29
Roanoke:					
Williamston, N.C.	10	Dec 1	Mar 4	11.3 11.2	Dec 22 Feb 11-26
Neuse:					
Smithfield, N.C.	13	30	31	13.2	31
Goldsboro, N.C.	14	Dec 19	2	20.2	Dec 24-25
Kinston, N.C.	14	Dec 23	4	17.4	Dec 28-29
Cape Fear:					
William O. Huske,L&D, N.C.	42	30	31	13.5	31
Lock No 2, Elizabethtown, N.C.	20	30	31	21.9	31
Lumber:					
Lumberton, N.C.	9	Dec 17	1/	12.3 11.2	Dec 23 24
Little Pee Dee:					
Galivants Ferry, S.C.	9	20	Mar 27	11.4 11.7 10.0	Feb 11 Feb 18 Mar 11
Pee Dee:					
Peedee, S.C.	19	Dec 17 8 25	3 12 Feb 24	22.8 19.3 26.4	Dec 27 10 Feb 8
Broad:					
Blair, S.C.	14	23 28	23 29	14.9 15.0	23 28
Edisto:					
Givhans Ferry State Pk,S.C.	10	11	18	10.4	13
Savannah:					
Wade Plantation, Ga.	15	Dec 27	10	#15.9	1
Clyo, Ga.	11	Dec 27	27	#14.4	7
Ogeechee:					
Eden, Ga.	9	22	23	# 9.4	22-23
ATLANTIC SLOPE DRAINAGE-Cont'd.					
Ocmulgee:					
Macon, Ga.	18	9	10	#19.4	9-10
EAST GULF OF MEXICO DRAINAGE					
Choctawhatchee:					
Caryville, Fla.	12	4	6	#12.6	5
Alabama:					
Millers Ferry L&D, Ala.	66	10	12	#68.1	11
Black Warrior:					
Bankhead L&D, Ala.	14	1 4 6 22	2 4 9 22	#14.6 #14.6 #17.1 #14.1	1,2 4 7 22
Warrior L&D, Ala.	30	8	13	#34.8	11
Tombigbee:					
Amory, Miss.	20	4	11	23.8	8
Columbus, Miss.	29	8	14	32.4	10
Gainesville, Ala.	36	9	18	#44.0	14
Demopolis L&D, Ala.	48	9	17	#54.5	13
Coffeeville L&D, Ala.	43	9	31	#49.5	16
Pearl:					
Edinburg, Miss.	20	8	15	22.5	11
Carthage, Miss.	17	5	17	20.6	9
Ofahoma, Miss.	14	4	14	16.6	8
Jackson, Miss.	18	Dec 15 24	21 29	29.2 30.4 22.6	Dec 22 12 26
Monticello, Miss.	19	Dec 21	21	24.1 21.7	Dec 23 Jan 11
Bogalusa, La.	15	Dec 18	1/	19.7 19.3	Dec 26 Feb 19
Pearl River, La.	12	Dec 23	29	15.1	Dec 26
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Whitewater:					
Beaver, Minn.	5	17	20	6.55	18
Root:					
Houston, Minn.	15	18	20	16.4	19
Hokah, Minn.	47	18	22	50.3	19
Upper Iowa:					
Dorchester (nr), Iowa	14	18	19	14.9	18
Grant:					
Burton, Wis.	17	17	17	19.3	17
Turkey:					
Garber, Iowa	17	18	18	E23.5	18
Maquoketa:					
Maquoketa, Iowa	13	19	20	14.2	19
Wapsipinicon:					
DeWitt, Iowa	10	6 11 20	6 11 24	10.15 10.05 10.2	6 11 24
Pecatonica:					
Darlington, Wis.	11	19	19	11.9	19
Martintown, Wis.	11	Dec 30	8	15.3	4
Freeport, Ill.	13	Dec 31 24	7 24	14.2 13.1	1 24
Shirland, Ill.	12	1 23	9 23	14.2 12.0	4 23
Green:					
Geneseo, Ill.	8	Dec 30 4	1 4	11.3 8.8	Dec 30 4
Rock:					
Joslin, Ill.	12	Dec 31 22	9 31	14.85 13.0	2 29

FLOOD STAGE DATA

(All dates in January unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Continued					
Upper Mississippi Basin-Cont'd.					
Rock:					
Moline, Ill	12	1	13	13.2	6-7
Pope Creek:					
Keithsburg, Ill.	17	3 19	5 19	22.7 23.8	4 19
Black Hawk Creek:					
Hudson, Iowa	12	Dec 30	9	15.05	Jan 1
Iowa:					
Marshalltown, Iowa	13	Dec 30 17	5 21	17.1 15.3	Dec 31 19
Wapello, Iowa	10	1	Feb 4	15.0	21
North Skunk:					
Sigourney, Iowa	16	18 20	20 21	16.4 17.0	19 21
Skunk:					
Oskaloosa, Iowa	15	16	30	19.1	19,22
Brighton, Iowa	14	6 19	8 25	14.55 15.45	7 23
Augusta, Iowa	15	16	21	#17.8	17
Racoon:					
Jefferson, Iowa	10	1 18	1 22	10.3 11.9	1 21
Des Moines:					
Eddyville, Iowa	14	5	19	17.6	17
Illinois:					
Morris, Ill.	13	Dec 31	5	20.3	1
LaSalle, Ill.	20	Dec 31	14	27.0	1
Peoria, Ill.	14	Dec 31	Feb 13	18.0 14.5	10 Feb 8
Beardstown, Ill.	14	Dec 31	Feb 13	19.4 14.8	8 Feb 2
Meredosia, Ill.	32	2	30	35.9	9
Mississippi:					
Keithsburg, Ill.	12	Dec 31 11	7 18	13.8 12.9	2 15-18
Burlington, Iowa	15	5 20	6 27	15.0 16.6	5-6 24
Missouri Basin					
Tarkio:					
Fairfax, Mo.	17	17	17	18.3	17
Platte:					
Agency, Mo.	20	1	1	21.0	1
Turkey Creek:					
Wilber, (nr) Nebr.	11	17	21	12.3	19
Grand:					
Chillicothe, Mo.	24	Dec 30	1	26.6	Dec 31
Sumner, Mo.	26	Dec 30	3	30.9	Dec 31
Chariton:					
Prairie Hill, (nr) Mo.	15	19	19	15.4	19
Missouri:					
Rulo, Nebr.	17	11	18	22.2	17
St. Joseph, Mo.	17	17	18	19.9	18
Waverly, Mo.	18	1 18	2 20	18.8 19.1	1 19
Boonville, Mo.	21	19	20	22.05	19
Ohio Basin					
Vermillion:					
Danville, Ill.	18	Dec 30	1	19.5	1
Embarrass:					
Ste. Marie, Ill.	18	1	7	19.2	2
MISSISSIPPI SYSTEM-Continued					
Ohio Basin - Continued					
Embarrass:					
Lawrenceville, Ill.	11	Dec 31 23	10 24	16.9 11.0	6 24
White:					
Elliston, Ind.	18	4	7	18.55	6
Newberry, Ind.	18	6	8	18.3	7
Edwardsport, Ind.	15	4	8	16.3	7
Little Wabash:					
Wilcox, Ill.	16	Dec 31 19	8 25	21.1 18.0	4 23
Wabash:					
LaFayette, Ind.	11	Dec 29	6	18.4	1
Covington, Ind.	16	Dec 30	7	22.5	2
Montezuma, Ind.	14	Dec 29	9	23.7	2
Terre Haute, Ind.	14	Dec 30	9	20.0	4
Hutsonville, Ind.	20	2	10	22.9	6
Riverton, Ind.	18	3	11	20.4	6
Vincennes, Ind.	16	3	12	30.15	7
New Harmony, Ind.	15	7	12	15.7	10
French Broad:					
Rosman, N.C.	8	21	22	9.5	22
Tennessee:					
Paducah, Ky.	320	Dec 10	12	332.7	Dec 18
Ohio:					
Shawneetown, Ill.	33	Dec 11	3	44.9	Dec 20
Dam No 50, Fords Ferry,Ky	34	Dec 11	4	48.1	Dec 20
Dam No 51, Golconda, Ill.	40	Dec 14	29	45.7	Dec 20
Paducah, Ky.	39	Dec 14	1	43.9	Dec 21
Dam No 52, Brookport, Ill	37	Dec 12	10	45.7	Dec 20
Dam No. 53, Grand Chain, Ill.	42	Dec 12	11	50.0	Dec 22
Cairo, Ill.	40	Dec 13 25	12 29	47.0 41.0	Dec 24 27
White Basin					
Black:					
Pocahontas, Ark.	17	24	Feb 2	18.65	28
Black Rock, Ark.	14	Dec 31 21	11 Feb 17	17.0 19.5 18.0	4 23 9
Cache:					
Patterson, Ark.	7	Oct 29	1/	10.0 9.4 8.2 9.4 9.2 9.4	Nov 9 Dec 16 7 24 Feb 10 Mar 17,28
White:					
Clarendon, Ark.	26	25	Mar 8	27.0 28.5	30 Feb 16
St. Charles, Ark.	25	Dec 12 29	2 1	25.7 26.7	Dec 21 Feb 19
Arkansas Basin					
Little Caney:					
Copan, Okla.	21	21	24	22.2	23
Bird Creek:					
Avant, Okla.	16	3	3	16.0	3
Sperry, Okla.	21	4	5	24.3	4
Owasso, Okla.	24.5	4	5	26.3	5
Spring:					
Quapaw, Okla.	20	22	22	20.1	22
Neosho:					
Commerce, Okla.	15	21	2[illegible]	18.5	23,24

FLOOD STAGE DATA

(All dates in January unless otherwise specified)

JANUARY 1973

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Continued					
Arkansas Basin-Continued					
Illinois:					
Tahlequah, Okla.	11	22	24	12.3	23
Fourche La Fave:					
Houston, Ark.	25	22	25	27.4	23
Arkansas:					
Van Buren, Ark.	22	22	Feb 3	23.0	29
Red Basin					
Sulphur:					
Hagansport, Tex.	44	26	30	46.6	26
Naples, Tex.	22	31	Feb 19	24.9	Feb 2-3
Little Missouri:					
Boughton, Ark.	20	23	23	20.2	23
Ouachita:					
Camden, Ark.	26	24	Feb 5	30.8	26
Lower Mississippi Basin					
St. Francis:					
Fisk, Mo.	20	2	31	24.45	8
St. Francis, Ark.	18	4	Feb 12	21.05	22
				19.0	9
Tallahatchie:					
Swan Lake, Miss.	26	Dec 16	6	27.1	Dec 22
		7	Feb 3	28.0	9
Yazoo:					
Yazoo City, Miss.	29	7	17	32.8	9
		21	28	29.6	22
Big Black:					
West, Miss.	12	Dec 31	17	21.4	8
Bovina, Miss.	28	7	27	37.7	14
Mississippi:					
New Madrid, Mo.	34	2	8	34.3	6
Caruthersville, Mo.	32	Dec 16	11	34.9	Dec 24
Atchafalaya Basin					
Atchafalaya:					
Morgan City, La.	7	Dec 20	1/	8.6	21
				8.4	Feb 20
WEST GULF OF MEXICO DRAINAGE					
Calcasieu:					
Hineston, La.	12	4	18	14.8	10
		22	Feb 20	15.1	24
				16.65	3-4
Sabine:					
Deweyville, Tex.	14	9	22	14.3	14
		30	Feb 21	14.5	Feb 5
Navasota:					
Easterly 7 NE, Tex.	14	27	30	16.3	28
Bryan 17 Ne, Tex.	12	7	12	12.6	8
		26	Feb. 4	13.7	30

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
	Ft.			Ft.	
PACIFIC SLOPE DRAINAGE					
Sacramento Basin					
Yolo Bypass:					
Lisbon, Calif.	W19	19	28	19.6	20
Sacramento:					
Ord Ferry, Calif.	W110.5	12	13	112.5	12
		16	21	114.6	17
				115.6	19
Moulton Weir, Calif.	W 76.8	12	14	E 79.0	12
				E 79.9	17
				E 80.6	20
Colusa Weir, Calif.	W 61.8	10	28	E 66.1	12
				E 66.8	17
				67.0	20
		31	1/	M	
Colusa Bridge, Calif.	W 63	12	14	64.3	13
		17	25	65.1	18
				65.5	20
Tisdale Weir, Calif.	W 45.5	10	Mar 16	E 49.2	13
				E 49.4	18
				E 49.6	20
				E 48.4	Feb 8
Fremont Weir, Calif.	W 33.5	12	Feb 1	E 36.8	20
Sacramento (I/ST),Calif.	W 25	18	21	26.7	19
Rio Vista, Calif.	9	15	30	9.7	16
				9.2	16
				9.8	18
San Francisco Bay Basin					
Salinas:					
Bradley, Calif.	11	18	18	11.3	18
Napa:					
St. Helena, Calif.	11	16	16	14.9	16
Central Coastal Basins					
Russian:					
Summerhome (Guerneville,nr),Calif.	32	11	13	40.4	12
		16	17	M	
		18	19	M	
Guerneville Bridge,Calif.	32	12	13	NA	
		16	17	M	
		18	19	M	
Columbia Basin					
Portneuf:					
Pocatello, Idaho	8	5	13	10.1	8
Weiser:					
Weiser 10 ENE, Idaho	8	16	17	9.2	17
Pudding:					
Aurora, Oreg.	20	14	19	21.2	15

* Provisional
# Highest Stage observed
1/ Continued at end of month
E Estimated
M Missing
W Warning Stage

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	ALBANY, N. Y. 1007 MB						ALBUQUERQUE, N. MEX. 838 MB						AMARILLO, TEXAS 891 MB						• ANCHORAGE, ALASKA 1002 MB						• ANNETTE, ALASKA 1003 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed	No of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed
SURFACE	31	86	-4.5	-8.8	29	2.3	3	1,619	-3.7	-7.4	04	2.1	31	1,095	-2.8	-8.0	29	3.3	30	45	-14.5	-17.9	02	1.6	31	37	.4	[illegible]	[illegible]	[illegible]
1000	26	162	-5.8	-10.7	29	2.9													16	169	[illegible]	-15.0	04	1.9	27	165	-1.0	[illegible]	14	[illegible]
950	31	544	-5.2	-9.2	28	6.2													30	455	-12.4	[illegible]	03	2.4	31	474	-1.0	[illegible]	13	[illegible]
900	31	967	-6.6	[illegible]	29	9.5													30	869	-12.6	-18.4	05	2.1	31	904	[illegible]	[illegible]	14	[illegible]
850	31	1,414	-7.1	-15.2	29	12.2							31	1,467	.9	-10.4	29	4.9	30	1,305	-13.3	-19.8	09	1.2	31	1,354	-5.6	[illegible]	14	[illegible]
800	31	1,886	-8.2	-17.3	29	13.8	31	1,984	-1.6	-9.5	35	.7	31	1,955	.4	-11.8	29	5.5	30	1,765	-14.5	-21.3	18	.9	31	1,828	-8.1	-13.5	19	[illegible]
750	31	2,386	-9.8	-19.2	29	15.2	31	2,497	-3.2	-12.2	28	3.6	31	2,471	-.7	-14.7	28	6.0	30	2,253	-16.5	-23.5	20	1.7	31	[illegible]	[illegible]	-16.6	[illegible]	[illegible]
700	31	2,917	-11.7	-23.5	28	16.8	31	3,040	-5.9	-15.9	28	6.3	31	3,020	-2.8	-18.4	27	7.2	30	2,769	-19.5	-26.1	20	3.4	31	2,854	-13.7	-19.5	[illegible]	[illegible]
650	31	3,482	-14.5	-26.6	28	18.7	31	3,618	-8.3	-19.7	28	8.2	31	3,604	-6.2	-19.9	26	9.1	30	3,316	-22.7	-29.4	22	4.3	31	3,414	-16.8	-24.3	23	[illegible]
600	31	4,085	-17.1	-29.6	28	20.4	31	4,236	-11.5	-24.1	27	9.5	31	4,226	-9.8	-24.9	26	10.4	30	3,900	-25.8	-33.2	23	5.9	31	[illegible]	-20.0	-27.6	24	[illegible]
550	31	4,734	-20.7	-33.6	28	22.9	31	4,898	-15.7	-26.5	27	11.0	31	4,892	-14.4	-28.6	26	12.2	30	4,526	-29.4	-36.9	24	8.3	31	4,652	[illegible]	-32.1	26	[illegible]
500	31	5,432	-25.1	-36.4	27	24.4	31	5,610	-20.8	-33.1	27	12.1	31	5,606	-20.1	-32.9	27	12.7	30	[illegible]	-33.9	-38.0	24	9.1	31	5,341	[illegible]	-35.5	26	[illegible]
450	31	6,190	-30.2	-40.1	27	25.1	31	6,380	-26.3	-37.7	26	13.0	31	6,379	-25.9	-37.1	27	13.0	30	5,932	-38.4	-40.5	24	10.5	31	6,088	-31.4	-40.1	28	[illegible]
400	31	7,018	-35.8	-44.5	27	28.0	31	7,221	-32.7	-45.8	26	13.9	31	7,221	-32.2	-42.6	26	15.7	30	6,734	-43.0	-45.7	24	12.3	31	[illegible]	[illegible]	-45.3	27	[illegible]
350	31	7,936	-42.1	-47.7	27	27.6	31	8,150	-39.7	-49.0	26	14.9	31	8,153	-38.9	-46.4	26	19.6	30	7,628	-47.1		25	14.6	31	7,813	-45.7		27	[illegible]
300	31	8,962	-48.7		27	26.4	31	9,187	-46.1		27	16.3	31	9,191	-46.2		26	22.0	29	8,624	-50.7		25	15.3	29	8,815	-52.0		25	[illegible]
250	31	10,148	-53.1		27	29.1	31	10,384	-51.4		27	20.3	31	10,389	-51.2		26	27.2	29	9,808	-52.0		25	15.2	29	9,946	-54.2		27	[illegible]
200	31	11,581	-54.0		27	29.7	31	11,829	-52.3		27	24.2	31	11,831	-53.0		26	32.0	29	11,257	-50.2		25	17.4	27	11,430	-50.5		28	[illegible]
175	31	12,442	-52.5		27	29.2	30	12,689	-53.2		27	25.8	31	12,691	-53.4		26	31.2	29	12,133	-48.2		25	17.3	24	12,304	-49.1		28	[illegible]
150	31	13,436	-53.7		27	26.5	30	13,680	-54.6		27	24.2	31	13,680	-55.5		26	31.6	29	13,151	-47.3		26	18.6	[illegible]	13,313	-48.8		28	[illegible]
125	31	14,605	-55.3		27	25.4	30	14,840	-57.4		27	21.0	31	14,835	-58.3		27	24.5	29	14,359	-46.8		26	20.1	24	14,510	-49.1		29	[illegible]
100	31	16,018	-58.4		27	24.4	29	16,240	-60.9		27	18.3	30	16,227	-61.2		27	20.3	29	15,940	-46.5		26	18.6	[illegible]	15,969	-50.1		29	[illegible]
80	31	17,419	-59.3		27	20.8	29	17,624	-62.4		27	12.1	30	17,606	-62.7		27	14.7	29	17,319	-47.4		24	17.5	24	17,426	-50.7		29	[illegible]
70	31	18,255	-59.7		28	18.6	29	18,448	-62.5		28	9.3	29	18,430	-62.9		28	11.9	28	18,201	-47.7		26	18.0	24	18,297	-50.6		30	13.5
60	31	19,219	-60.0		28	18.0	28	19,399	-62.6		28	6.2	29	19,383	-62.9		27	7.2	28	19,223	-47.9		27	17.7	25	19,306	-50.8		30	[illegible]
50	31	20,357	-60.4		29	16.2	28	20,546	-61.6		31	2.9	27	20,510	-61.6		29	3.6	28	20,428	-47.4		27	17.2	[illegible]	[illegible]	-51.2		30	[illegible]
40	29	21,743	-62.0		30	16.3	26	21,914	-59.8		02	2.6	27	21,898	-60.1		33	2.2	24	21,908	-46.9		28	17.8	[illegible]	21,951	-50.9		31	13.7
30	25	23,537	-60.4		31	16.7	22	23,718	-58.4		03	5.7	25	23,698	-59.2		04	5.7	24	23,813	-47.1		28	16.1	20	23,809	-50.6		32	15.1
25	24	24,671	-60.9		32	15.4	19	24,866	-58.1		05	7.0	25	24,842	-58.6		05	6.6	21	25,024	-47.1		29	17.1	20	24,998	-50.6		33	[illegible]
20	23	26,061	-61.3		32	15.1	14	26,266	-56.5		06	6.1	22	26,256	-57.0		05	7.7	15	26,529	-45.7		30	13.1	14	[illegible]	-50.4		33	15.3
15	22	27,857	-57.9		31	16.7	11	28,083	-55.1		03	6.9	20	28,088	-55.2		04	8.3	12	28,492	-44.1		31	14.9	11	28,296	-50.3			
10	17	30,491	-54.6		33	13.5							11	30,705	-52.9										[illegible]	[illegible]	[illegible]			

Standard pressure surface (mb)	ATHENS, GEORGIA 991 MB						BARTER IS., ALASKA 1010 MB						BETHEL, ALASKA 1006 MB						• BISMARCK, N. DAK. 956 MB						BOISE, IDAHO 918 MB					
SURFACE	31	246	2.6	-1.4	32	.9	31	15	-24.6	-26.4	25	3.6	31	39	-21.2	-23.1	06	.5	31	503	-11.3	-13.6	30	1.7	31	871	-2.2	-6.5	14	1.4
1000							24	127	-21.2	-24.8	26	5.2	21	127	-17.1	-20.4	02	1.3												
950	31	586	4.2	-3.5	30	2.3	31	469	-21.4	-24.3	26	8.9	31	474	-14.8	-19.0	10	1.1	20	591	-12.9	-16.0	30	2.8						
900	31	1,026	4.2	-5.4	27	4.9	31	869	-20.2	-23.6	27	7.9	31	883	-15.4	-20.6	13	.7	31	970	-5.4	-12.4	30	7.3	31	1,028	-2.2	[illegible]	13	[illegible]
850	31	1,492	4.7	-9.6	26	7.4	31	1,293	-20.8	-24.1	27	7.8	31	1,314	-16.7	-23.1	25	1.4	31	1,420	-4.4	-15.0	31	8.4	31	1,482	-3.0	[illegible]	15	2.1
800	31	1,986	4.2	-12.7	26	9.8	31	1,740	-21.8	-24.3	27	7.7	31	1,769	-17.6	-24.9	27	2.8	31	1,897	-5.3	-15.9	31	9.2	31	1,960	-4.8	-11.4	22	2.3
750	31	2,510	2.2	-12.6	26	12.7	31	2,214	-23.2	-26.8	27	7.7	31	2,251	-19.1	-27.0	26	3.9	31	2,402	-7.5	-18.5	30	[illegible]	31	2,466	-6.9	-14.4	26	4.4
700	31	3,064	-.5	-15.9	26	16.2	31	2,717	-25.5	-29.8	27	7.4	31	2,762	-21.1	-29.2	26	5.4	31	2,936	-10.5	-20.5	30	10.6	31	3,002	-9.4	-17.8	27	6.7
650	31	3,653	-4.2	-18.2	26	18.2	31	3,252	-28.1	-32.9	27	8.6	31	3,307	-23.9	-32.0	26	6.2	31	3,504	-13.4	-24.5	30	11.4	31	3,572	-12.5	-20.9	27	8.4
600	31	4,280	-7.7	-22.4	26	20.6	31	3,823	-31.1	-34.1	27	9.5	31	3,887	-27.4	-35.2	26	7.3	31	4,109	-16.9	-27.9	30	12.7	31	4,179	-16.2	[illegible]	28	[illegible]
550	31	4,951	-11.8	-24.7	26	23.1	31	4,435	-34.6	-36.3	27	9.4	31	4,509	-31.0	-37.1	27	9.4	31	4,756	-21.2	-31.3	30	13.8	31	4,828	-20.5	-26.9	28	[illegible]
500	31	5,675	-16.7	-29.3	26	26.0	31	5,096	-38.5	-38.2	26	10.3	31	5,179	-35.2	-35.0	27	11.3	31	5,453	-26.3	-34.6	29	15.2	31	5,527	-25.2	-32.8	27	12.9
450	31	6,458	-22.2	-35.0	26	30.3	31	5,813	-42.9	-39.9	26	11.4	31	5,907	-39.6	-38.9	27	12.8	31	6,207	-31.7	-38.2	29	17.1	31	6,284	-30.5	-37.8	27	14.2
400	31	7,313	-28.5	-39.6	26	33.1	31	6,600	-47.7		26	13.1	31	6,704	-44.6	-42.7	26	14.3	31	7,029	-37.8	-43.0	29	18.9	31	7,111	-36.4	-41.4	27	15.9
350	31	8,259	-35.3	-42.7	26	38.6	31	7,475	-52.0		26	14.9	31	7,592	-49.0		26	16.2	31	7,940	-44.3	-46.8	28	19.9	31	8,027	-42.8	[illegible]	27	[illegible]
300	31	9,314	-42.7	-46.8	26	42.6	31	8,462	-55.4		26	15.0	31	8,593	-52.4		25	17.8	31	8,955	-51.1		28	21.1	31	9,049	-49.7		28	[illegible]
250	31	10,526	-49.6		27	48.8	30	9,631	-56.1		26	17.3	31	9,767	-53.4		25	20.2	31	10,126	-55.9		28	23.3	31	10,227	-54.9		28	20.4
200	31	11,967	-55.1		27	51.0	30	11,056	-54.0		26	17.5	30	11,220	-50.1		25	20.3	31	11,543	-55.4		28	21.7	31	11,649	-55.9		28	[illegible]
175	31	12,816	-57.0		27	50.1	30	11,915	-53.1		26	18.5	30	12,096	-48.6		24	20.3	31	12,400	-53.1		28	20.6	31	12,504	-53.2		28	[illegible]
150	31	13,766	-59.9		27	44.0	29	12,903	-51.8		26	18.9	30	13,113	-47.2		25	21.1	31	13,395	-52.9		28	20.6	31	13,499	-53.1		28	[illegible]
125	31	14,917	-63.0		27	37.9	29	14,088	-51.2		27	21.6	30	14,323	-46.4		25	20.7	30	14,572	-53.1		28	20.0	31	14,672	-54.0		28	[illegible]
100	30	16,276	-65.4		27	27.4	29	15,539	-50.9		27	23.9	30	15,806	-46.5		25	21.1	30	16,006	-54.9		29	18.4	31	16,099	-55.3		29	[illegible]
80	28	17,627	-66.5		27	19.4	29	16,992	-50.5		27	28.7	30	17,287	-46.4		25	21.1	30	17,429	-55.7		29	16.3	30	17,516	-56.4		30	[illegible]
70	28	18,437	-65.6		27	16.4	29	17,864	-50.5		27	30.0	30	18,175	-46.3		25	20.3	29	18,277	-56.3		29	16.5	29	18,361	-57.0		30	[illegible]
60	27	19,372	-64.9		28	11.8	29	18,870	-50.4		27	32.3	29	19,198	-46.1		25	18.6	29	19,260	-56.6		30	15.2	27	19,332	-57.6		30	7.5
50	27	20,488	-63.6		29	7.0	29	20,060	-50.1		28	33.9	29	20,409	-46.5		25	17.8	28	20,416	-57.0		30	13.6	27	20,485	-57.0		32	[illegible]
40	25	21,864	-62.3		30	6.1	29	21,519	-49.7		28	33.3	27	21,892	-46.7		26	17.4	27	21,836	-57.0		31	14.5	27	[illegible]	-56.9		34	5.7
30	24	23,648	-61.1		34	4.8	28	23,381	-50.5		28	34.4	26	23,803	-46.4		26	16.1	25	23,657	-57.2		32	14.9	24	23,735	-56.2		36	[illegible]
25	24	24,763	-59.9		34	6.2	28	24,570	-50.5		28	29.7	22	25,019	-45.5		26	14.6	26	24,809	-57.7		33	16.1	21	24,894	-56.4		01	[illegible]
20	23	26,180	-58.1		35	6.5	25	26,042	-49.7		28	30.6	16	26,518	-44.9		23	12.2	23	26,226	-57.8		34	14.8	21	26,317	-56.2		02	9.5
15	23	28,000	-56.1		32	7.0	23	27,951	-48.9		29	35.0	11	28,489	-43.3				18	28,122	-56.2		35	16.1	19	28,189	-54.4		04	[illegible]
10	20	30,598	-52.4		31	10.2	14	30,808	-45.1										8	30,871	-53.1									
7	5	32,913	-50.0																5	33,234	-49.4									

Standard pressure surface (mb)	BOOTHVILLE, LA. 1019 MB						• BROWNSVILLE, TEXAS 1018 MB						BUFFALO, N. Y. 992 MB						CAPE HATTERAS, N. C. 1020 MB						• CARIBOU, MAINE [illegible] MB					
SURFACE	31	1	9.6	7.8	01	1.6	31	7	9.5	6.7	33	1.8	30	218	-4.0	-7.3	25	4.0	31	4	7.2	3.4	33	2.1	31	151	-13.6	-17.4	29	[illegible]
1000	31	160	11.7	7.0	01	1.4	31	153	11.5	7.4	33	1.1							31	163	7.7	1.4	32	3.6						
950	31	589	10.8	4.9	23	1.2	31	583	11.8	6.1	16	1.7	30	557	-4.9	-8.2	25	7.6	31	585	5.8	-1.5	31	4.5	31	483	-10.9	-14.4	29	[illegible]
900	31	1,040	10.4	.9	24	4.6	31	1,036	11.2	3.0	18	3.7	30	981	-6.1	-11.2	26	10.2	31	1,027	4.4	-4.8	28	5.1	31	898	-11.5	-15.1	30	[illegible]
850	31	1,515	9.3	-2.6	25	7.2	31	1,514	11.1	.0	20	5.6	30	1,428	-7.2	-12.9	27	11.2	31	1,492	3.9	-6.5	27	8.1	31	1,336	-12.0	[illegible]	30	[illegible]
800	31	2,017	7.9	-6.4	25	9.1	31	2,019	9.8	-4.0	21	6.5	30	1,899	-8.8	-15.5	27	12.3	31	1,984	2.6	-10.6	27	10.8	31	1,800	-12.0	-17.4	29	[illegible]
750	31	2,547	5.4	-8.5	25	10.7	31	2,553	7.6	-7.9	22	6.7	30	2,398	-10.5	-19.6	28	13.2	31	2,514	.7	-13.5	27	13.9	31	2,294	-13.3	-18.9	29	[illegible]
700	31	3,108	2.6	-12.9	25	13.0	31	3,119	4.7	-13.5	24	7.7	30	2,927	-12.4	-22.5	28	14.8	31	3,055	-2.0	-15.9	27	17.4	31	2,817	-15.5	[illegible]	29	[illegible]
650	31	3,705	-.2	-17.6	25	15.2	31	3,719	1.8	-17.7	25	10.4	30	3,491	-14.7	-24.6	28	16.7	31	3,642	-5.1	-17.4	27	18.7	31	3,374	-17.9	-24.2	28	[illegible]
600	31	4,341	-3.7	-21.8	25	17.3	31	4,360	-2.2	-22.3	25	13.5	30	4,093	-17.7	-27.9	28	18.5	31	4,266	-8.7	-21.0	27	21.1	31	3,969	-21.3	-27.8	28	[illegible]
550	31	5,023	-8.3	-26.3	25	20.0	31	5,045	-6.6	-25.9	25	17.2	30	4,740	-21.3	-31.4	28	21.3	31	4,936	-12.5	-25.3	27	23.8	31	4,607	-24.8	-32.1	28	19.4
500	31	5,755	-13.7	-29.0	25	22.8	31	5,783	-11.5	-31.4	25	20.6	30	5,437	-25.7	-35.4	28	24.2	31	5,667	-17.4	-29.8	27	26.9	31	5,295	-28.9	[illegible]	28	[illegible]
450	31	6,547	-19.2	-33.4	25	26.2	31	6,582	-16.7	-34.9	25	24.3	30	6,193	-30.8	-38.9	28	26.5	31	6,439	-22.4	-33.6	27	30.3	31	6,041	-33.8	[illegible]	28	[illegible]
400	31	7,413	-25.0	-38.7	25	31.1	31	7,457	-22.6	-37.1	25	29.8	30	7,019	-36.6	-43.4	28	27.7	31	7,294	-28.3	-38.0	27	34.5	31	6,858	-39.1	-43.7	27	[illegible]
350	31	8,374	-31.4	-42.1	25	36.2	31	8,426	-29.5	-39.7	25	35.0	30	7,935	-42.9	-46.3	28	27.0	31	8,241	-35.2	-42.1	27	38.1	31	7,764	-44.9		27	[illegible]
300	31	9,446	-39.1	-45.4	25	41.6	31	9,506	-37.5	-46.4	25	39.6	30	8,958	-48.6		27	30.5	31	9,296	-42.8	-45.3	27	43.8	31	8,779	-50.0		27	[illegible]
250	31	10,676	-46.5		26	44.8	31	10,743	-45.5		26	45.6	30	10,146	-52.6		27	31.7	31	10,575	-50.5		27	50.0	31	9,961	-53.5		27	[illegible]
200	31	12,132	-54.0		26	47.2	31	12,203	-54.1		26	44.8	30	11,581	-53.3		27	30.3	31	11,942	-55.2		27	51.1	30	11,392	-54.1		27	[illegible]
175	31	12,983	-57.5		26	45.0	31	13,050	-58.9		26	44.4	30	12,443	-52.4		27	30.9	31	12,792	-56.5		27	48.1	30	12,249	-52.7		27	[illegible]
150	31	13,947	-61.3		26	40.1	30	14,006	-63.6		26	39.8	30	13,439	-53.3		27	27.5	31	13,766	-58.4		27	43.4	29	13,232	-52.4		27	[illegible]
125	30	15,074	-65.7		26	34.5	30	15,113	-68.2		26	33.3	30	14,608	-55.5		27	25.4	29	14,912	-60.8		27	36.5	29	14,476	-54.0		27	31.4
100	29	16,417	-69.8		26	26.6	27	16,441	-72.9		26	23.9	30	16,022	-58.2		28	21.9	29	16,285	-64.2		27	28.8	29	15,831	-56.5		27	[illegible]
80	29	17,740	-70.9		27	18.5	25	17,745	-73.6		26	13.0	29	17,424	-59.3		28	20.7	29	17,567	-65.0		27	21.9	29	17,243	-57.9		27	[illegible]
70	28	18,532	-69.0		27	14.3	25	18,529	-72.1		26	10.3	27	18,251	-60.2		28	18.7	26	18,463	-64.6		27	18.1	28	18,083	-58.8		27	[illegible]
60	26	19,452	-67.5		27	8.6	25	19,443	-69.6		26	7.2	25	19,228	-60.2		28	17.3	[illegible]	[illegible]	-63.6		[illegible]	13.3	27	19,057	-59.5		27	[illegible]
50	25	20,559	-64.9		27	4.3	25	20,538	-66.9		27	4.3	25	20,364	-60.3		29	15.0	24	20,533	-62.4		28	8.6	27	20,196	-60.3		28	[illegible]
40	23	21,933	-62.4		34	2.6	23	21,901	-63.4		29	1.4	23	21,764	-60.6		32	13.0	24	21,915	-61.5		29	5.4	26	21,581	-60.9		28	29.2
30	23	23,718	-60.3		04	4.9	23	23,678	-61.0		05	4.4	20	23,583	-60.2		32	12.2	21	23,716	-59.9		33	5.1	23	23,381	-60.1		28	27.7
25	22	24,857	-58.9		05	5.8	23	24,817	-59.2		06	5.1	19	24,722	-60.5		32	12.7	20	24,857	-58.3		34	6.4	21	24,506	-61.0		28	27.2
20	21	26,263	-56.5		04	4.8	23	26,225	-56.5		06	3.6	15	26,104	-60.2				15	26,274	-57.3		33	[illegible]	20	25,909	-61.7		28	[illegible]
15	16	28,099	-54.3		04	6.1	21	28,064	-53.5		14	2.5	11	27,882	-59.0				15	28,199	-55.2		31	[illegible]	20	27,689	-61.5		28	[illegible]
10	7	30,668	-52.0				18	30,701	-48.6		26	6.1	5	30,286	-57.3				5	30,701	-52.5				[illegible]	[illegible]	[illegible]		28	[illegible]
7							11	33,093	-44.7																10	32,661	-47.2			
5							5	35,344	-38.7																					

See reference note at end of table

RAWINSONDE DATA

Average monthly values

CHARLESTON, S. C.
1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	13	5.8	2.5	34	1.0
1000	31	161	8.2	2.4	33	1.6
950	31	586	8.2	-.9	28	2.2
900	31	1,032	7.8	-3.4	25	4.8
850	31	1,503	7.3	-5.[illegible]	25	8.0
800	31	2,001	5.1	-8.2	26	10.2
750	31	2,528	3.9	-9.4	26	12.5
700	31	3,086	.8	-11.2	26	14.6
650	31	3,678	-2.6	-15.1	27	16.2
600	31	4,308	-5.2	-19.1	27	19.7
550	31	4,984	-10.4	-22.9	27	22.5
500	31	5,711	-15.4	-27.0	27	25.2
450	31	6,499	-20.7	-31.3	27	27.9
400	31	7,350	-27.0	-35.9	26	31.4
350	31	8,312	-33.7	-41.2	26	34.8
300	31	9,373	-41.4	-45.7	26	41.9
250	31	10,589	-49.3		27	47.2
200	31	12,030	-55.0		27	49.4
175	31	12,879	-57.2		27	48.7
150	30	13,839	-59.9		27	42.8
125	30	14,967	-64.0		27	36.9
100	29	16,324	-67.0		27	26.9
80	28	17,666	-67.6		27	19.4
70	27	18,471	-66.5		27	15.2
60	26	19,404	-66.0		28	10.2
50	25	20,518	-63.5		28	7.2
40	24	21,899	-61.9		30	5.3
30	23	23,677	-60.1		34	4.9
25	22	24,814	-59.2		34	5.0
20	22	26,220	-56.9		35	5.3
15	20	28,056	-55.0		33	5.3
10	10	30,701	-49.3			
7						

CHATHAM, MASS.
1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	16	-.8	-5.2	28	3.3
1000	28	135	-1.2	-7.2	29	5.9
950	31	526	-2.0	-7.9	29	8.1
900	31	955	-3.4	-11.6	29	7.6
850	31	1,407	-4.4	-15.7	28	9.1
800	31	1,884	-5.6	-18.4	28	11.5
750	31	2,388	-7.5	-20.3	28	14.0
700	31	2,923	-10.1	-23.[illegible]	28	16.7
650	31	3,491	-12.8	-25.4	27	18.3
600	31	4,098	-15.7	-28.0	27	20.0
550	31	4,749	-19.8	-31.2	27	22.3
500	31	5,450	-24.6	-35.8	27	24.8
450	31	6,210	-29.4	-40.5	27	28.4
400	31	7,041	-35.3	-44.9	27	31.6
350	31	7,962	-41.4	-46.4	27	35.9
300	31	8,991	-47.9		27	40.8
250	31	10,180	-52.6		27	43.1
200	31	11,615	-53.7		27	39.5
175	30	12,470	-53.4		27	38.2
150	30	13,460	-54.5		27	36.3
125	29	14,618	-55.7		27	33.9
100	25	16,021	-59.1		27	30.2
80	23	17,422	-60.9		27	28.5
70	23	18,251	-61.5		27	26.3
60	22	19,200	-61.6		28	23.7
50	21	20,336	-61.2		28	22.9
40	20	21,723	-60.9		28	20.5
30	19	23,511	-60.7		28	21.2
25	19	24,646	-60.7		28	20.9
20	18	26,021	-59.9		28	22.7
15	17	27,822	-58.2		28	27.2
10	16	30,427	-51.8		27	29.6
7	10	32,816	-43.9			

CHIHUAHUA, MEXICO
857 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,428	2.3	-5.7	29	.4
1000						
950						
900						
850	28	1,502	4.2	-5.2	24	.7
800	31	1,988	5.6	-6.6	24	4.0
750	31	2,514	3.3	-10.1	24	5.8
700	31	3,070	.8	-15.0	26	9.0
650	31	3,663	-2.1	-17.9	26	10.7
600	31	4,294	-6.1	-21.9	26	12.8
550	31	4,969	-10.8	-26.4	26	15.3
500	31	5,695	-15.9	-30.5	26	19.5
450	31	6,480	-21.6	-34.9	26	22.2
400	31	7,337	-27.3	-40.1	26	23.6
350	31	8,289	-33.5	-45.4	26	27.0
300	31	9,352	-40.8	-45.7	26	28.9
250	31	10,577	-46.3		26	33.6
200	31	12,042	-51.8			
175	40	12,896	-55.0		27	38.4
150	29	13,869	-59.0		27	33.4
125	25	14,995	-63.4			
100	23	16,353	-67.4			
80	22	17,692	-67.9			
70	22	18,495	-67.8			
60	21	19,425	-66.8			
50	19	20,527	-65.3			
40	18	21,897	-62.5			
30	18	23,683	-60.4			
25	16	24,824	-59.3			
20	15	26,230	-56.7			
15	13	28,075	-54.0			
10	9	30,731	-48.1			
7						

• COLD BAY, ALASKA
1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	26	30	-5.4	-8.0	05	2.8
1000	17	108	-2.8	-6.5	08	3.2
950	26	472	-7.3	-10.0	05	3.2
900	26	891	-9.8	-13.1	01	2.0
850	26	1,331	-11.8	-17.5	31	2.3
800	26	1,794	-13.0	-20.5	31	3.2
750	26	2,285	-14.4	-24.3	30	4.2
700	26	2,805	-17.0	-27.0	28	4.6
650	26	3,359	-19.6	-29.8	27	4.9
600	26	3,950	-23.2	-32.5	26	5.7
550	26	4,582	-27.1	-36.3	26	7.9
500	26	5,263	-31.4	-37.5	25	8.8
450	26	6,002	-36.1	-41.0	25	9.2
400	26	6,811	-41.3	-44.3	26	11.3
350	26	7,710	-46.4		25	13.1
300	26	8,719	-51.9		25	15.0
250	26	9,894	-53.8		24	15.7
200	25	11,351	-48.9		24	14.6
175	25	12,230	-47.9		24	14.8
150	23	13,242	-47.0		25	14.9
125	21	14,439	-46.5		25	13.2
100	21	15,921	-46.6		25	12.6
80	21	17,401	-47.0		24	11.3
70	21	18,286	-47.4		25	10.0
60	20	19,293	-47.8		25	9.4
50	20	20,496	-47.7		25	7.6
40	18	21,968	-47.0		25	6.7
30	16	23,873	-47.1		26	5.6
25	16	25,081	-46.7		28	4.2
20	15	26,559	-45.8		28	4.3
15	13	28,466	-45.8		29	5.1
10	9	31,171	-44.4			
7	7	33,533	-43.7			

DAYTON, OHIO
984 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	299	-2.8	-6.7	22	1.9
1000						
950	31	572	-2.8	-8.1	24	5.8
900	31	1,001	-2.8	-11.0	25	7.5
850	31	1,453	-3.8	-13.6	26	8.2
800	31	1,932	-4.2	-15.8	27	9.4
750	31	2,439	-5.6	-18.0	27	11.3
700	31	2,978	-7.6	-19.6	27	13.5
650	31	3,553	-10.2	-21.9	27	16.2
600	31	4,166	-13.7	-25.2	27	18.8
550	31	4,822	-17.7	-28.8	27	20.5
500	31	5,529	-22.3	-32.6	27	23.0
450	31	6,295	-27.7	-37.9	27	24.8
400	31	7,131	-33.6	-42.8	27	28.2
350	31	8,058	-40.1	-44.2	26	31.1
300	31	9,093	-46.6		26	36.4
250	31	10,288	-51.7		27	40.0
200	31	11,728	-53.7		27	38.9
175	31	12,586	-53.9		27	37.1
150	30	13,580	-55.0		27	36.6
125	28	14,733	-57.2		27	29.9
100	27	16,135	-60.0		27	25.9
80	26	17,519	-61.2		27	21.0
70	25	18,347	-61.7		27	17.8
60	25	19,302	-61.8		27	15.9
50	24	20,436	-61.4		29	13.9
40	24	21,821	-61.4		29	11.2
30	20	23,398	-60.8		30	10.2
25	19	24,738	-60.2		30	11.7
20	19	26,137	-58.8		30	10.4
15	13	27,966	-57.0			
10	5	30,477	-50.8			
7						

DEL RIO, TEXAS
983 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	314	4.6	.6	04	1.4
1000						
950	31	590	6.5	-.2	08	.7
900	31	1,034	5.9	-3.2	26	1.9
850	31	1,501	5.5	-6.3	26	3.5
800	31	1,998	5.5	-8.7	26	4.9
750	31	2,524	3.9	-10.6	26	6.9
700	31	3,082	.8	-14.9	26	9.7
650	31	3,673	-2.7	-18.3	26	11.6
600	31	4,303	-6.8	-21.9	25	13.9
550	31	4,977	-11.3	-25.7	25	16.1
500	31	5,700	-16.4	-31.6	25	19.0
450	31	6,485	-21.5	-34.1	26	23.0
400	31	7,344	-26.9	-39.0	25	30.0
350	31	8,297	-33.3	-44.1	25	34.5
300	31	9,362	-40.2	-47.1	25	39.1
250	31	10,588	-46.3		26	45.0
200	31	12,052	-52.2		26	47.4
175	31	12,910	-55.6		26	44.7
150	30	13,882	-59.3		26	38.5
125	30	15,012	-63.7		27	33.6
100	30	16,366	-67.7		26	24.7
80	29	17,702	-69.2		26	16.5
70	29	18,502	-68.3		27	12.2
60	29	19,430	-67.3		27	6.6
50	29	20,534	-65.5		28	4.2
40	28	21,900	-62.9		32	1.4
30	26	23,685	-60.0		03	2.4
25	26	24,826	-58.8		03	4.0
20	24	26,230	-56.9		04	3.9
15	23	28,057	-55.1		36	3.6
10	12	30,688	-51.6			

DENVER, COLO.
835 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,611	-5.5	-12.9	22	1.3
1000						
950						
900						
850						
800	31	1,952	-2.6	-15.1	29	2.7
750	31	2,463	-3.9	-17.3	32	3.8
700	31	3,006	-5.8	-19.1	31	4.6
650	31	3,583	-9.4	-21.6	31	7.4
600	31	4,197	-13.2	-24.6	30	9.9
550	31	4,854	-17.4	-29.2	30	10.2
500	31	5,562	-22.2	-34.3	29	10.7
450	31	6,328	-27.9	-40.3	28	12.0
400	31	7,163	-34.4	-44.0	28	12.4
350	31	8,085	-41.5	-49.8	27	13.7
300	31	9,112	-48.7		27	16.1
250	31	10,294	-54.6		27	19.2
200	31	11,717	-55.5		27	19.3
175	31	12,571	-54.5		27	19.9
150	31	13,560	-54.0		27	20.0
125	31	14,726	-55.2		27	17.2
100	31	16,144	-57.3		27	15.3
80	31	17,548	-59.0		28	12.8
70	31	18,384	-59.7		28	9.7
60	29	19,346	-59.6		29	5.7
50	28	20,488	-58.3		30	5.8
40	26	21,896	-58.7		33	3.4
30	23	23,715	-57.2		02	5.8
25	22	24,873	-56.9		04	8.8
20	22	26,291	-55.7		04	9.2
15	21	28,125	-55.0		03	10.1
10	12	30,737	-53.7		02	12.1

DODGE CITY, KANS.
925 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	791	-4.9	-8.8	28	1.3
1000						
950						
900	31	1,004	-1.4	-8.4	28	2.2
850	31	1,462	.1	-11.6	29	3.9
800	31	1,947	-.6	-12.3	29	4.7
750	31	2,461	-2.7	-15.3	29	6.5
700	31	3,007	-4.4	-17.9	28	7.6
650	31	3,587	-7.4	-20.6	27	9.0
600	31	4,207	-11.1	-24.9	28	9.8
550	31	4,869	-15.5	-28.8	28	11.0
500	31	5,581	-20.6	-33.4	28	12.9
450	31	6,352	-26.4	-37.4	27	14.9
400	31	7,192	-32.9	-43.3	26	16.9
350	31	8,121	-39.8	-47.3	26	18.3
300	31	9,156	-46.7		26	19.7
250	31	10,348	-52.5		26	24.1
200	31	11,784	-53.8		26	27.7
175	31	12,642	-53.7		26	25.3
150	31	13,633	-54.3		26	25.9
125	31	14,797	-56.2		26	22.6
100	31	16,207	-58.8		27	19.4
80	31	17,602	-60.5		27	13.3
70	30	18,432	-60.8		28	11.0
60	28	19,390	-60.0		28	9.0
50	27	20,534	-59.9		30	4.4
40	25	21,925	-59.5		32	4.2
30	23	23,729	-58.5		36	5.7
25	23	24,877	-58.2		03	6.8
20	19	26,289	-56.7		03	7.2
15	12	28,166	-54.3		04	9.0
10	5	30,793	-51.9			

EL PASO, TEXAS
882 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,193	1.1	-4.8	29	1.4
1000						
950						
900						
850	31	1,496	4.0	-7.5	28	2.8
800	31	1,987	2.3	-10.2	27	4.6
750	31	2,506	.1	-13.4	26	6.2
700	31	3,056	-2.6	-17.6	26	3.1
650	31	3,641	-5.8	-21.1	26	9.6
600	31	4,263	-9.7	-25.0	26	11.8
550	31	4,929	-14.3	-28.7	26	13.2
500	31	5,644	-19.7	-33.4	26	15.0
450	31	6,418	-25.4	-36.8	26	17.1
400	31	7,263	-30.7	-44.1	26	19.9
350	31	8,202	-37.1	-46.6	26	24.5
300	31	9,251	-43.4		26	32.5
250	31	10,461	-49.2		26	35.5
200	31	11,917	-51.5		26	40.9
175	31	12,780	-53.7		27	37.0
150	31	13,765	-56.6		27	33.1
125	30	14,906	-60.4		27	30.5
100	29	16,287	-63.9		27	21.6
80	28	17,645	-65.3		27	14.6
70	27	18,461	-65.3		28	8.8
60	27	19,400	-65.0		28	5.5
50	26	20,515	-63.7		31	2.2
40	26	21,892	-61.4		35	1.6
30	25	23,689	-59.0		05	5.0
25	25	24,835	-58.3		05	7.5
20	23	26,248	-56.4		06	6.5
15	16	28,095	-54.0		05	6.2
10	5	30,696	-49.8			

ELY, NEV.
807 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,908	-11.0	-14.9	20	3.3
1000						
950						
900						
850						
800	28	1,990	-6.5	-11.1	20	2.5
750	31	2,487	-5.2	-13.1	23	.6
700	31	3,027	-7.2	-15.8	30	3.5
650	31	3,602	-9.8	-18.3	29	5.7
600	31	4,216	-13.3	-21.1	29	6.5
550	31	4,873	-17.6	-26.0	29	7.8
500	31	5,580	-22.4	-30.9	28	9.1
450	31	6,345	-28.0	-36.5	27	10.2
400	31	7,180	-34.5	-42.7	28	12.3
350	31	8,102	-41.5	-46.4	28	14.0
300	31	9,129	-48.7		28	15.6
250	31	10,313	-53.8		29	17.9
200	30	11,739	-55.9		29	17.6
175	30	12,594	-53.9		28	18.2
150	30	13,587	-53.4		28	18.1
125	30	14,756	-55.3		28	16.4
100	28	16,174	-57.7		28	13.3
80	26	17,581	-58.5		28	9.7
70	25	18,420	-59.5		29	7.8
60	25	19,385	-59.4		31	5.5
50	23	20,534	-58.6		35	3.0
40	22	21,939	-57.3		02	4.2
30	19	23,765	-57.2		05	6.4
25	19	24,919	-56.8		04	7.0
20	18	26,339	-55.8		05	8.8
15	18	28,172	-55.4		04	9.9
10	12	30,772	-54.4			

EMPALME, MEXICO
1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	10.6	4.2	33	1.7
1000	31	136	14.8	.5	33	2.7
950	31	570	14.5	-2.3	34	3.8
900	31	1,025	12.1	-5.1	31	1.9
850	31	1,502	9.8	-9.2	28	2.3
800	31	2,003	8.0	-13.1	28	3.5
750	31	2,532	5.1	-16.6	28	4.9
700	31	3,092	2.0	-19.4	28	7.7
650	31	3,686	-1.3	-22.8	28	9.4
600	31	4,318	-5.7	-26.0	28	10.7
550	31	4,994	-10.4	-30.1	27	13.7
500	31	5,721	-15.2	-32.8	27	16.7
450	31	6,509	-20.5	-37.5	27	19.8
400	31	7,370	-26.7	-42.4	27	23.3
350	31	8,325	-33.1	-46.7	26	25.5
300	31	9,388	-40.7	-45.5	26	29.0
250	31	10,615	-46.2		26	37.2
200	31	12,092	-51.3		26	38.8
175	31	12,943	-54.8		26	38.5
150	31	13,919	-59.0		26	34.8
125	31	15,053	-63.0		26	29.6
100	30	16,412	-66.9		26	22.2
80	29	17,753	-68.4		26	16.6
70	25	18,559	-66.9		27	12.8
60	25	19,492	-66.2		28	6.6
50	24	20,634	-64.4		30	3.0
40	24	21,975	-62.1		02	1.4
30	24	23,767	-59.3		05	3.4
25	24	24,913	-57.9		05	4.1
20	23	26,327	-55.2		06	3.0
15	14	28,180	-53.7		34	2.8
10	5	30,811	-50.3			
7						

• FAIRBANKS, ALASKA
997 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	135	-28.4	-24.5	32	.5
1000	13	206	-21.8	-19.8	09	.6
950	31	487	-21.9	-24.8	13	2.1
900	31	886	-20.3	-24.5	19	1.8
850	31	1,310	-20.0	-25.2	22	2.5
800	31	1,760	-19.4	-24.4	24	2.9
750	31	2,239	-20.4	-25.5	23	3.9
700	31	2,748	-22.9	-27.3	24	4.4
650	31	3,288	-25.6	-29.8	24	5.3
600	31	3,865	-28.9	-33.8	24	6.6
550	31	4,482	-32.9	-35.7	23	7.6
500	31	5,147	-37.1	-35.9	24	9.2
450	31	5,870	-41.3	-39.6	24	10.7
400	31	6,662	-45.5	-45.0	24	13.5
350	31	7,548	-49.5		25	14.5
300	31	8,547	-52.5		25	16.6
250	31	9,722	-53.7		25	18.0
200	30	11,157	-51.9		26	18.5
175	30	12,025	-50.5		26	19.4
150	30	13,034	-49.1		26	20.2
125	29	14,241	-48.2		26	22.6
100	28	15,717	-48.2		27	24.2
80	27	17,182	-47.8		26	24.0
70	26	18,071	-48.0		27	25.0
60	25	19,085	-47.7		27	23.7
50	23	20,297	-48.0		27	22.3
40	21	21,789	-48.1		27	22.1
30	20	23,687	-48.0		28	22.9
25	17	24,899	-47.6		29	22.8
20	12	26,378	-47.4		29	19.4
15	9	28,404	-44.0			
10	7	31,107	-44.2			
7	[illegible]	33,557	-45.0			

FLINT, MICH.
988 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	236	-2.6	-7.0	25	2.8
1000						
950	31	544	-4.5	-8.8	25	5.8
900	31	969	-5.8	-11.0	26	8.6
850	31	1,417	-6.3	-15.3	27	9.9
800	31	1,890	-7.6	-17.4	27	11.2
750	31	2,391	-9.2	-19.5	27	12.3
700	31	2,923	-11.3	-22.9	28	14.4
650	31	3,489	-14.1	-25.3	28	15.6
600	31	4,092	-17.4	-29.0	28	16.5
550	31	4,739	-21.4	-33.0	28	19.0
500	31	5,436	-25.6	-36.8	28	21.6
450	31	6,192	-30.8	-41.8	28	23.4
400	31	7,018	-36.8	-46.1	28	26.4
350	31	7,933	-43.1		27	28.4
300	31	8,954	-49.2		27	33.2
250	31	10,139	-52.7		27	35.3
200	31	11,576	-53.5		27	34.1
175	31	12,437	-52.8		27	32.3
150	31	13,430	-53.6		27	30.3
125	31	14,597	-55.7		27	29.7
100	31	16,011	-57.9		28	26.5
80	30	17,403	-59.5		28	23.8
70	29	18,230	-60.4		28	22.4
60	29	19,189	-60.8		28	21.3
50	27	20,321	-61.8		28	20.1
40	24	21,700	-61.4		29	19.4
30	23	23,481	-61.6		30	20.2
25	20	24,632	-61.0		30	19.9
20	20	26,021	-60.4		31	20.6
15	17	27,818	-59.9		31	22.8
10	10	30,382	-54.8			
7						

FORT WORTH, TEXAS
998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	160	2.1	-2.7	30	1.2
1000	18	214	-.8	-6.3	34	3.1
950	31	560	3.1	-3.6	27	1.6
900	31	1,019	3.6	-5.8	26	3.2
850	31	1,482	3.2	-7.4	26	4.9
800	31	1,974	3.1	-8.9	26	6.6
750	31	2,496	1.4	-11.3	26	8.4
700	31	3,048	-1.2	-15.6	26	10.4
650	31	3,636	-4.2	-18.7	25	12.1
600	31	4,263	-8.1	-21.4	25	15.1
550	31	4,933	-12.8	-24.5	26	17.6
500	31	5,652	-18.0	-29.6	25	19.6
450	31	6,432	-23.2	-35.4	25	21.7
400	31	7,284	-29.5	-41.4	25	23.8
350	31	8,227	-35.9	-44.3	25	28.6
300	31	9,279	-43.0	-45.4	25	34.4
250	31	10,494	-48.2		25	40.6
200	30	11,946	-52.6		26	44.4
175	29	12,804	-54.8		26	42.5
150	29	13,784	-57.2		26	37.6
125	28	14,924	-60.4		26	33.5
100	28	16,303	-63.9		26	25.5
80	25	17,660	-64.9		27	16.7
70	25	18,474	-65.4		27	11.6
60	22	19,404	-64.9		27	9.2
50	21	20,525	-62.7		28	5.5
40	19	21,901	-60.9		31	4.0
30	17	23,700	-59.2		35	4.3
25	17	24,844	-58.4		36	4.6
20	15	26,249	-56.9		36	4.2
15	13	28,071	-54.6		34	3.6
10						
7						

GLASGOW, MONT.
934 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	696	-9.3	-13.7	31	.9
1000						
950						
900	31	980	-5.1	-11.3	29	6.2
850	31	1,431	-4.2	-13.8	30	10.4
800	31	1,908	-5.8	-15.7	30	10.1
750	31	2,411	-8.3	-17.2	30	10.7
700	31	2,944	-11.3	-20.0	29	11.1
650	31	3,509	-14.6	-24.1	29	11.7
600	31	4,111	-18.2	-27.5	29	12.3
550	31	4,755	-22.5	-30.6	29	12.9
500	31	5,448	-27.4	-34.3	29	14.5
450	31	6,199	-32.6	-38.4	29	15.3
400	31	7,019	-38.5	-42.5	29	16.2
350	31	7,927	-44.6	-44.2	29	16.5
300	31	8,942	-51.0		29	17.2
250	31	10,114	-56.4		28	19.8
200	31	11,528	-54.8		28	19.6
175	30	12,386	-52.9		28	18.4
150	28	13,389	-51.9		29	17.3
125	26	14,563	-52.7		29	16.6
100	24	15,997	-54.4		29	16.4
80	23	17,428	-55.0		30	15.9
70	22	18,278	-55.4		31	14.6
60	22	19,261	-55.6		31	14.5
50	21	20,427	-55.6		31	14.2
40	21	21,848	-56.0		32	14.6
30	19	23,676	-56.8		33	14.5
25	17	24,859	-55.9		34	15.1
20	15	26,314	-54.1		35	12.5
15	10	28,155	-54.7		35	16.9
10						
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

GRAND JUNCTION, COLO. 855 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,472	-13.8	-15.1	12	1.1
1000						
950						
900						
850	20	1,553	-11.9	-14.1	12	1.8
800	30	1,985	-7.1	-11.3	14	1.3
750	30	2,489	-6.6	-12.8	17	1.6
700	30	3,027	-8.1	-16.5	26	2.7
650	30	3,600	-10.6	-19.9	28	4.2
600	30	4,212	-13.8	-22.7	27	5.8
550	30	4,868	-17.9	-28.[illegible]	27	7.6
500	30	5,574	-22.9	-32.8	27	9.2
450	29	6,340	-28.1	-38.0	27	9.8
400	29	7,176	-34.1	-43.4	28	11.0
350	29	8,100	-41.1	-46.5	28	11.8
300	29	9,128	-48.7		28	14.3
250	29	10,311	-54.4		28	17.5
200	29	11,737	-54.3		27	19.8
175	29	12,595	-53.3		27	18.2
150	29	13,590	-53.1		27	18.7
125	28	14,756	-55.1		27	17.0
100	28	16,172	-57.9		27	15.6
80	28	17,573	-59.1		27	12.6
70	28	18,411	-59.4		28	9.3
60	28	19,376	-59.4		29	6.9
50	28	20,519	-58.8		30	4.1
40	25	21,919	-57.9		35	4.1
30	25	23,734	-57.7		02	5.9
25	25	24,886	-57.0		03	7.4
20	25	26,300	-56.5		04	9.0
15	16	28,144	-54.9			
10						
7						

• GREAT FALLS, MONT. 887 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,118	-5.6	-14.2	22	6.5
1000						
950						
900						
850	31	1,449	-3.7	-13.5	24	9.1
800	31	1,926	-6.2	-15.5	26	8.9
750	31	2,428	-8.9	-17.1	27	9.2
700	31	2,960	-11.4	-20.6	28	10.8
650	31	3,525	-14.4	-24.0	28	12.1
600	31	4,128	-17.6	-27.4	28	11.9
550	31	4,774	-22.1	-30.5	28	12.2
500	31	5,469	-26.8	-34.6	28	12.4
450	31	6,221	-31.9	-37.3	28	13.8
400	31	7,043	-37.7	-41.3	28	14.6
350	31	7,954	-44.1		28	16.5
300	31	8,971	-50.8		28	17.6
250	31	10,144	-55.7		29	19.0
200	31	11,563	-55.3		28	19.3
175	30	12,419	-52.8		28	18.1
150	27	13,409	-51.1		28	16.9
125	27	14,593	-51.9		28	14.7
100	27	16,036	-52.5		28	12.3
80	26	17,468	-55.0		29	12.0
70	25	18,319	-54.3		30	11.5
60	24	19,309	-54.2		30	11.0
50	24	20,476	-55.0		31	10.5
40	24	21,901	-55.3		33	9.5
30	22	23,731	-55.9		34	12.7
25	21	24,900	-55.4		34	13.5
20	20	26,317	-56.3		35	14.3
15	16	28,193	-55.9		36	15.0
10	11	30,746	-56.7		36	23.5
7	7	33,056	-54.0			

GREEN BAY, WIS. 990 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	210	-7.4	-10.2	26	2.4
1000	5	246	-17.2	-19.7		
950	31	533	-7.2	-10.2	28	5.6
900	31	955	-6.6	-12.0	28	6.7
850	31	1,402	-6.3	-15.2	29	6.9
800	31	1,876	-7.4	-16.3	29	8.2
750	31	2,377	-9.3	-19.1	29	9.7
700	31	2,909	-11.7	-21.6	29	11.2
650	31	3,474	-14.7	-24.3	29	13.2
600	31	4,077	-17.6	-28.1	29	14.1
550	31	4,723	-21.8	-31.0	29	15.8
500	31	5,418	-26.4	-35.4	29	17.7
450	31	6,172	-31.2	-39.6	29	19.1
400	31	6,997	-37.0	-45.0	29	21.7
350	31	7,911	-43.5	-47.2	29	24.1
300	31	8,930	-50.1		29	26.7
250	31	10,110	-53.9		28	28.2
200	30	11,536	-53.9		28	26.3
175	30	12,396	-52.7		28	26.6
150	30	13,392	-53.2		28	26.5
125	30	14,563	-54.6		28	24.7
100	29	15,992	-57.0		28	22.4
80	27	17,402	-57.6		28	21.3
70	27	18,245	-58.2		29	19.6
60	27	19,215	-58.7		29	18.1
50	25	20,363	-59.2		30	15.9
40	25	21,759	-59.6		30	17.1
30	21	23,556	-59.6		31	16.7
25	20	24,715	-59.2		32	15.4
20	16	26,164	-58.9		33	17.2
15	12	28,023	-57.7		34	18.6
10	8	30,670	-55.5			
7						

GREENSBORO, N. C. 987 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	275	-.8	-3.9	30	.4
1000						
950	31	582	2.5	-6.4	30	2.8
900	31	1,019	2.2	-9.5	27	4.2
850	31	1,461	2.0	-12.7	26	6.8
800	31	1,970	1.3	-15.1	26	9.7
750	31	2,488	-.2	-16.1	27	13.1
700	31	3,037	-2.7	-19.1	27	16.0
650	31	3,622	-5.7	-21.3	27	18.6
600	31	4,245	-9.2	-24.6	27	20.9
550	31	4,913	-13.6	-27.5	27	23.9
500	31	5,630	-18.7	-30.1	27	26.5
450	31	6,407	-24.1	-33.5	27	30.1
400	31	7,256	-30.3	-39.7	27	33.7
350	31	8,196	-36.6	-42.8	27	37.0
300	31	9,245	-44.1	-43.8	27	40.0
250	31	10,447	-51.7		27	45.1
200	31	11,881	-55.2		27	44.9
175	31	12,732	-56.4		27	38.5
150	31	13,707	-58.3		27	34.9
125	31	14,848	-60.8		27	27.0
100	29	16,223	-63.9		27	22.1
80	28	17,583	-64.5		28	17.3
70	28	18,400	-64.3		28	13.5
60	25	19,349	-63.2		28	10.1
50	24	20,471	-62.2		29	10.6
40	23	21,852	-61.9		29	9.0
30	23	23,639	-60.9		33	7.7
25	23	24,775	-60.1		33	7.1
20	20	26,167	-58.2		31	10.4
15	19	27,904	-55.8		30	11.5
10	11	30,614	-51.5			
7	6	32,943	-47.0			

GUADALUPE IS., MEXICO 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	23	14.1	9.4	34	[illegible]
1000	31	163	12.1	7.1	34	[illegible]
950	31	591	9.4	2.9	33	[illegible]
900	31	1,038	7.6	-3.5	34	3.5
850	31	1,507	6.7	-12.4	33	[illegible]
800	30	2,004	5.9	-16.4	31	4.0
750	30	2,530	4.1	-18.7	31	5.4
700	30	3,088	1.3	-20.4	29	5.7
650	29	3,680	-2.2	-22.8	28	7.0
600	29	4,312	-5.9	-26.8	28	7.5
550	29	4,987	-10.7	-30.6	27	9.5
500	29	5,712	-16.0	-34.8	27	11.3
450	29	6,497	-21.9	-38.6	27	12.4
400	29	7,352	-28.7	-43.1	26	13.7
350	29	8,298	-35.6	-47.3		
300	29	9,350	-42.9	-49.0		
250	29	10,562	-49.3			
200	29	12,013	-52.9			
175	29	12,870	-55.4			
150	28	13,843	-58.9			
125	27	14,977	-62.4			
100	26	16,342	-66.6			
80	26	17,687	-67.6			
70	25	18,492	-66.8			
60	25	19,426	-65.7			
50	24	20,540	-64.7			
40	23	21,912	-62.0			
30	22	23,711	-59.2			
25	22	24,857	-57.9			
20	21	26,275	-55.8			
15	18	28,115	-53.9			
10	10	30,720	-49.7			
7						

• GUAM, MARIANA IS. 1001 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	111	23.0	20.6	08	2.7
1000	22	122	23.6	20.9	08	3.7
950	31	565	21.6	18.8	08	8.1
900	31	1,033	18.6	13.8	08	7.6
850	31	1,522	16.0	9.4	09	6.7
800	31	2,036	13.9	1.7	09	6.5
750	31	2,579	13.0	-7.8	10	4.8
700	31	3,156	11.5	-15.1	09	3.1
650	31	3,771	8.6	-18.1	10	2.9
600	31	4,427	4.8	-21.6	11	3.7
550	31	5,131	.8	-25.5	08	3.6
500	31	5,889	-3.5	-28.8	09	3.9
450	31	6,715	-8.1	-32.4	08	3.5
400	31	7,619	-14.4	-37.3	06	3.3
350	31	8,619	-21.5	-42.8	04	2.5
300	31	9,734	-30.0	-49.4	01	1.6
250	31	11,005	-40.2	-56.1	01	1.0
200	31	12,488	-52.2		04	.2
175	31	13,339	-59.1		10	.8
150	31	14,288	-66.9		13	2.1
125	31	15,368	-74.8		13	3.1
100	30	16,639	-82.3		12	5.8
80	27	17,883	-81.5		10	8.1
70	27	18,640	-77.4		09	8.2
60	27	19,537	-72.5		09	9.4
50	26	20,619	-67.9		10	11.8
40	25	21,972	-64.0		09	10.3
30	25	23,763	-58.2		09	5.0
25	23	24,923	-54.4		23	.3
20	22	26,362	-50.5		29	4.4
15	20	28,244	-48.9		29	6.7
10	15	30,941	-44.6		27	9.7
7	5	33,387	-41.4			
5						

HILO, HAWAII 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	19.7	16.9	26	1.1
1000	31	149	20.5	17.4	26	.3
950	31	591	17.4	15.5	09	2.4
900	31	1,051	14.3	12.9	08	3.0
850	31	1,533	11.6	8.4	10	1.9
800	31	2,039	10.2	-.5	09	1.5
750	31	2,576	9.5	-10.7	10	1.3
700	31	3,146	8.2	-15.9	07	1.0
650	31	3,754	5.2	-18.5	29	.5
600	31	4,403	1.6	-22.4	28	1.9
550	31	5,098	-2.8	-25.5	27	3.4
500	31	5,846	-7.4	-29.5	28	6.0
450	31	6,658	-12.6	-33.6	27	7.8
400	31	7,547	-18.9	-38.0	27	11.3
350	31	8,532	-25.1	-43.2	27	15.3
300	31	9,631	-32.9	-49.7	28	18.8
250	31	10,892	-41.1	-55.0	28	22.7
200	31	12,373	-51.8		28	22.5
175	31	13,227	-57.8		28	21.4
150	31	14,184	-64.6		28	20.8
125	31	15,279	-71.9		28	18.7
100	30	16,573	-77.2		29	11.1
80	30	17,844	-78.6		27	3.2
70	29	18,609	-75.6		31	1.4
60	28	19,511	-71.0		05	2.2
50	27	20,601	-67.3		07	2.7
40	27	21,960	-63.1		08	2.5
30	27	23,746	-59.6		07	4.3
25	27	24,892	-57.5		08	4.8
20	26	26,309	-54.4		07	4.3
15	24	28,163	-51.1		27	2.5
10	17	30,821	-46.8		25	6.6
7	7	33,239	-43.8			
5						

HUNTINGTON W. VA. 991 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	-1.9	-6.6	21	.9
1000						
950	31	581	-.9	-6.9	25	4.1
900	31	1,012	-2.3	-10.1	25	6.2
850	31	1,465	-2.9	-12.3	26	7.5
800	31	1,945	-3.3	-14.5	27	9.9
750	31	2,456	-4.2	-17.3	27	12.8
700	31	2,998	-6.1	-19.0	27	15.1
650	31	3,575	-8.6	-20.9	27	17.0
600	31	4,192	-11.8	-23.8	27	19.7
550	31	4,853	-15.7	-26.8	27	22.4
500	31	5,566	-20.6	-30.9	27	25.2
450	31	6,337	-25.8	-35.6	27	28.5
400	31	7,180	-31.8	-41.6	27	31.0
350	31	8,115	-38.0	-45.1	26	35.9
300	31	9,158	-45.1	-44.7	26	41.0
250	31	10,358	-51.0		26	43.3
200	31	11,799	-53.9		27	41.2
175	31	12,656	-54.2		27	37.0
150	30	13,642	-54.9		27	34.0
125	29	14,809	-58.0		27	29.1
100	29	16,206	-60.7		27	24.7
80	25	17,571	-62.1		27	19.8
70	23	18,385	-62.0		28	15.7
60	21	19,349	-62.0		28	13.6
50	20	20,476	-61.5		29	13.2
40	17	21,856	-60.6		30	10.7
30	14	23,652	-59.9		31	13.2
25	13	24,797	-59.4		31	14.6
20	13	26,196	-59.1		31	15.2
15	8	27,955	-58.4			
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• INTERNATIONAL FALLS, MINN. 972 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	359	-14.2	-18.4	24	1.7
1000						
950	31	527	-12.0	-13.9	27	3.4
900	31	944	-8.8	-14.6	29	5.5
850	31	1,388	-8.0	-16.8	30	5.9
800	31	1,858	-9.2	-17.9	30	7.1
750	31	2,356	-10.9	-19.3	30	8.8
700	31	2,884	-13.3	-21.6	30	10.2
650	31	3,445	-16.0	-23.1	30	11.1
600	31	4,045	-19.3	-26.6	30	12.1
550	31	4,687	-23.0	-30.2	30	13.8
500	31	5,379	-27.5	-33.7	30	14.6
450	31	6,129	-32.9	-37.7	29	16.6
400	31	6,947	-38.9	-43.0	29	18.3
350	31	7,854	-45.3	-44.0	29	19.1
300	31	8,864	-52.1		29	21.8
250	31	10,032	-56.6		29	22.6
200	31	11,448	-55.6		28	22.6
175	30	12,303	-52.8		28	21.9
150	30	13,298	-52.7		28	21.5
125	30	14,473	-53.6		29	21.6
100	29	15,906	-55.1		29	21.4
80	28	17,322	-56.1		29	21.6
70	28	18,170	-56.5		29	20.9
60	27	19,142	-57.3		29	20.5
50	27	20,293	-57.9		30	19.6
40	27	21,697	-58.8		30	20.9
30	26	23,513	-59.6		31	20.9
25	25	24,664	-59.7		31	20.4
20	25	26,058	-60.3		32	20.5
15	21	27,911	-59.7		31	21.1
10	17	30,418	-59.5		32	23.6
7	12	32,679	-57.6		31	30.7
5	8	34,880	-52.0			

JACKSON, MISS. 1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	100	3.9	2.2	34	.6
1000	27	181	4.5	.7	02	1.1
950	31	584	5.1	-.9	24	1.7
900	31	1,026	5.6	-2.9	24	4.5
850	30	1,493	5.8	-5.7	25	7.5
800	30	1,989	4.7	-7.5	25	10.6
750	30	2,514	3.0	-10.8	26	12.3
700	30	3,070	.3	-13.6	26	13.9
650	30	3,661	-2.8	-17.1	26	15.2
600	30	4,291	-6.7	-20.5	25	17.4
550	30	4,964	-11.4	-23.5	26	19.0
500	30	5,688	-16.3	-27.3	25	23.1
450	30	6,473	-21.7	-32.3	25	26.3
400	30	7,330	-27.9	-37.9	25	29.6
350	30	8,279	-34.6	-42.6	25	32.9
300	30	9,337	-41.9	-44.8	26	37.7
250	30	10,553	-48.8		26	45.5
200	30	12,001	-53.8		26	47.5
175	29	12,858	-56.6		26	45.1
150	29	13,828	-59.9		26	40.4
125	28	14,964	-63.5		26	34.9
100	26	16,323	-67.1		27	25.6
80	26	17,668	-67.6		26	17.3
70	25	18,473	-67.0		27	12.3
60	23	19,408	-65.7		27	8.1
50	22	20,525	-63.5		27	4.6
40	21	21,901	-62.3		32	2.4
30	19	23,692	-60.2		36	3.6
25	17	24,828	-59.1		03	5.0
20	14	26,216	-57.6		04	5.1
15	9	28,012	-57.1			
10	5	30,634	-51.7			
7						
5						

JOHN F. KENNEDY INT. AP NY 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	.3	-7.2	30	4.3
1000	29	154	.0	-6.7	29	5.2
950	31	552	-1.3	-7.9	30	7.5
900	31	982	-2.7	-10.8	29	7.0
850	31	1,434	-3.3	-14.9	29	8.9
800	31	1,913	-4.7	-17.5	29	11.0
750	31	2,419	-6.9	-19.6	28	12.7
700	31	2,955	-9.0	-22.6	28	15.4
650	31	3,526	-11.4	-25.8	28	17.4
600	31	4,136	-14.4	-28.9	28	20.3
550	31	4,791	-18.3	-31.9	28	22.6
500	31	5,497	-22.8	-35.5	28	24.9
450	31	6,262	-28.0	-38.7	28	28.3
400	31	7,097	-34.1	-43.8	28	30.5
350	31	8,023	-39.9	-46.1	27	30.8
300	31	9,058	-46.6		27	34.2
250	31	10,253	-52.2		27	36.7
200	31	11,689	-54.2		27	35.6
175	31	12,547	-53.7		27	32.0
150	31	13,538	-54.3		27	28.9
125	28	14,715	-56.2		27	27.0
100	28	16,123	-59.0		27	23.0
80	26	17,516	-60.4		28	18.8
70	24	18,358	-60.8		28	16.9
60	23	19,318	-61.2		28	14.7
50	22	20,449	-60.9		28	10.8
40	22	21,837	-60.6		30	10.3
30	19	23,647	-60.1		31	8.9
25	18	24,781	-59.5		31	8.7
20	17	26,162	-60.2		32	9.8
15	11	27,955	-58.9			
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JOHNSTON IS., PACIFIC AREA 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	23.8	19.4	07	7.4
1000	30	128	22.5	18.2	07	8.3
950	30	572	18.6	16.7	07	9.2
900	30	1,035	15.5	12.9	08	8.7
850	30	1,519	13.0	8.1	09	7.4
800	30	2,028	12.6	-2.5	10	5.8
750	30	2,569	11.6	-10.3	09	4.1
700	30	3,143	9.3	-14.6	10	2.3
650	30	3,753	6.1	-17.5	11	1.4
600	30	4,404	2.7	-20.4	10	1.0
550	30	5,102	-1.4	-24.3	13	1.3
500	30	5,855	-5.6	-27.8	27	.3
450	30	6,674	-10.1	-32.5	29	3.3
400	30	7,573	-15.6	-36.8	28	6.0
350	30	8,571	-22.0	-42.1	26	9.7
300	30	9,683	-30.4	-49.1	26	12.0
250	30	10,952	-40.5	-56.0	27	12.8
200	30	12,434	-52.2		27	13.9
175	30	13,286	-58.8		27	14.1
150	30	14,237	-66.0		27	13.0
125	29	15,322	-74.0		28	9.2
100	27	16,548	-81.2		28	4.5
80	25	17,839	-81.3		09	1.4
70	24	18,596	-78.1		09	3.7
60	22	19,491	-72.5		10	5.2
50	21	20,579	-66.9		09	5.4
40	21	21,936	-63.6		09	5.3
30	20	23,723	-59.2		06	4.0
25	20	24,873	-56.7		05	3.6
20	19	26,300	-53.3		35	1.2
15	19	28,170	-49.9		26	4.9
10	13	30,849	-45.8		25	10.6
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KEY WEST, FLA. 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	20.8	18.2	07	2.1
1000	31	147	20.6	17.7	09	2.7
950	31	590	18.0	14.9	12	3.0
900	31	1,052	15.2	10.8	16	2.5
850	31	1,535	13.0	4.6	19	2.5
800	31	2,044	11.0	-.1	22	3.6
750	31	2,581	9.3	-6.1	23	4.4
700	31	3,150	6.9	-11.7	23	5.2
650	31	3,756	3.9	-17.5	24	6.8
600	31	4,403	.9	-21.7	25	8.5
550	31	5,096	-3.5	-25.0	26	11.1
500	31	5,842	-8.4	-28.7	26	13.5
450	31	6,651	-14.1	-33.3	26	16.6
400	31	7,534	-20.1	-38.1	26	20.2
350	31	8,513	-27.3	-42.4	26	23.2
300	31	9,601	-35.3	-48.8	27	27.1
250	31	10,847	-44.8		27	31.3
200	29	12,305	-55.7		28	34.5
175	29	13,146	-60.4		28	28.8
150	29	14,097	-64.6		27	26.7
125	29	15,198	-69.3		27	21.7
100	28	16,518	-74.2		27	16.4
80	27	17,815	-75.5		28	9.8
70	27	18,592	-73.8		28	6.3
60	27	19,499	-70.9		28	4.4
50	27	20,590	-66.9		27	3.8
40	26	21,950	-63.6		30	4.4
30	26	23,728	-60.5		34	3.3
25	25	24,868	-57.9		35	2.0
20	25	26,282	-55.6		30	3.3
15	22	28,134	-51.3		30	4.4
10	16	30,814	-44.2		26	13.9
7	7	33,226	-42.1			

+ KOROR, CAROLINE IS. 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	27.1	23.2	06	4.3
1000	31	105	26.1	22.8	07	5.3
950	31	557	22.7	20.4	07	8.2
900	31	1,027	19.5	16.7	07	8.7
850	31	1,518	16.8	11.9	08	7.5
800	31	2,034	15.5	4.7	08	5.9
750	31	2,580	13.1	-2.0	08	4.9
700	31	3,157	10.5	-7.3	09	4.9
650	31	3,771	7.7	-13.4	09	5.5
600	31	4,426	4.0	-16.2	08	4.9
550	31	5,128	-.1	-17.8	10	4.6
500	31	5,884	-5.0	-22.7	11	6.5
450	31	6,706	-8.6	-29.6	10	9.7
400	31	7,610	-14.0	-34.3	09	10.4
350	31	8,613	-20.8	-40.1	09	9.1
300	31	9,730	-29.4	-46.3	08	7.4
250	31	11,004	-39.9	-54.9	08	5.7
200	31	12,489	-52.3		09	6.1
175	31	13,339	-59.2		10	6.3
150	31	14,287	-66.9		10	8.2
125	31	15,368	-74.8		10	10.0
100	31	16,638	-82.4		10	12.5
80	30	17,884	-80.9		09	10.5
70	30	18,645	-77.0		09	10.7
60	30	19,541	-72.4		09	14.2
50	30	20,626	-67.3		09	18.4
40	29	21,994	-60.0		09	14.4
30	27	23,811	-54.8		09	3.1
25	29	24,986	-51.8		26	3.1
20	27	26,438	-50.0		27	10.2
15	24	28,330	-48.2		27	12.8
10	24	31,014	-45.7		27	18.7
7	7	33,388	-41.8			

KWAJALEIN, MARSHALL IS. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	26.0	21.9	07	7.3
1000	31	100	25.3	21.5	07	8.5
950	31	550	21.6	19.7	07	10.8
900	31	1,018	18.3	15.9	08	11.2
850	31	1,507	16.0	10.6	08	9.8
800	31	2,022	15.4	-.7	07	7.9
750	31	2,568	14.0	-6.8	07	6.3
700	31	3,147	10.9	-8.3	08	5.4
650	31	3,760	7.2	-12.4	09	5.5
600	31	4,415	4.0	-17.5	08	5.2
550	31	5,117	.0	-20.5	08	5.2
500	31	5,874	-4.1	-26.9	07	6.0
450	31	6,698	-8.8	-29.7	08	6.8
400	31	7,601	-14.3	-34.3	08	6.3
350	31	8,601	-20.8	-40.7	07	4.8
300	31	9,722	-29.4	-47.0	05	2.6
250	31	10,995	-40.0	-55.[illegible]	13	2.0
200	30	12,479	-52.3	-65.3	13	[illegible]
175	30	13,329	-59.4	[illegible]	[illegible]	[illegible]
150	29	14,277	-67.2		[illegible]	6.5
125	29	15,353	-75.8		[illegible]	8.4
100	22	16,620	-83.0		09	10.4
80	19	17,857	-83.5		09	11.8
70	17	[illegible]	-79.6		09	10.2
60	13	19,493	-73.7		09	14.5
50	13	20,572	-68.3		09	14.7
40	12	21,931	-63.3		08	13.0
30	11	23,726	-56.5		10	3.4
25	10	24,892	-53.6		24	3.3
20	9	26,335	-51.5			
15	8	28,232	-46.9			
10	6	30,916	[illegible]			
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

LAKE CHARLES, LA. 1019 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	6.3	4.6	03	2.0
1000	30	166	7.5	3.6	03	2.0
950	31	584	7.5	.9	26	1.1
900	31	1,032	8.5	-2.5	24	4.1
850	31	1,503	7.6	-3.4	24	7.0
800	31	2,001	6.2	-5.5	25	8.9
750	31	2,529	4.2	-9.9	25	10.5
700	31	3,088	1.2	-12.9	25	11.9
650	31	3,681	-1.7	-18.4	25	14.5
600	31	4,314	-5.9	-21.4	25	16.6
550	31	4,989	-10.5	-26.9	25	19.1
500	31	5,716	-15.1	-31.7	25	22.9
450	31	6,505	-20.4	-34.0	25	26.0
400	31	7,365	-26.5	-38.8	25	29.8
350	31	8,321	-33.2	-44.3	25	33.8
300	31	9,385	-40.1	-45.8	25	39.8
250	31	10,609	-47.2		25	46.1
200	31	12,054	-53.4		26	48.7
175	31	12,918	-56.5		26	44.0
150	30	13,892	-60.3		26	39.8
125	30	15,018	-64.5		26	35.2
100	29	16,372	-68.1		26	25.7
80	27	17,702	-68.6		26	17.1
70	25	18,501	-67.8		27	13.2
60	24	19,433	-66.5		27	6.7
50	24	20,543	-64.0		26	6.0
40	21	21,919	-62.0		32	2.0
30	19	23,710	-60.4		05	4.7
25	16	24,857	-59.1		05	5.5
20	14	26,269	-56.5		05	6.9
15	13	28,104	-54.5		06	8.1
10	8	30,789	-48.1			

LANDER, WYO. 828 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,697	-14.8	-18.6	23	.4
1000						
950						
900						
850						
800	31	1,958	-7.9	-14.7	29	.1
750	31	2,463	-6.3	-16.7	29	2.4
700	31	3,000	-8.4	-18.6	30	5.4
650	31	3,572	-12.0	-21.0	29	7.6
600	31	4,180	-15.7	-24.1	29	9.9
550	31	4,831	-19.6	-28.4	28	11.7
500	31	5,533	-24.3	-34.0	28	13.0
450	31	6,293	-29.5	-38.1	28	15.3
400	31	7,123	-35.6	-43.4	28	16.6
350	31	8,041	-42.5	-48.0	28	17.6
300	31	9,063	-50.0		28	18.3
250	31	10,237	-55.9		28	19.0
200	31	11,656	-55.8		28	19.8
175	31	12,510	-54.1		28	17.9
150	31	13,502	-53.1		28	18.9
125	30	14,677	-54.3		28	17.3
100	30	16,101	-56.5		28	14.4
80	28	17,516	-56.6		28	11.8
70	27	18,361	-57.0		29	9.2
60	27	19,336	-57.6		30	7.5
50	26	20,491	-57.2		31	6.6
40	24	21,906	-57.0		34	5.7
30	19	23,744	-57.1		36	7.0
25	17	24,898	-56.8		01	8.
20	13	26,357	-55.1		03	9.4
15	8	28,226	-53.8			
10						

○ LIHUE KAUAI, HAWAII 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	36	19.8	16.5	03	1.6
1000	31	158	20.4	16.0	05	3.0
950	31	600	17.2	14.1	06	4.6
900	31	1,060	14.1	10.5	06	3.2
850	31	1,541	11.4	5.2	08	2.3
800	31	2,047	10.9	-6.3	10	1.0
750	31	2,565	10.8	-13.7	31	.7
700	31	3,157	8.3	-17.1	27	2.4
650	31	3,765	4.8	-19.5	27	3.9
600	31	4,413	1.2	-22.0	26	5.2
550	31	5,107	-3.2	-24.9	26	6.8
500	31	5,853	-8.2	-29.5	27	9.0
450	31	6,663	-13.5	-33.5	27	11.5
400	31	7,549	-19.2	-38.8	27	14.3
350	31	8,532	-25.9	-44.2	28	17.7
300	31	9,628	-33.4	-49.5	28	21.8
250	31	10,886	-42.0	-55.8	28	24.9
200	31	12,364	-51.9		28	27.0
175	31	13,219	-57.6		28	25.6
150	31	14,177	-64.1		28	24.2
125	31	15,275	-71.3		28	21.3
100	29	16,574	-76.7		28	13.1
80	29	17,853	-77.3		28	6.3
70	29	18,623	-75.2		28	1.9
60	28	19,526	-71.1		05	1.7
50	27	20,612	-67.0		06	2.6
40	25	21,972	-62.9		07	3.9
30	26	23,758	-59.4		08	6.3
25	25	24,910	-57.0		08	7.4
20	25	26,332	-54.3		09	7.0
15	19	28,193	-51.6		07	4.1
10	18	30,865	-46.2		21	4.2

LITTLE ROCK, ARK. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	1.2	-2.6	34	.7
1000	29	175	2.4	-3.9	33	.9
950	31	578	2.4	-4.1	26	1.3
900	31	1,015	2.3	-5.4	25	2.9
850	31	1,478	2.4	-7.3	26	5.2
800	31	1,967	1.8	-10.6	26	7.2
750	31	2,487	.3	-12.4	26	10.3
700	31	3,038	-1.5	-15.6	26	12.7
650	31	3,625	-4.6	-18.2	26	14.4
600	31	4,251	-8.7	-22.0	26	15.8
550	31	4,920	-13.0	-26.1	26	17.0
500	31	5,638	-18.6	-30.5	26	18.6
450	31	6,415	-24.1	-35.9	26	22.0
400	31	7,264	-30.0	-40.8	26	25.3
350	31	8,205	-36.6	-44.4	26	28.7
300	31	9,254	-43.9	-46.2	25	33.0
250	31	10,459	-50.6		25	39.5
200	31	11,902	-53.7		26	42.5
175	30	12,752	-54.8		26	42.0
150	30	13,734	-56.7		26	35.8
125	30	14,881	-59.8		26	30.3
100	28	16,265	-62.6		26	21.9
80	27	17,630	-64.2		27	16.0
70	26	18,448	-64.4		27	12.5
60	25	19,390	-64.0		28	7.8
50	25	20,512	-62.2		28	4.8
40	22	21,892	-61.0		31	4.1
30	20	23,682	-59.7		34	4.2
25	17	24,837	-58.9		36	3.6
20	13	26,249	-58.2		03	4.9
15	9	28,131	-54.7			
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MCGRATH, ALASKA 1000 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	27	103	-29.8	-21.8	15	.3
1000	14	173	-23.2	-24.3	14	.8
950	27	474	-21.4	-24.6	09	.9
900	27	875	-20.0	-25.2	15	1.2
850	27	1,299	-20.0	-25.1	15	.3
800	27	1,748	-20.4	-26.4	32	.7
750	27	2,225	-21.6	-29.1	28	1.9
700	27	2,732	-23.4	-32.0	26	2.8
650	27	3,272	-26.0	-34.1	27	4.4
600	27	3,847	-29.3	-36.3	26	5.9
550	27	4,464	-33.0	-38.5	26	7.7
500	27	5,128	-37.4	-35.1	26	8.9
450	27	5,850	-41.3	-38.2	25	10.2
400	27	6,642	-45.3	-43.1	26	11.8
350	27	7,529	-48.7		25	13.3
300	27	8,535	-50.7		25	14.4
250	27	9,719	-51.9		25	16.4
200	27	11,168	-50.6		25	17.8
175	27	12,043	-48.6		25	19.1
150	27	13,061	-47.1		25	19.2
125	27	14,270	-46.7		26	20.2
100	27	15,751	-46.1		26	21.0
80	27	17,237	-45.9		26	21.0
70	27	18,126	-46.2		26	21.6
60	27	19,151	-46.1		26	20.6
50	27	20,363	-46.3		26	18.9
40	26	21,842	-47.2		27	19.7
30	26	23,749	-46.7		27	19.0
25	23	24,963	-46.4		27	18.4
20	22	26,454	-45.7		28	17.2
15	20	28,392	-44.6		28	15.1
10	9	31,206	-44.6			

* MAJURO, MARSHALL IS. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	28.1	22.4	06	6.5
1000	31	99	26.3	20.2	06	8.1
950	31	550	22.4	19.3	06	10.6
900	31	1,019	19.3	16.0	07	10.3
850	31	1,509	16.7	11.4	08	8.5
800	31	2,026	16.0	2.3	08	5.9
750	31	2,573	14.7	-4.5	08	5.3
700	31	3,153	11.6	-6.3	08	5.2
650	31	3,769	8.1	-8.2	08	5.4
600	31	4,425	4.3	-12.8	08	4.8
550	31	5,129	.9	-17.4	07	4.2
500	31	5,888	-3.6	-21.6	09	3.2
450	31	6,714	-7.7	-27.1	09	3.6
400	31	7,621	-12.9	-32.1	09	3.4
350	31	8,629	-19.7	-38.1	09	3.6
300	31	9,751	-28.4	-44.6	09	1.9
250	31	11,030	-38.9	-52.1	13	2.7
200	31	12,521	-51.4		14	4.8
175	31	13,375	-58.2		13	5.5
150	31	14,328	-66.1		11	6.0
125	31	15,411	-74.3		09	8.3
100	30	16,685	-81.6		08	10.2
80	29	17,931	-81.1		09	9.9
70	29	18,688	-77.5		09	11.8
60	29	19,584	-72.2		09	15.4
50	29	20,670	-66.9		09	18.2
40	28	22,048	-59.5		09	12.4
30	28	23,869	-54.8		15	1.1
25	28	25,043	-52.3		27	5.2
20	28	26,493	-49.8		27	9.9
15	27	28,388	-47.6		27	15.0
10	23	31,080	-43.0		27	18.0
7	10	33,505	-39.6			
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* MEDFORD, OREG. 971 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	401	1.3	-1.1	01	.4
1000						
950	31	571	2.2	-1.0	11	.4
900	31	1,008	1.8	-3.8	15	3.6
850	31	1,468	.4	-7.5	20	4.4
800	31	1,953	-2.2	-10.0	22	6.5
750	31	2,463	-4.9	-13.6	23	8.1
700	31	3,003	-7.4	-16.2	24	9.5
650	31	3,577	-10.4	-19.4	25	9.8
600	31	4,190	-14.2	-24.4	26	10.9
550	31	4,844	-18.4	-26.9	26	12.4
500	31	5,549	-23.1	-31.1	27	13.8
450	31	6,313	-27.9	-37.5	27	15.2
400	31	7,148	-34.3	-43.3	28	16.2
350	31	8,073	-40.9	-46.6	28	19.0
300	31	9,100	-48.8		28	20.7
250	31	10,279	-55.5		28	21.2
200	30	11,697	-55.4		28	19.9
175	30	12,555	-52.6		28	18.4
150	31	13,552	-52.5		28	17.3
125	30	14,726	-54.2		28	15.4
100	30	16,152	-55.7		28	12.6
80	29	17,569	-57.0		29	7.6
70	29	18,415	-56.8		30	6.2
60	29	19,393	-56.9		31	4.8
50	29	20,547	-56.7		34	3.8
40	27	21,963	-56.3		03	4.2
30	25	23,796	-55.1		05	6.5
25	25	24,961	-55.1		06	8.2
20	23	26,393	-53.6		05	11.1
15	20	28,260	-53.5		05	12.9
10	15	30,865	-52.7		07	16.8
7	5	33,309	-44.6			
5	5	35,581	-41.4			

MERIDA, MEXICO 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	11	18.7	17.8	07	.6
1000	31	140	21.5	18.3	10	2.8
950	31	585	19.6	15.0	12	4.1
900	31	1,050	17.0	11.3	12	3.8
850	31	1,536	13.7	8.2	14	3.0
800	31	2,045	11.5	2.0	17	2.9
750	31	2,583	9.7	-2.5	17	2.9
700	31	3,156	9.3	-13.1	19	2.4
650	30	3,767	6.6	-16.7	23	2.0
600	30	4,419	2.8	-20.5	24	3.9
550	30	5,118	-1.4	-24.8	23	6.1
500	30	5,869	-6.7	-28.6	23	8.7
450	30	6,684	-11.5	-32.3	23	10.9
400	30	7,576	-17.9	-36.3	24	13.9
350	30	8,564	-24.8	-41.0	26	17.7
300	30	9,664	-33.3	-47.9	26	20.3
250	30	10,920	-42.7		27	21.8
200	30	12,388	-54.2		27	23.6
175	30	13,234	-59.4		27	17.6
150	30	14,166	-65.0		27	17.4
125	29	15,286	-70.2		27	14.7
100	29	16,596	-75.0		26	10.4
80	29	17,882	-76.7		27	5.7
70	29	18,656	-74.2		31	2.0
60	29	19,564	-70.1		04	2.2
50	27	20,661	-66.4		04	3.3
40	26	22,022	-64.2		07	3.8
30	25	23,799	-60.3		07	5.0
25	25	24,940	-58.1		04	4.8
20	24	26,359	-54.9		01	4.4
15	23	28,217	-50.6		03	8.6
10	8	30,900	-44.7			
7						
5						

MIAMI, FLA. 1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	18.4	15.3	36	.8
1000	31	156	19.1	16.9	05	1.1
950	31	597	17.1	14.4	12	1.7
900	31	1,058	14.6	10.9	19	1.8
850	31	1,540	12.6	5.6	23	2.9
800	31	2,048	11.1	1.2	24	4.2
750	31	2,585	8.9	-4.4	24	5.4
700	31	3,154	6.6	-8.6	25	6.4
650	31	3,759	3.7	-13.8	25	7.9
600	31	4,404	-.2	-17.8	25	9.6
550	31	5,094	-4.5	-21.9	26	11.6
500	31	5,838	-9.5	-26.4	26	14.4
450	31	6,644	-14.7	-30.8	27	18.1
400	31	7,525	-20.9	-35.0	26	20.8
350	31	8,500	-28.2	-39.5	26	23.6
300	31	9,584	-36.3	-45.1	27	27.8
250	31	10,825	-45.5		27	31.3
200	31	12,280	-55.3		28	34.0
175	31	13,123	-59.8		28	31.7
150	31	14,077	-63.9		28	28.0
125	31	15,182	-68.7		27	25.0
100	31	16,503	-73.6		27	21.2
80	31	17,800	-74.6		27	14.3
70	30	18,580	-72.4		27	10.3
60	30	19,492	-69.9		27	7.4
50	30	20,586	-66.4		27	7.2
40	30	21,949	-63.5		28	6.5
30	30	23,729	-60.1		31	4.6
25	27	24,872	-58.3		31	2.4
20	25	26,284	-56.0		29	4.3
15	25	28,134	-51.3		29	4.7
10	18	30,834	-43.8		26	23.4
7						
5						

MIDLAND, TEXAS 918 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	874	-.3	-3.1	31	.6
1000						
950						
900	31	1,027	2.4	-5.8	28	1.9
850	31	1,490	3.2	-9.9	29	4.5
800	31	1,981	3.1	-11.4	28	6.2
750	31	2,503	1.4	-14.4	28	8.4
700	31	3,056	-1.4	-16.8	27	9.8
650	31	3,643	-4.7	-20.7	26	11.4
600	31	4,268	-8.8	-24.7	26	13.1
550	31	4,936	-13.5	-27.9	26	15.9
500	31	5,653	-18.8	-32.3	25	17.4
450	31	6,430	-24.1	-37.3	26	20.4
400	31	7,279	-30.4	-42.2	25	22.9
350	31	8,218	-36.9	-46.5	25	27.3
300	31	9,268	-43.2	-47.1	26	31.1
250	31	10,460	-48.3		26	39.2
200	30	11,937	-51.8		26	41.0
175	30	12,798	-54.0		27	39.4
150	30	13,781	-57.3		27	34.7
125	29	14,921	-60.4		27	31.6
100	29	16,300	-64.0		27	21.7
80	28	17,657	-65.7		27	15.7
70	27	18,468	-65.7		27	12.0
60	26	19,405	-65.7		28	7.1
50	26	20,517	-64.0		29	3.9
40	26	21,891	-61.9		01	2.1
30	26	23,683	-59.2		03	3.7
25	23	24,828	-58.8		05	5.9
20	22	26,231	-57.8		05	6.2
15	19	28,067	-55.3		05	4.7
10	5	30,674	-51.5			
7						
5						

MONTERREY, MEXICO 966 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	423	6.3	3.6	35	1.3
1000						
950	30	590	7.9	3.2	34	2.3
900	30	1,037	8.3	1.0	32	2.0
850	30	1,509	8.6	-2.6	22	1.8
800	30	2,012	8.9	-7.8	24	3.5
750	30	2,544	6.8	-12.0	25	6.2
700	30	3,107	4.4	-15.1	25	8.5
650	30	3,707	1.1	-17.9	25	10.6
600	30	4,345	-3.2	-22.3	25	13.6
550	30	5,028	-7.3	-26.7	25	16.9
500	30	5,765	-11.7	-30.0	25	20.0
450	30	6,565	-16.5	-34.3	25	21.7
400	30	7,440	-22.7	-37.3	26	24.4
350	30	8,409	-29.9	-41.6	26	28.6
300	30	9,487	-37.6	-48.0	26	32.8
250	30	10,724	-45.2		26	41.3
200	30	12,186	-54.2		27	42.0
175	30	13,034	-58.3		27	40.1
150	30	13,994	-63.0		27	35.9
125	29	15,104	-67.6		27	32.1
100	29	16,432	-71.9		27	22.7
80	29	17,741	-72.9		27	15.8
70	29	18,527	-71.7		27	12.8
60	29	19,441	-70.0		27	8.8
50	29	20,533	-67.6		27	6.3
40	28	21,887	-64.6		27	2.3
30	28	23,659	-61.6		01	1.0
25	28	24,794	-59.7		04	2.2
20	28	26,196	-57.9		04	3.2
15	28	28,025	-54.4		08	2.1
10	12	30,518	-52.4			

MONETT, MO. 967 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	438	-2.5	-5.4	19	.5
1000						
950	28	587	-1.9	-7.3	25	1.0
900	30	1,006	-.8	-8.0	24	4.0
850	30	1,463	-.4	-8.9	26	5.7
800	30	1,948	-.9	-11.1	27	6.3
750	30	2,463	-1.7	-14.2	27	7.2
700	30	3,010	-4.0	-17.2	27	9.0
650	30	3,592	-6.7	-20.4	27	11.8
600	30	4,213	-10.5	-23.8	27	13.5
550	30	4,877	-14.7	-28.1	26	15.9
500	30	5,591	-19.8	-31.2	26	17.6
450	30	6,365	-25.2	-35.9	26	19.2
400	30	7,210	-31.5	-40.8	26	22.1
350	30	8,144	-38.5	-44.0	26	25.2
300	30	9,183	-46.1		26	27.9
250	30	10,377	-52.7		25	32.7
200	29	11,806	-54.2		26	35.3
175	29	12,662	-54.6		26	34.8
150	29	13,646	-55.8		26	30.5
125	29	14,801	-58.2		26	26.6
100	29	16,197	-61.1		27	20.6
80	28	17,572	-63.0		27	15.2
70	28	18,395	-62.5		27	13.1
60	28	19,347	-62.3		28	9.0
50	27	20,477	-61.2		29	5.8
40	26	21,871	-60.7		32	4.4
30	25	23,661	-60.3		36	5.4
25	21	24,784	-59.6		01	6.6
20	20	26,186	-58.8		36	6.4
15	19	27,997	-57.9		35	8.7
10	11	30,582	-53.2			

MONTGOMERY, ALA. 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	57	4.4	1.1	01	1.3
1000	31	167	5.7	.4	01	1.4
950	31	587	5.5	-.8	28	1.2
900	31	1,031	6.5	-3.7	25	4.8
850	31	1,500	6.2	-5.6	26	8.2
800	31	1,996	4.7	-8.7	26	10.6
750	31	2,520	2.5	-12.5	26	12.2
700	31	3,075	-.4	-14.1	26	14.2
650	31	3,665	-3.3	-17.3	26	16.4
600	31	4,294	-6.7	-22.1	26	18.6
550	31	4,967	-11.1	-27.1	26	22.0
500	31	5,693	-15.7	-30.9	26	24.5
450	31	6,479	-21.4	-34.9	26	27.1
400	31	7,336	-27.6	-39.8	26	31.5
350	31	8,287	-34.2	-43.0	26	35.6
300	31	9,346	-41.5	-46.7	26	40.7
250	31	10,563	-49.1		26	47.1
200	30	12,003	-54.9		26	50.3
175	30	12,853	-57.2		26	47.9
150	28	13,813	-60.1		27	41.9
125	26	14,941	-64.1		26	35.9
100	26	16,297	-66.8		27	28.2
80	26	17,642	-67.9		27	19.1
70	25	18,449	-67.1		27	13.7
60	24	19,378	-65.8		27	9.8
50	23	20,494	-63.5		28	6.0
40	23	21,870	-62.0		31	3.6
30	21	23,654	-60.6		34	4.4
25	20	24,789	-59.0		36	4.5
20	20	26,196	-57.3		01	4.4
15	17	28,018	-55.4		31	5.1
10	9	30,643	-50.5			

NASHVILLE, TENN. 999 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	180	-.2	-4.1	05	.1
1000	16	213	-3.8	-8.5	03	1.4
950	31	584	.2	-5.3	25	2.5
900	31	1,017	.2	-8.9	26	4.8
850	31	1,476	.1	-11.7	27	6.7
800	31	1,961	-.4	-13.6	27	8.8
750	31	2,476	-1.5	-15.3	27	11.4
700	31	3,024	-3.9	-16.5	27	13.7
650	31	3,605	-6.9	-19.4	25	17.0
600	31	4,227	-10.2	-23.0	26	20.3
550	31	4,892	-14.4	-27.3	26	22.6
500	31	5,608	-19.3	-31.4	26	25.3
450	31	6,383	-24.7	-35.9	26	27.9
400	31	7,230	-30.5	-40.8	26	31.5
350	31	8,169	-37.2	-43.6	26	35.4
300	31	9,215	-44.5	-42.6	26	39.4
250	31	10,418	-51.2		26	43.5
200	31	11,855	-54.6		26	46.2
175	31	12,709	-55.2		27	43.5
150	31	13,689	-57.4		26	38.7
125	31	14,834	-60.0		26	33.4
100	31	16,217	-63.0		27	26.1
80	30	17,579	-64.1		27	19.0
70	30	18,397	-64.3		27	15.7
60	30	19,341	-63.7		28	12.2
50	30	20,463	-62.6		29	9.3
40	29	21,842	-61.9		30	7.8
30	29	23,629	-60.6		32	6.6
25	27	24,758	-59.9		32	8.7
20	27	26,157	-58.3		31	8.9
15	24	27,984	-56.7		31	9.9
10	19	30,582	-52.4		28	19.5

* NOME, ALASKA 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	-20.8	-23.4	14	2.3
1000	25	102	-17.2	-20.0	15	3.2
950	31	459	-17.8	-20.1	19	3.7
900	31	864	-17.3	-21.7	21	3.4
850	31	1,292	-18.6	-22.3	23	3.1
800	31	1,743	-20.2	-25.8	24	3.8
750	31	2,219	-22.1	-27.7	25	4.5
700	31	2,725	-24.3	-30.9	25	6.5
650	31	3,262	-26.8	-33.1	25	8.2
600	31	3,836	-30.1	-35.9	26	8.8
550	31	4,451	-33.9	-38.6	26	9.9
500	31	5,113	-38.0	-38.0	26	11.7
450	31	5,832	-42.5	-41.2	26	12.9
400	31	6,619	-47.2	-40.7	27	14.7
350	31	7,497	-51.8		27	15.1
300	31	8,486	-54.7		26	15.7
250	31	9,650	-54.8		26	16.0
200	31	11,087	-51.4		25	16.6
175	31	11,958	-49.7		25	17.7
150	30	12,963	-48.6		25	19.3
125	30	14,167	-47.2		25	18.8
100	30	15,646	-46.5		24	20.8
80	30	17,130	-45.9		25	23.0
70	30	18,019	-45.9		24	23.2
60	30	19,044	-46.4		24	23.5
50	28	20,261	-46.3		25	22.2
40	28	21,744	-45.8		25	21.5
30	25	23,663	-45.1		24	19.2
25	22	24,874	-44.6		25	19.4
20	18	26,388	-43.7		25	14.2
15	14	28,286	-45.3			
10	8	31,001	-44.6			

See reference note at end of table.

RAWINSONDE DATA

Average monthly values

NORTH PLATTE, NEBR.
918 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	847	-9.3	-11.9	33	1.7
1000						
950						
900	31	1,000	-4.9	-10.1	32	4.1
850	31	1,453	-1.9	-13.4	32	6.4
800	31	1,935	-2.8	-15.4	32	6.3
750	31	2,445	-4.8	-16.3	31	6.7
700	31	2,985	-7.1	-17.2	30	7.4
650	31	3,560	-9.8	-21.2	30	9.0
600	31	4,173	-13.6	-25.1	29	10.1
550	31	4,830	-17.7	-29.1	29	11.6
500	31	5,537	-22.3	-34.6	28	13.9
450	31	6,303	-27.7	-39.9	28	14.9
400	31	7,139	-34.3	-45.1	28	15.5
350	30	8,062	-41.5	-52.3	27	16.5
300	30	9,087	-49.2		27	17.5
250	30	10,266	-55.0		27	21.4
200	30	11,688	-55.1		27	21.9
175	30	12,544	-53.6		27	22.5
150	30	13,536	-53.9		27	21.9
125	30	14,704	-55.1		27	20.5
100	30	16,124	-56.8		27	17.1
80	30	17,531	-58.5		28	13.7
70	30	18,370	-58.8		28	12.1
60	30	19,338	-58.7		29	10.9
50	30	20,483	-58.4		30	8.8
40	30	21,887	-58.5		32	7.5
30	29	23,703	-58.4		34	7.7
25	27	24,851	-58.2		35	8.5
20	26	26,257	-57.7		34	9.5
15	19	28,095	-57.0		02	10.5
10	5	30,927	-50.3			
7						

OAKLAND, CALIF.
1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	6	7.3	4.3	13	1.8
1000	31	159	8.3	3.3	14	1.9
950	31	582	6.7	.9	19	2.2
900	31	1,025	4.5	-3.0	21	2.7
850	31	1,490	2.9	-8.3	23	5.0
800	31	1,979	1.2	-12.6	26	5.3
750	31	2,496	-1.4	-15.2	27	6.1
700	31	3,043	-4.1	-16.8	28	8.3
650	30	3,627	-7.4	-21.5	28	9.8
600	30	4,245	-11.4	-26.5	28	11.5
550	30	4,907	-15.8	-28.2	29	12.2
500	30	5,619	-20.6	-32.6	29	14.3
450	30	6,390	-26.3	-36.7	29	15.8
400	30	7,231	-32.6	-42.6	28	17.6
350	30	8,160	-39.8	-49.2	29	20.0
300	30	9,194	-47.8		29	23.8
250	30	10,378	-54.7		29	23.0
200	29	11,799	-56.2		28	24.4
175	29	12,653	-53.9		28	23.8
150	28	13,642	-54.7		28	22.7
125	27	14,809	-56.5		28	19.2
100	26	16,215	-58.8		29	13.6
80	24	17,609	-60.1		29	10.0
70	23	18,446	-59.8		30	6.8
60	22	19,412	-60.0		31	4.0
50	22	20,553	-59.3		01	2.9
40	21	21,958	-58.1		05	4.8
30	21	23,776	-56.6		07	9.0
25	19	24,939	-56.7		07	9.7
20	18	26,355	-56.0		07	11.6
15	10	28,183	-54.0			
10	7	30,849	-51.1			
7						

OMAHA, NEBR.
970 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	403	-7.8	-10.3	30	.7
1000						
950	30	566	-5.3	-10.1	30	2.4
900	31	987	-2.7	-11.4	29	4.7
850	31	1,442	-2.2	-13.3	28	5.7
800	31	1,922	-3.2	-14.6	29	7.2
750	31	2,432	-5.1	-16.7	30	8.2
700	31	2,971	-7.2	-18.5	29	9.4
650	31	3,546	-10.0	-21.0	29	11.8
600	31	4,160	-13.4	-24.4	28	13.4
550	31	4,817	-17.2	-28.7	28	15.8
500	31	5,525	-21.9	-33.6	28	16.4
450	31	6,292	-27.4	-36.8	28	20.9
400	31	7,129	-33.8	-42.1	27	23.8
350	31	8,054	-40.9	-47.7	27	26.5
300	31	9,081	-49.2		27	27.6
250	31	10,258	-55.2		28	24.8
200	31	11,683	-54.4		27	28.0
175	30	12,540	-53.9		27	23.4
150	27	13,542	-53.7		27	24.1
125	27	14,709	-55.4		27	21.4
100	27	16,124	-58.0		27	19.9
80	27	17,527	-59.0		28	15.9
70	25	18,360	-59.2		28	14.3
60	25	19,325	-59.8		29	11.7
50	25	20,465	-59.7		29	8.2
40	24	21,863	-59.3		31	7.1
30	22	23,679	-59.1		34	7.9
25	18	24,834	-58.3		01	9.7
20	15	26,273	-57.4		36	10.6
15	8	28,147	-55.4			
10						
7						

+ PAGO PAGO, AMERICAN SAMOA
1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	5	29.1	23.9	04	2.1
1000	28	69	27.6	23.8	06	1.9
950	30	516	24.1	21.4	03	2.6
900	30	969	20.9	17.9	36	3.2
850	30	1,482	18.2	14.3	35	3.5
800	30	2,001	16.0	10.7	35	3.0
750	30	2,549	13.7	7.2	34	2.7
700	30	3,128	10.3	3.9	34	2.3
650	30	3,743	7.4	-.9	31	2.0
600	30	4,399	4.0	-5.2	31	1.6
550	30	5,102	.4	-10.1	30	2.1
500	30	5,862	-3.5	-16.3	28	1.6
450	30	6,688	-8.1	-20.3	29	2.7
400	30	7,593	-13.7	-26.4	29	3.4
350	30	8,599	-20.1	-33.7	29	5.1
300	30	9,720	-28.4	-40.4	30	7.0
250	30	11,001	-38.5	-49.9	30	9.5
200	30	12,495	-50.7		31	10.7
175	30	13,352	-57.9		30	9.4
150	29	14,301	-66.0		30	7.7
125	28	15,383	-74.4		30	6.2
100	28	16,656	-81.4		34	.4
80	28	17,908	-79.8		08	7.1
70	28	18,673	-75.7		09	10.8
60	28	19,575	-70.8		09	14.8
50	28	20,672	-65.1		09	19.3
40	28	22,044	-61.3		09	21.9
30	28	23,850	-56.7		09	21.2
25	26	25,012	-54.3		09	21.5
20	24	26,453	-50.3		09	19.2
15	23	28,344	-47.1		09	18.8
10	20	31,055	-42.9		09	22.7
7	6	33,477	-40.3			

* PEORIA, ILL.
995 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	200	-5.2	-7.8	24	1.0
1000	3	238	-13.0	-17.[illegible]		
950	31	561	-4.1	-9.2	27	4.3
900	31	989	-3.0	-10.7	28	6.1
850	31	1,442	-3.1	-13.[illegible]	29	7.2
800	31	1,921	-4.0	-15.9	28	8.0
750	31	2,429	-5.7	-18.5	28	9.4
700	31	2,967	-7.9	-20.8	28	10.9
650	31	3,541	-10.6	-24.4	28	12.8
600	31	4,152	-14.1	-27.4	28	14.4
550	31	4,808	-18.2	-30.8	28	17.1
500	31	5,513	-22.7	-34.7	28	19.9
450	31	6,278	-27.9	-39.4	28	21.9
400	31	7,114	-34.0	-44.0	29	23.5
350	31	8,038	-41.0	-46.1	28	25.8
300	31	9,067	-47.8		27	29.7
250	31	10,254	-53.7		27	35.3
200	31	11,684	-54.5		27	36.0
175	30	12,540	-53.8		27	34.5
150	30	13,530	-54.1		27	31.9
125	30	14,694	-56.3		27	27.9
100	29	16,103	-58.9		27	23.3
80	27	17,506	-60.0		27	18.4
70	25	18,330	-60.4		28	16.9
60	25	19,289	-61.0		28	15.2
50	25	20,424	-60.6		30	12.8
40	22	21,828	-59.7		30	10.5
30	19	23,638	-59.6		32	9.3
25	18	24,773	-59.2		33	10.9
20	14	26,225	-57.5		36	10.2
15	13	28,051	-56.2		35	11.4
10	9	30,641	-53.7			
7	5	33,015	-51.5			

* PITTSBURGH, PA.
976 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	359	-3.4	-7.5	24	3.3
1000						
950	30	572	-3.6	-8.0	25	5.4
900	30	998	-4.8	-11.0	26	7.7
850	30	1,447	-6.2	-14.5	27	9.0
800	30	1,921	-6.8	-16.8	27	10.7
750	30	2,423	-8.0	-19.6	28	12.9
700	30	2,958	-9.5	-21.6	28	15.0
650	30	3,529	-11.7	-22.9	28	17.2
600	30	4,139	-14.5	-26.4	28	19.4
550	30	4,793	-18.5	-29.8	28	21.6
500	30	5,497	-23.3	-33.3	27	24.3
450	30	6,260	-28.5	-37.6	27	27.6
400	30	7,094	-34.3	-42.6	27	31.0
350	30	8,018	-41.0	-46.6	27	34.7
300	30	9,048	-47.4		27	39.6
250	30	10,240	-51.9		27	43.0
200	30	11,677	-53.8		28	37.4
175	30	12,534	-54.0		27	36.0
150	29	13,523	-54.8		27	35.2
125	27	14,682	-56.7		27	31.0
100	27	16,088	-59.5		28	26.0
80	25	17,466	-61.0		28	21.6
70	22	18,315	-60.6		28	18.3
60	19	19,297	-60.7		29	15.0
50	16	20,448	-60.2		29	13.0
40	15	21,843	-59.5		30	11.2
30	13	23,640	-59.1		32	12.4
25	12	24,787	-58.6		32	10.9
20	11	26,167	-58.7		32	14.8
15	11	27,977	-57.9		32	18.3
10	10	30,571	-52.8			
7	8	32,936	-46.8			
5						

+ PONAPE, CAROLINE IS.
1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	39	27.8	22.6	06	3.9
1000	31	90	26.6	21.5	06	4.8
950	31	542	22.8	20.0	07	9.3
900	31	1,012	19.4	17.0	07	9.9
850	31	1,503	16.7	11.9	07	9.1
800	31	2,019	15.5	4.6	08	6.8
750	31	2,565	13.8	-2.1	08	5.0
700	31	3,144	10.8	-7.1	09	5.2
650	31	3,758	8.1	-11.5	08	5.9
600	31	4,415	4.6	-15.6	08	6.0
550	31	5,117	.3	-19.9	08	6.0
500	31	5,875	-4.1	-23.6	08	5.5
450	31	6,698	-8.7	-29.0	09	6.7
400	31	7,602	-13.8	-34.6	09	6.9
350	31	8,607	-20.4	-39.8	09	7.2
300	31	9,726	-28.9	-46.6	11	5.9
250	31	11,004	-39.0	-54.0	11	5.5
200	31	12,495	-51.1		12	6.7
175	31	13,350	-57.9		11	7.3
150	30	14,305	-65.8		10	8.6
125	30	15,391	-73.9		09	9.5
100	30	16,665	-81.9		08	11.1
80	30	17,905	-83.8		09	12.8
70	30	18,658	-77.7		09	14.1
60	29	19,555	-71.7		09	15.6
50	29	20,644	-67.0		09	17.3
40	28	22,007	-61.2		09	14.1
30	27	23,819	-56.1		07	3.2
25	27	24,988	-52.6		28	2.1
20	27	26,438	-50.0		27	7.6
15	25	28,326	-47.7		27	13.5
10	18	31,028	-44.5		26	17.6
7						
5						

PORTLAND, MAINE
1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	20	-7.1	-13.0	29	2.0
1000	28	126	-5.7	-12.9	29	3.6
950	31	514	-4.7	-12.1	29	6.0
900	31	939	-5.9	-14.3	30	7.3
850	31	1,385	-7.3	-16.2	30	9.3
800	31	1,857	-8.2	-19.3	29	12.0
750	31	2,357	-9.5	-21.9	29	14.0
700	31	2,888	-11.7	-24.5	28	16.2
650	31	3,453	-14.7	-27.8	28	17.6
600	31	4,055	-18.2	-30.4	28	18.4
550	31	4,700	-22.2	-33.7	27	21.2
500	31	5,394	-26.7	-38.2	27	23.9
450	31	6,147	-31.5	-41.4	27	27.0
400	31	6,971	-37.1	-44.3	28	28.4
350	31	7,885	-43.0	-48.3	27	29.7
300	31	8,907	-49.4		27	32.3
250	31	10,093	-52.8		27	34.1
200	30	11,534	-53.3		26	31.5
175	29	12,398	-52.6		26	30.2
150	29	13,394	-53.1		27	29.2
125	29	14,564	-54.9		27	29.4
100	28	15,978	-57.6		27	23.6
80	28	17,380	-59.3		27	22.3
70	26	18,203	-59.8		28	21.2
60	25	19,159	-60.8		28	19.8
50	24	20,301	-60.5		28	20.3
40	24	21,690	-60.8		29	17.4
30	23	23,477	-60.8		29	18.1
25	22	24,612	-60.9		30	17.8
20	20	26,001	-60.0		30	18.1
15	16	27,805	-59.6		29	20.0
10	13	30,366	-52.8			
7	6	32,692	-48.4			
5						

* QUILLAYUTE, WASH.
1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	58	3.3	-.1	13	1.8
1000	25	145	2.9	-1.9	12	2.8
950	31	533	1.9	-2.2	17	5.5
900	31	968	-.3	-4.6	20	8.0
850	31	1,423	-2.9	-7.8	21	9.5
800	31	1,902	-4.8	-11.2	21	10.2
750	31	2,407	-7.4	-13.8	22	9.9
700	31	2,942	-10.5	-16.8	23	9.7
650	31	3,509	-13.6	-21.0	24	10.0
600	31	4,114	-17.1	-24.1	25	10.7
550	31	4,761	-21.3	-28.4	25	12.0
500	31	5,458	-25.7	-34.2	26	14.6
450	30	6,211	-30.9	-38.5	26	15.7
400	30	7,037	-36.7	-42.2	26	17.2
350	30	7,952	-43.0		27	17.7
300	30	8,973	-50.0		28	19.1
250	30	10,151	-54.6		28	19.5
200	29	11,576	-51.8		28	17.8
175	29	12,445	-50.3		29	16.7
150	28	13,455	-50.4		29	15.5
125	27	14,643	-51.3		29	13.1
100	26	16,088	-52.6		30	10.9
80	26	17,526	-53.8		30	9.5
70	24	18,383	-53.8		31	7.8
60	24	19,374	-53.7		32	6.6
50	23	20,542	-54.1		33	6.4
40	20	21,975	-54.1		35	6.0
30	20	23,819	-54.1		36	7.2
25	17	24,985	-54.0		01	7.6
20	15	26,425	-53.4		02	10.4
15	13	28,281	-53.0		01	11.9
10	13	30,892	-53.2		01	15.6
7	10	33,136	-54.4			
5	7	35,286	-52.7			

RAPID CITY, S. DAK.
904 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	966	-5.5	-13.7	32	3.3
1000						
950						
900	29	1,036	-7.5	-15.1	32	3.1
850	31	1,450	-2.8	-13.7	31	6.6
800	31	1,929	-4.4	-14.8	32	8.0
750	31	2,436	-6.5	-16.3	31	8.4
700	31	2,972	-9.2	-18.2	31	8.3
650	31	3,543	-12.2	-21.9	30	9.0
600	31	4,151	-15.7	-25.0	30	9.8
550	31	4,801	-19.8	-29.6	29	11.2
500	31	5,502	-24.5	-35.2	28	13.2
450	30	6,255	-30.1	-40.2	28	14.4
400	30	7,083	-36.3	-43.8	28	15.7
350	30	7,999	-43.2	-46.3	28	18.4
300	30	9,018	-50.5		27	19.9
250	30	10,192	-55.7		28	19.9
200	30	11,606	-55.9		28	20.4
175	29	12,466	-53.9		27	19.2
150	29	13,457	-54.0		27	19.2
125	29	14,629	-54.1		27	18.5
100	29	16,056	-55.6		28	16.2
80	27	17,470	-57.2		29	13.8
70	27	18,315	-56.9		29	11.9
60	27	19,290	-57.5		29	10.9
50	25	20,446	-57.5		30	10.4
40	25	21,856	-57.4		32	9.4
30	24	23,668	-57.5		33	11.7
25	22	24,823	-57.8		34	12.2
20	15	26,284	-56.9		34	12.9
15	12	28,159	-54.4			
10						
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5						

ST CLOUD, MINN.
980 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	316	-13.2	-15.9	31	.8
1000						
950	31	552	-9.4	-12.4	30	3.0
900	31	973	-6.4	-14.0	29	4.9
850	31	1,421	-5.4	-16.5	29	6.4
800	31	1,896	-6.5	-18.2	29	7.8
750	31	2,399	-8.3	-19.9	29	9.0
700	31	2,932	-10.9	-21.7	29	10.0
650	31	3,498	-13.6	-23.0	29	11.4
600	31	4,103	-17.1	-27.0	29	12.3
550	31	4,751	-21.2	-30.8	29	14.1
500	31	5,448	-25.6	-35.0	29	15.4
450	31	6,204	-31.1	-38.8	29	17.0
400	31	7,028	-37.2	-41.9	29	18.3
350	31	7,941	-43.8	-45.7	28	20.0
300	31	8,957	-51.2		29	23.1
250	31	10,128	-55.9		28	24.4
200	31	11,547	-55.3		28	21.9
175	31	12,402	-53.6		28	22.7
150	31	13,396	-53.2		28	20.9
125	31	14,568	-54.3		28	20.8
100	31	15,993	-56.2		28	19.4
80	30	17,404	-57.4		29	17.9
70	30	18,247	-57.7		29	15.7
60	28	19,227	-58.1		29	15.0
50	28	20,376	-58.2		30	15.3
40	25	21,784	-58.9		31	13.5
30	23	23,600	-58.5		32	12.1
25	20	24,768	-58.8		32	13.0
20	16	26,201	-58.9		34	12.8
15	11	28,096	-56.4			
10						
7						

* ST PAUL IS., ALASKA
1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	10	-4.7	-7.4	10	1.3
1000	26	91	-5.6	-9.4	05	2.8
950	31	460	-7.4	-9.3	17	1.2
900	31	879	-10.5	-12.4	20	1.8
850	31	1,317	-12.3	-18.4	22	2.4
800	31	1,779	-14.5	-21.0	24	3.3
750	31	2,266	-16.6	-24.9	25	4.5
700	31	2,782	-18.9	-28.6	24	5.3
650	31	3,331	-21.8	-31.4	24	5.7
600	31	3,917	-25.3	-35.2	24	6.9
550	31	4,543	-29.3	-38.0	24	7.1
500	31	5,218	-33.8	-39.9	24	8.9
450	31	5,949	-38.5	-42.0	24	9.9
400	31	6,750	-43.7	-44.2	23	11.3
350	31	7,640	-48.6		23	12.5
300	30	8,535	-53.1		23	14.5
250	30	9,806	-53.6		23	16.5
200	30	11,255	-49.2		23	16.1
175	29	12,134	-47.3		24	15.5
150	29	13,157	-46.2		24	15.1
125	28	14,358	-45.7		24	15.2
100	27	15,848	-44.8		23	15.0
80	27	17,340	-45.1		23	14.5
70	27	18,232	-45.1		23	13.8
60	26	19,268	-45.7		23	12.1
50	26	20,482	-45.8		23	11.2
40	25	21,972	-45.2		24	8.6
30	25	23,892	-44.9		23	7.5
25	25	25,111	-44.6		23	6.0
20	24	26,598	-44.6		25	5.3
15	23	28,529	-43.8		27	4.6
10	17	31,300	-42.0		30	3.4
7	9	33,739	-40.4			

SALEM, ILL.
999 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	174	-2.3	-5.4	27	1.0
1000	14	217	-7.2	-10.2	31	1.8
950	31	568	-1.6	-7.2	27	4.3
900	31	1,000	-1.1	-10.6	27	5.8
850	31	1,455	-1.6	-12.8	27	6.2
800	31	1,937	-2.5	-14.2	28	7.6
750	31	2,448	-3.8	-16.3	28	9.4
700	31	2,991	-6.1	-19.3	27	11.1
650	31	3,567	-9.0	-21.5	27	13.1
600	31	4,184	-12.2	-25.0	28	15.4
550	31	4,844	-16.2	-29.4	27	18.0
500	31	5,554	-21.0	-34.5	27	20.8
450	31	6,324	-26.7	-39.0	27	23.4
400	31	7,164	-32.8	-42.9	27	24.8
350	31	8,094	-39.1	-42.3	27	27.1
300	31	9,132	-46.2		26	29.2
250	31	10,326	-52.2		26	31.9
200	31	11,760	-54.5		26	32.6
175	31	12,615	-54.7		27	25.8
150	31	13,601	-55.6		27	22.8
125	31	14,756	-57.9		27	19.8
100	31	16,157	-60.1		27	16.3
80	31	17,542	-61.7		27	13.1
70	31	18,368	-62.0		28	11.1
60	31	19,322	-61.9		29	8.0
50	31	20,451	-61.5		30	6.2
40	31	21,835	-61.0		32	5.4
30	31	23,626	-60.4		36	6.6
25	30	24,757	-60.2		36	7.4
20	29	26,158	-60.2		36	10.0
15	22	27,939	-58.9		36	12.0
10	11	30,525	-55.3			
7						

SALEM, OREG.
1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	61	2.9	-.3	19	1.4
1000	28	153	2.4	-.8	19	1.6
950	31	554	2.6	-2.3	20	4.4
900	31	991	1.5	-5.6	20	6.1
850	31	1,450	-.8	-8.2	22	7.7
800	31	1,932	-3.1	-10.9	23	8.5
750	31	2,441	-5.9	-14.4	23	9.3
700	31	2,978	-9.0	-18.3	24	10.3
650	31	3,548	-12.2	-22.3	25	10.6
600	31	4,157	-15.5	-25.0	26	11.7
550	31	4,808	-19.6	-28.6	26	13.5
500	31	5,510	-24.2	-31.8	27	14.6
450	31	6,270	-29.5	-37.6	27	16.1
400	31	7,101	-35.4	-42.3	28	19.0
350	31	8,021	-42.0	-43.6	28	21.7
300	31	9,045	-49.4		28	23.7
250	31	10,223	-54.7		28	22.5
200	31	11,647	-54.8		28	20.5
175	31	12,507	-51.8		28	18.3
150	31	13,509	-51.5		28	16.2
125	31	14,688	-53.1		28	14.5
100	31	16,122	-54.7		28	13.7
80	29	17,557	-55.1		29	8.6
70	29	18,410	-55.0		30	6.2
60	29	19,394	-55.5		31	4.8
50	29	20,555	-55.1		33	4.8
40	27	21,978	-55.3		36	3.8
30	25	23,820	-54.4		02	5.3
25	25	24,989	-54.4		03	6.5
20	24	26,411	-54.4		02	9.3
15	15	28,296	-53.2		04	10.9
10						
7						

SALT LAKE CITY, UTAH
874 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	1,288	-8.8	-12.1	16	1.5
1000						
950						
900						
850	31	1,502	-5.5	-9.0	18	2.5
800	31	1,980	-4.9	-11.3	19	3.5
750	31	2,486	-6.6	-13.7	22	3.2
700	31	3,023	-9.1	-16.3	27	4.6
650	31	3,593	-11.7	-19.5	27	6.4
600	31	4,203	-15.1	-23.6	28	8.5
550	31	4,856	-18.8	-27.2	28	10.2
500	31	5,560	-23.4	-31.9	28	11.4
450	31	6,323	-28.8	-38.0	28	12.6
400	31	7,155	-35.0	-43.8	28	13.8
350	31	8,075	-42.2	-48.1	28	15.1
300	31	9,098	-49.7		28	16.4
250	31	10,275	-54.6		28	19.2
200	31	11,698	-55.5		28	18.2
175	31	12,553	-53.7		28	18.8
150	31	13,545	-53.5		28	18.7
125	31	14,714	-54.9		27	16.7
100	31	16,138	-56.7		28	14.5
80	24	17,549	-58.6		28	10.5
70	29	18,389	-58.2		29	8.2
60	29	19,358	-58.8		30	6.0
50	29	20,503	-58.4		32	4.5
40	29	21,911	-57.7		36	3.6
30	27	23,733	-56.7		02	6.2
25	25	24,889	-55.9		03	8.4
20	23	26,315	-55.6		04	9.8
15	17	28,158	-55.7		03	10.7
10	8	30,757	-53.3			
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SAN DIEGO, CALIF. 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	124	8.[illegible]	3.9	01	.9
1000	29	160	10.4	2.6	01	1.2
950	31	582	10.1	-.6	32	1.0
900	31	1,030	7.7	-4.4	31	1.7
850	31	1,499	5.8	-9.2	31	2.9
800	31	1,993	3.4	-12.6	31	4.6
750	31	2,514	.8	-16.8	30	6.4
700	31	3,066	-1.5	-19.9	30	8.7
650	31	3,652	-4.8	-23.4	30	10.8
600	31	4,277	-8.7	-27.0	30	12.7
550	31	4,945	-13.2	-30.6	30	14.2
500	31	5,664	-18.4	-35.1	30	16.1
450	31	6,442	-23.9	-39.5	29	18.4
400	31	7,291	-30.3	-44.1	29	20.2
350	31	8,229	-37.7	-48.5	29	22.2
300	31	9,271	-45,7		29	25.0
250	31	10,467	-52.5		28	28.3
200	31	11,903	-53.5		27	33.8
175	31	12,760	-54.5		27	32.4
150	31	13,743	-56.3		27	31.4
125	31	14,892	-59.6		27	25.5
100	31	16,275	-63.2		27	19.1
80	30	17,646	-63.8		27	11.7
70	30	18,465	-63.9		27	8.3
60	29	19,410	-63.4		29	4.4
50	28	20,534	-62.3		33	2.1
40	27	21,920	-60.4		04	4.1
30	27	23,721	-58.3		07	7.9
25	27	24,872	-57.0		07	8.9
20	24	26,286	-55.4		07	10.0
15	21	28,119	-53.9		07	9.9
10	9	30,728	-51.9			
7						
5						
4						

SAN JUAN, P. R. 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	6	23.2	19.4	12	1.8
1000	31	151	23.1	19.6	09	4.5
950	31	597	20.0	17.2	10	6.6
900	31	1,062	17.0	13.7	10	6.7
850	31	1,548	14.1	8.4	10	[illegible]
800	31	2,059	12.3	2.5	10	5.5
750	31	2,599	10.9	-5.7	10	5.4
700	31	3,172	8.8	-10.9	10	4.9
650	31	3,781	6.[illegible]	-16.1	11	4.4
600	31	4,432	2.6	-20.1	10	4.2
550	31	5,131	-1.2	-24.5	08	3.1
500	31	5,883	-6.4	-27.7	03	2.5
450	31	6,698	-11.7	-32.0	36	4.0
400	31	7,590	-19.2	-36.9	34	6.1
350	31	8,575	-25.8	-42.5	33	8.5
300	31	9,670	-34.6	-49.5	33	12.8
250	31	10,918	-44.2		32	15.5
200	31	12,380	-54.4		31	16.3
175	31	13,226	-59.3		30	15.4
150	31	14,179	-65.0		30	14.2
125	31	15,275	-70.9		29	11.7
100	31	16,576	-76.9		30	8.2
80	31	17,853	-78.0		32	2.9
70	31	18,622	-74.6		35	1.6
60	31	19,531	-69.3		04	2.1
50	30	20,630	-65.7		09	3.6
40	3[illegible]	21,996	-62.8		07	5.1
30	28	23,781	-58.9		05	3.1
25	29	24,933	-56.2		02	1.7
20	26	26,362	-52.3		27	4.0
15	22	28,246	-47.9		27	11.9
10	7	30,908	-43.7			
7						
5						
4						

* SAULT STE MARIE, MICH. 987 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	221	-7.6	-10.0	26	.8
1000						
950	31	515	-7.8	-9.8	26	3.1
900	31	936	-7.7	-11.5	28	5.3
850	31	1,380	-8.3	-13.5	28	7.2
800	31	1,850	-9.6	-15.5	28	9.6
750	31	2,347	-11.4	-18.3	28	11.2
700	31	2,874	-13.8	-20.7	29	13.3
650	31	3,435	-16.1	-23.6	29	13.8
600	31	4,034	-19.5	-27.1	29	14.7
550	31	4,676	-23.4	-31.5	28	15.8
500	31	5,367	-28.0	-35.4	28	17.3
450	31	6,116	-33.1	-37.7	28	18.3
400	31	6,934	-38.9	-41.4	28	19.6
350	31	7,842	-44.6	-42.8	28	22.8
300	31	8,858	-50.1		28	25.9
250	31	10,039	-53.6		28	28.1
200	31	11,473	-53.2		28	29.7
175	30	12,334	-52.7		28	28.6
150	30	13,331	-52.6		28	29.0
125	29	14,492	-53.9		28	27.9
100	29	15,918	-56.0		28	25.0
80	28	17,324	-57.7		28	25.7
70	28	18,166	-58.3		28	24.6
60	28	19,135	-59.0		29	24.0
50	28	20,278	-59.2		29	24.3
40	26	21,683	-60.0		29	24.0
30	26	23,475	-60.7		30	23.1
25	24	24,629	-60.5		30	21.7
20	21	26,037	-59.5		30	19.7
15	19	27,799	-59.6		30	21.1
10	17	30,395	-57.1		30	22.4
7	14	32,708	-52.1		29	26.1
5	8	34,982	-50.4			
4	6	36,381	-51.0			

* SHEMYA, ALASKA 998 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	30	38	-1.5	-4.8	05	.7
1000	12	53	-1.7	-6.9	02	.6
950	30	429	-4.6	-7.5	09	2.2
900	30	852	-8.3	-9.4	12	2.1
850	30	1,293	-11.6	-13.6	15	1.6
800	30	1,755	-14.6	-18.1	20	1.9
750	30	2,241	-17.7	-23.3	23	3.6
700	30	2,755	-20.7	-27.1	23	4.8
650	30	3,299	-24.1	-30.4	23	6.2
600	30	3,879	-27.5	-35.0	23	6.7
550	30	4,500	-31.5	-38.7	23	7.3
500	30	5,168	-35.9	-40.2	23	8.7
450	30	5,894	-40.4	-41.2	23	10.4
400	30	6,688	-45.4	-42.0	23	12.3
350	30	7,572	-50.1		24	14.3
300	30	8,567	-53.9		24	13.2
250	30	9,738	-53.2		24	14.7
200	30	11,189	-49.3		25	16.0
175	30	12,067	-48.0		24	16.5
150	30	13,085	-47.4		24	16.5
125	30	14,294	-46.4		24	15.9
100	30	15,780	-45.4		24	15.3
80	28	17,270	-45.4		24	13.7
70	28	18,160	-46.0		24	13.7
60	26	19,180	-46.2		24	13.6
50	25	20,401	-46.2		23	11.1
40	25	21,884	-46.4		23	7.8
30	23	23,790	-45.6		21	6.2
25	22	25,007	-45.3		20	4.7
20	22	26,497	-45.4		17	4.8
15	18	28,437	-43.7		15	5.3
10	14	31,169	-42.6		13	6.2
7	10	33,645	-41.0			
5						
4						

* SHREVEPORT, LA. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	79	3.5	.2	30	.9
1000	28	178	4.5	.0	33	1.0
950	31	581	4.3	-2.0	27	2.1
900	31	1,021	4.1	-5.0	25	4.0
850	31	1,487	4.9	-6.7	25	7.1
800	31	1,982	4.2	-9.0	25	9.4
750	31	2,505	2.3	-13.9	26	11.0
700	31	3,060	-.5	-16.9	26	12.7
650	31	3,649	-3.7	-19.0	26	13.8
600	31	4,277	-7.5	-23.0	26	15.6
550	31	4,948	-12.0	-26.6	25	17.8
500	31	5,670	-17.2	-30.7	25	20.9
450	31	6,452	-22.8	-36.6	25	23.8
400	31	7,305	-28.7	-40.7	25	28.0
350	31	8,251	-35.3	-42.9	25	31.4
300	31	9,305	-42.6	-46.9	26	36.6
250	31	10,518	-48.9		26	43.2
200	31	11,968	-53.4		26	47.3
175	30	12,816	-55.8		26	41.9
150	29	13,784	-58.4		26	36.4
125	28	14,919	-61.7		27	34.2
100	28	16,288	-65.3		27	27.4
80	26	17,643	-67.0		27	18.7
70	25	18,454	-66.3		26	13.5
60	24	19,392	-65.9		27	10.9
50	24	20,504	-63.9		29	3.7
40	23	21,885	-61.8		28	4.2
30	20	23,669	-60.6		04	4.7
25	19	24,811	-59.1		05	5.7
20	19	26,214	-57.7		05	6.4
15	14	28,034	-55.8		05	5.8
10	12	30,627	-51.7		33	4.8
7	9	32,966	-47.7			
5						
4						

SPOKANE, WASH. 933 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	720	-4.2	-7.4	12	1.1
1000						
950						
900	31	1,002	-2.9	-7.4	18	2.9
850	31	1,455	-3.9	-11.3	22	4.7
800	31	1,932	-6.1	-14.8	23	5.6
750	31	2,435	-8.5	-16.[illegible]	24	6.9
700	31	2,967	-11.3	-19.2	25	7.9
650	31	3,533	-14.2	-22.9	26	9.0
600	31	4,136	-18.0	-26.3	26	10.2
550	31	4,781	-22.0	-30.1	26	10.6
500	31	5,476	-26.8	-34.4	26	12.6
450	31	6,229	-31.8	-38.0	27	13.7
400	31	7,052	-37.2	-41.7	27	16.0
350	31	7,965	-43.4	-43.1	27	17.6
300	31	8,985	-49.6		27	19.6
250	31	10,166	-53.9		28	20.9
200	31	11,595	-53.8		28	18.7
175	31	12,457	-51.6		28	16.7
150	31	13,460	-51.0		28	15.3
125	31	14,644	-52.1		28	13.0
100	29	16,083	-53.3		29	13.0
80	29	17,519	-53.4		29	11.0
70	29	18,379	-53.6		30	8.7
60	29	19,367	-54.8		31	9.9
50	29	20,534	-54.2		32	8.[illegible]
40	29	21,963	-54.1		33	6.6
30	26	23,825	-53.7		35	8.2
25	25	25,002	-53.9		36	9.1
20	20	26,439	-53.3		01	10.0
15	13	28,295	-52.8		04	10.5
10						
7						

* SWAN ISLAND, W. I. 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	10	24.9	21.3	08	2.9
1000	31	119	24.4	20.8	07	3.7
950	31	568	21.1	18.5	08	5.0
900	31	1,035	17.8	15.0	09	4.8
850	31	1,522	14.4	10.9	10	4.2
800	31	2,033	11.7	6.8	11	3.9
750	31	2,572	9.7	.8	11	4.4
700	31	3,144	8.9	-7.0	12	4.1
650	31	3,756	7.4	-11.1	12	3.4
600	31	4,412	4.4	-15.3	13	2.3
550	31	5,114	.1	-18.9	16	2.5
500	31	5,870	-5.3	-24.3	19	2.5
450	31	6,689	-10.6	-28.8	22	3.2
400	31	7,564	-17.1	-34.6	24	5.4
350	31	8,573	-24.6	-40.4	25	7.9
300	31	9,673	-33.1	-47.4	27	11.8
250	31	10,928	-43.3		28	13.5
200	31	12,393	-54.5		27	16.6
175	31	13,236	-60.5		27	17.8
150	31	14,183	-66.3		27	16.1
125	31	15,271	-72.6		27	13.0
100	30	16,562	-78.8		28	7.9
80	29	17,828	-79.3		30	1.8
70	29	18,591	-76.4		09	.7
60	27	19,485	-71.8		09	2.4
50	27	20,574	-66.8		08	3.2
40	26	21,932	-64.2		08	3.7
30	24	23,712	-59.6		04	2.2
25	25	24,857	-57.2		32	2.1
20	23	26,287	-53.4		29	5.2
15	22	28,161	-49.2		27	10.9
10	9	30,804	-45.1			
7						

TAMPA, FLA. 1019 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	3	12.7	10.9	07	1.2
1000	31	164	14.4	9.8	08	1.8
950	31	598	13.9	8.3	16	1.5
900	31	1,054	13.1	4.5	22	3.0
850	31	1,534	11.2	1.1	24	4.6
800	31	2,038	9.1	-3.0	25	6.1
750	31	2,572	7.4	-8.0	25	8.2
700	31	3,137	4.7	-11.1	25	10.4
650	31	3,738	1.5	-14.4	26	11.6
600	31	4,378	-1.9	-19.5	26	14.2
550	31	5,064	-6.3	-24.5	26	17.5
500	31	5,8[illegible]3	-11.3	-27.8	26	19.4
450	31	6,603	-16.8	-31.9	26	22.6
400	31	7,477	-23.0	-37.2	26	25.7
350	31	8,444	-29.7	-41.7	26	28.7
300	31	9,523	-38.0	-45.7	26	33.3
250	31	10,756	-46.5		27	37.2
200	31	12,205	-55.5		27	39.6
175	31	13,049	-59.6		27	38.6
150	31	14,005	-63.3		28	30.6
125	31	15,114	-67.6		27	28.0
100	30	16,447	-71.5		27	18.9
80	30	17,757	-73.1		27	13.6
70	29	18,542	-71.0		27	9.8
60	29	19,459	-69.2		27	7.6
50	29	20,557	-66.1		27	5.7
40	29	21,920	-63.1		30	3.8
30	27	23,7[illegible]0	-60.4		34	3.4
25	27	24,841	-58.6		36	3.3
20	26	26,252	-56.5		35	2.8
15	25	28,088	-53.5		30	5.8
10	20	30,737	-47.2		2	8.2
7						

TOPEKA, KANS. 987 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	268	-4.8	-8.4	29	.8
1000						
950	31	571	-2.8	-7.7	27	2.3
900	31	1,001	-1.3	-10.0	27	4.3
850	31	1,458	-.8	-11.3	28	5.7
800	31	1,941	-2.0	-12.0	28	6.6
750	31	2,453	-3.7	-13.7	28	7.5
700	30	2,997	-6.0	-16.5	29	9.5
650	30	3,574	-8.9	-19.3	28	11.2
600	30	4,190	-12.3	-22.9	28	12.7
550	30	4,850	-16.5	-27.5	27	14.7
500	30	5,560	-21.2	-31.4	27	16.9
450	30	6,329	-26.8	-36.1	27	18.1
400	30	7,168	-33.1	-42.4	27	20.4
350	30	8,097	-40.2	-45.2	26	22.9
300	30	9,127	-48.2		26	24.3
250	30	10,312	-53.7		26	26.7
200	30	11,742	-54.6		27	27.5
175	30	12,597	-54.2		27	24.7
150	30	13,586	-54.6		27	23.5
125	30	14,748	-56.7		27	20.2
100	30	16,156	-58.8		28	17.1
80	30	17,551	-60.2		28	13.3
70	30	18,384	-60.5		28	10.7
60	30	19,345	-60.5		29	8.6
50	30	20,482	-59.6		30	7.6
40	30	21,877	-59.8		32	6.8
30	27	23,683	-59.1		35	6.6
25	26	24,822	-58.7		36	6.8
20	26	26,226	-58.0		01	[illegible].3
15	22	28,076	-56.4		01	9.6
10	9	30,694	-55.9			
7						

+ TRUK, CAROLINE IS. 1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	2	28.1	23.2	05	5.8
1000	31	107	26.9	22.2	06	7.2
950	31	559	23.1	20.1	07	9.3
900	31	1,029	19.8	16.3	07	9.8
850	31	1,521	17.1	9.8	07	8.6
800	31	2,038	15.9	3.9	07	7.2
750	31	2,585	14.0	-1.4	08	6.5
700	31	3,164	11.1	-6.9	08	5.7
650	31	3,779	8.1	-12.4	09	6.3
600	31	4,435	4.3	-15.6	10	6.3
550	31	5,137	.1	-21.6	10	6.7
500	31	5,894	-4.4	-25.5	09	7.3
450	31	6,716	-8.9	-30.7	09	8.4
400	31	7,620	-13.6	-34.5	08	7.9
350	31	8,625	-20.4	-40.5	08	7.1
300	31	9,745	-28.9	-47.4	08	5.5
250	31	11,022	-39.1	-54.3	10	5.3
200	31	12,512	-51.3		11	6.4
175	31	13,367	-58.2		11	7.4
150	31	14,319	-66.0		10	8.5
125	31	15,404	-74.1		09	9.1
100	31	16,678	-81.9		09	11.6
80	31	17,921	-81.8		09	12.7
70	30	18,681	-76.1		09	12.1
60	30	19,382	-71.4		09	14.7
50	29	20,672	-67.0		09	18.0
40	29	22,042	-60.5		09	15.1
30	27	23,858	-54.7		08	3.6
25	27	25,033	-51.9		26	2.6
20	27	26,485	-50.0		27	8.3
15	25	28,379	-47.5		26	13.5
10	24	31,083	-43.6		26	18.6
7	15	33,488	-41.0			

* TUCSON, ARIZ. 925 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	789	4.0	-3.3	14	2.5
1000						
950						
900	31	1,020	7.7	-4.7	15	2.3
850	31	1,492	5.8	-7.5	20	2.1
800	31	1,963	2.9	-11.0	23	2.7
750	31	2,504	.5	-14.8	26	3.6
700	31	3,054	-2.2	-18.3	27	5.7
650	31	3,639	-5.6	-21.5	28	7.9
600	31	4,263	-9.4	-25.2	28	10.1
550	31	4,929	-14.1	-29.1	27	11.6
500	31	5,645	-19.6	-33.4	27	13.3
450	31	6,419	-25.2	-38.6	27	14.8
400	30	7,263	-31.5	-44.4	27	17.4
350	30	8,193	-38.1	-49.0	27	20.4
300	30	9,242	-44.1		27	27.5
250	29	10,456	-49.7		27	32.7
200	28	11,902	-52.0		27	36.6
175	28	12,764	-53.6		27	37.4
150	24	13,749	-56.2		27	33.7
125	25	14,896	-59.3		27	26.1
100	24	16,263	-63.0		27	18.6
80	24	17,644	-64.9		27	13.7
70	24	18,460	-64.2		27	8.9
60	24	19,403	-64.3		29	6.2
50	23	20,526	-62.9		34	1.8
40	22	21,903	-60.9		05	3.1
30	20	23,701	-59.0		06	7.0
25	19	24,848	-57.8		07	9.0
20	18	26,262	-56.[illegible]		07	10.1
15	14	28,091	-54.6		06	5.9
10	7	30,730	-52.3			
7						

* VANDENBERG AFB, CALIF. 1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	100	6.8	4.2	10	.9
1000	30	168	8.4	4.0	06	.9
950	31	591	8.4	.0	35	1.6
900	31	1,037	6.7	-3.9	30	2.1
850	31	1,505	4.5	-7.2	29	3.7
800	31	1,997	2.6	-10.4	29	5.6
750	31	2,516	.2	-14.5	30	7.8
700	31	3,067	-2.4	-18.0	30	9.3
650	31	3,651	-5.7	-21.0	30	11.2
600	31	4,274	-9.7	-24.3	29	12.4
550	31	4,941	-13.8	-28.2	29	13.8
500	31	5,658	-19.0	-34.6	29	14.8
450	31	6,433	-24.8	-38.6	28	16.5
400	31	7,278	-31.6	-43.5	28	18.2
350	31	8,212	-38.8	-46.8	28	20.5
300	31	9,249	-46.8		29	22.7
250	31	10,437	-54.2		28	25.9
200	31	11,861	-55.0		28	28.4
175	31	12,716	-54.2		28	27.6
150	31	13,7[illegible]3	-55.5		28	27.0
125	31	14,859	-58.3		28	21.7
100	31	16,251	-61.4		28	16.2
80	30	17,632	-62.1		29	11.1
70	30	18,457	-62.2		29	7.9
60	29	19,409	-62.1		30	4.3
50	29	20,537	-61.5		35	3.4
40	28	21,926	-59.6		06	4.6
30	28	23,731	-58.3		07	7.6
25	28	24,882	-57.2		07	9.6
20	27	26,297	-56.0		07	11.2
15	22	28,144	-53.7		07	11.7
10	20	30,765	-51.2		07	11.8
7	12	33,133	-48.5			

VICTORIA, TEXAS 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	33	5.7	3.2	36	2.5
1000	30	162	8.0	4.8	01	2.9
950	31	581	7.6	1.0	01	.7
900	31	1,027	8.2	-1.1	22	2.7
850	31	1,500	8.3	-3.3	23	5.2
800	31	2,000	6.9	-4.9	24	7.6
750	31	2,530	5.3	-9.2	25	9.1
700	31	3,090	2.4	-13.3	25	11.4
650	31	3,685	-1.0	-16.1	25	13.2
600	31	4,319	-5.3	-20.3	25	15.1
550	31	4,996	-9.9	-26.4	25	17.2
500	31	5,724	-14.5	-32.5	25	22.0
450	31	6,515	-19.5	-35.7	25	26.8
400	31	7,380	-25.6	-39.9	25	31.3
350	31	8,338	-32.4	-43.6	25	35.4
300	31	9,405	-39.7	-45.9	25	42.6
250	31	10,634	-46.3		26	49.0
200	31	12,093	-53.0		26	51.7
175	31	12,947	-56.7		26	46.8
150	30	13,915	-60.5		26	39.2
125	29	15,042	-65.6		27	32.5
100	29	16,386	-69.2		27	23.2
80	28	17,712	-70.2		26	17.2
70	26	18,506	-69.1		26	13.5
60	26	19,430	-68.0		27	7.8
50	25	20,532	-65.5		28	4.3
40	25	21,897	-63.2		30	1.6
30	25	23,678	-60.8		06	4.2
25	24	24,815	-59.[illegible]		06	5.2
20	20	26,212	-57.4		04	3.9
15	17	28,034	-54.8		03	3.4
10	9	30,669	-50.4			
7						

* WAKE IS., PACIFIC AREA 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	5	24.5	20.6	08	4.7
1000	31	144	23.4	19.0	08	5.6
950	31	591	19.7	17.3	08	5.8
900	31	1,055	16.5	13.5	09	5.3
850	31	1,540	13.5	10.2	09	4.8
800	31	2,050	12.0	.9	08	3.5
750	31	2,589	11.0	-8.4	09	1.9
700	31	3,162	8.7	-13.8	11	.2
650	31	3,773	6.8	-18.0	30	1.8
600	31	4,425	3.2	-20.9	30	3.0
550	31	5,125	-.6	-24.3	29	4.5
500	31	5,880	-5.0	-27.6	28	5.8
450	31	6,700	-9.9	-32.1	28	7.6
400	31	7,598	-15.8	-36.8	28	9.8
350	31	8,594	-22.6	-42.2	28	11.7
300	31	9,704	-30.8	-49.0	28	12.9
250	31	10,974	-40.1	-55.7	28	14.6
200	30	12,456	-51.7		28	13.9
175	30	13,310	-58.2		27	14.0
150	29	14,261	-65.5		27	14.0
125	29	15,349	-73.0		27	12.1
100	27	16,631	-80.0		27	6.7
80	24	17,890	-81.2		27	1.6
70	24	18,648	-77.3		13	2.7
60	23	19,543	-72.4		11	3.5
50	23	20,630	-67.5		09	4.3
40	22	21,985	-63.2		09	3.8
30	21	23,776	-58.3		06	3.2
25	20	24,934	-55.7		05	5.7
20	18	26,363	-52.9		07	3.3
15	18	28,234	-49.7		28	1.4
10	15	30,922	-45.2		27	4.6
7	6	33,289	-42.5			

* WALLOPS IS., VA. NASA 1019 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	4	1.1	-3.6	30	1.6
1000	30	162	2.5	-6.0	32	3.2
950	31	570	1.6	-8.3	30	5.6
900	31	1,005	.4	-10.9	29	6.5
850	31	1,462	-.7	-14.0	28	8.1
800	31	1,945	-2.1	-14.4	27	10.1
750	31	2,457	-3.1	-17.9	27	13.7
700	31	3,001	-5.4	-19.5	27	16.3
650	31	3,579	-8.4	-23.1	27	19.0
600	31	4,197	-11.6	-26.8	27	22.0
550	31	4,859	-15.6	-30.4	27	24.4
500	31	5,571	-20.7	-34.9	27	27.2
450	31	6,342	-25.9	-36.8	27	31.1
400	31	7,184	-32.0	-41.4	27	34.4
350	31	8,119	-38.0	-44.6	27	36.5
300	30	9,158	-45.4		26	34.1
250	30	10,354	-52.6		27	33.9
200	30	11,784	-55.6		27	38.1
175	29	12,639	-55.8		27	35.2
150	28	13,622	-56.9		27	31.3
125	27	14,770	-59.0		27	24.8
100	26	16,161	-61.5		27	22.2
80	25	17,544	-63.1		27	17.0
70	25	18,366	-63.1		28	14.0
60	25	19,315	-62.5		28	12.2
50	25	20,441	-62.0		29	10.0
40	24	21,823	-61.4		31	9.2
30	23	23,618	-60.3		32	8.9
25	23	24,756	-59.6		33	8.0
20	23	26,157	-58.3		33	7.6
15	22	27,969	-56.8		33	8.8
10	18	30,580	-51.7		31	12.3
7	14	32,905	-47.3		28	20.7

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	WASHINGTON DULLES INT. AP 1009 MB						WAYCROSS, GA. 1014 MB						WINNEMUCCA, NEV. 87[illegible] MB					
					Resultant Wind						Resultant Wind						Resultant Wind	
	No of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.	No of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.	No of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.
SURFACE	31	85	-2.9	-7.2	32	1.8	31	44	6.7	4.6	35	.7	31	1,312	-5.6	-7.1	18	.5
1000	28	170	-.3	-8.0	32	2.4	31	160	9.2	3.7	34	.9						
950	31	569	-.2	-8.8	30	6.2	31	586	9.5	1.9	25	2.4						
900	31	1,001	-1.3	-10.9	30	6.7	31	1,035	9.4	-3.0	24	5.5						
850	31	1,455	-2.8	-13.2	29	7.2	31	1,509	8.5	-4.3	25	7.1	31	1,507	-2.3	-6.8	17	1.7
800	31	1,935	-3.5	-14.6	28	9.3	31	2,009	7.1	-5.9	25	8.6	31	1,989	-3.1	-9.6	22	3.0
750	31	2,445	-4.6	-16.5	27	12.3	31	2,538	4.6	-7.5	26	10.7	31	2,498	-5.2	-12.2	25	4.8
700	31	2,986	-6.4	-20.2	27	14.8	31	3,097	1.5	-10.8	26	12.8	31	3,038	-7.6	-16.3	27	6.2
650	31	3,563	-9.1	-23.0	27	17.6	31	3,691	-1.2	-17.8	26	15.3	31	3,611	-10.8	-19.7	27	7.2
600	31	4,178	-12.5	-25.4	27	20.6	31	4,325	-4.8	-21.7	26	18.2	31	4,222	-14.4	-23.0	27	8.7
550	31	4,839	-16.3	-29.5	27	23.7	31	5,003	-9.3	-23.7	26	21.0	31	4,876	-18.8	-27.6	27	10.1
500	31	5,549	-21.0	-32.8	27	26.4	31	5,734	-14.1	-29.2	26	24.0	31	5,580	-23.7	-32.3	27	11.7
450	31	6,319	-26.5	-36.6	27	30.0	31	6,525	-19.6	-33.7	26	27.2	31	6,341	-29.0	-37.5	28	13.4
400	31	7,160	-32.5	-41.2	27	34.0	31	7,389	-25.6	-38.7	26	30.9	31	7,173	-35.2	-42.1	28	13.8
350	31	8,091	-39.0	-44.9	27	38.8	31	8,348	-32.3	-42.2	26	34.5	31	8,093	-41.8	-45.6	28	16.3
300	30	9,122	-46.0		27	42.9	31	9,414	-40.3	-45.0	26	40.2	31	9,120	-48.7		28	18.3
250	30	10,317	-52.2		27	45.5	31	10,635	-48.4		26	46.9	31	10,301	-54.5		28	19.9
200	30	11,750	-55.0		27	45.8	31	12,082	-54.6		27	49.2	29	11,723	-55.5		28	17.3
175	30	12,603	-54.9		27	43.1	31	12,930	-57.8		27	46.3	29	12,578	-53.1		28	17.0
150	30	13,588	-55.4		27	38.6	31	13,894	-61.4		27	41.2	28	13,574	-52.5		28	17.7
125	30	14,744	-58.1		27	33.9	30	15,017	-65.1		27	36.0	27	14,749	-54.3		28	14.4
100	30	16,141	-60.5		27	28.2	28	16,361	-68.0		27	28.8	25	16,176	-56.7		28	11.6
80	29	17,528	-61.8		27	22.4	26	17,689	-68.7		27	19.7	25	17,587	-57.9		28	9.9
70	28	18,354	-62.2		28	19.7	25	18,490	-67.6		27	15.2	25	18,428	-58.0		29	7.6
60	27	19,312	-62.1		28	17.5	25	19,420	-66.8		27	9.8	24	19,404	-57.9		31	4.9
50	27	20,441	-61.9		28	15.9	25	20,530	-63.7		27	7.2	23	20,552	-57.7		34	2.9
40	27	21,825	-60.9		29	13.3	23	21,911	-62.3		29	5.3	23	21,965	-56.7		03	3.1
30	27	23,616	-60.1		30	12.5	23	23,699	-60.1		33	4.7	22	23,792	-55.9		05	6.0
25	25	24,761	-59.6		30	11.7	23	24,839	-58.9		35	4.8	21	24,953	-55.4		05	6.1
20	24	26,154	-58.7		29	12.0	23	26,247	-56.7		34	3.7	19	26,375	-54.8		04	9.3
15	22	27,970	-56.5		28	15.0	22	28,078	-54.5		32	4.6	14	28,231	-53.9		04	10.4
10	17	30,536	-52.2		26	30.3	17	30,698	-47.8		28	18.6	5	30,886	-51.4			
7							8	33,049	-44.7									

Standard pressure surface (mb)	WINSLOW, ARIZ. 852 MB						YAKUTAT, ALASKA 1[illegible] MB					
					Resultant Wind						Wind	
	No of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.	No of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.
SURFACE	30	1,487	-3.6	-7.1	25	.7	31	12	-6.7	-9.8	12	1.3
1000							16	162	-2.0	-5.6	09	1.9
950							31	436	-3.5	[illegible]	15	2.3
900							31	862	-5.5	-10.3	18	2.6
850	17	1,55[illegible]	-4.2	-7.4	28	.3	31	1,309	-8.3	-12.7	19	3.9
800	30	1,986	-2.5	-8.9	25	2.5	31	1,777	-10.9	-16.1	20	5.2
750	30	2,498	-2.9	-12.7	24	5.3	31	2,271	-13.7	-18.5	20	5.9
700	30	3,044	-4.6	-15.9	26	6.1	31	2,792	-16.5	-22.4	21	6.4
650	30	3,624	-7.3	-18.3	27	7.3	31	3,346	-19.7	-25.9	22	7.0
600	30	4,244	-11.1	-22.9	27	9.0	31	3,937	-23.0	-29.2	22	8.4
550	30	4,906	-15.6	-27.6	27	10.2	31	4,569	-27.0	-33.3	22	10.3
500	29	5,623	-20.5	-32.7	27	12.3	31	5,250	-31.5	-35.9	23	12.0
450	29	6,394	-26.4	-37.7	27	13.0	31	5,988	-36.4	-38.8	24	14.1
400	29	7,234	-32.9	-43.3	27	15.3	31	6,796	-41.7	-42.6	24	16.5
350	29	8,164	-39.4	-46.9	27	19.3	31	7,694	-46.8		24	17.1
300	29	9,201	-46.3		27	21.1	31	8,702	-51.2		25	16.0
250	29	10,396	-52.2		27	25.9	31	9,884	-52.6		26	16.2
200	29	11,837	-52.9		27	30.3	31	11,328	-51.1		27	15.6
175	28	12,695	-53.5		27	28.5	30	12,201	-49.4		26	16.9
150	28	13,665	-54.5		27	26.9	30	13,213	-48.5		26	17.9
125	27	14,846	-57.5		27	22.6	29	14,420	-47.9		27	18.4
100	27	16,242	-60.9		27	17.6	29	15,891	-48.7		27	17.5
80	26	17,624	-62.4		27	12.8	28	17,349	-49.1		27	19.0
70	25	18,446	-62.4		28	8.6	28	18,227	-48.3		28	18.8
60	23	19,394	-62.3		28	5.3	28	19,242	-48.6		28	17.3
50	22	20,528	-61.4		32	2.9	28	20,439	-49.3		28	16.8
40	22	21,918	-59.5		05	3.6	28	21,902	-49.3		29	18.9
30	20	23,728	-57.9		05	6.4	27	23,788	-49.1		30	17.5
25	17	24,901	-56.8		06	8.2	24	24,989	-49.0		31	17.0
20	16	26,318	-56.4		07	9.4	[illegible]	26,466	-49.2		31	17.2
15	10	28,163	-53.3				16	28,377	-48.0		32	17.5
10							5	31,066	-47.6			
7												

Standard pressure surface (mb)	+ YAP, CAROLINE IS. 1011 MB						YUCCA FLAT, NEV. 883 MB					
SURFACE	31	14	27.5	22.7	07	4.2	31	1,198	-4.5	-7.8	33	1.6
1000	31	108	25.8	21.8	07	5.5						
950	31	559	22.1	19.7	07	8.4						
900	31	1,028	19.2	14.7	07	8.4						
850	31	1,518	16.2	10.4	07	7.6	31	1,499	.2	-9.0	36	2.3
800	31	2,033	14.8	3.4	08	5.7	31	1,984	-1.5	-11.9	35	.7
750	31	2,577	13.0	-2.9	09	4.4	31	2,497	-2.8	-13.9	28	1.8
700	31	3,154	10.5	-8.8	10	3.9	31	3,042	-4.5	-16.8	28	3.6
650	31	3,768	7.9	-13.1	09	4.9	31	3,622	-7.8	-19.4	28	5.0
600	31	4,424	4.5	-17.1	09	4.4	31	4,241	-11.7	-22.9	29	7.5
550	31	5,127	.3	-19.8	11	5.2	31	4,901	-16.3	-27.1	29	9.4
500	31	5,884	-4.3	-23.7	10	8.0	31	5,611	-21.5	-32.2	29	10.5
450	31	6,708	-8.2	-28.2	10	9.1	30	6,383	-26.9	-36.8	29	11.5
400	31	7,613	-14.0	-33.7	09	9.2	30	7,222	-33.3	-42.2	29	14.1
350	31	8,616	-21.0	-39.7	08	7.8	30	8,150	-40.1	-46.3	29	16.1
300	31	9,732	-29.7	-46.0	08	5.5	30	9,183	-47.3		29	18.1
250	31	11,006	-39.8	-53.8	07	4.5	30	10,371	-53.4		29	20.9
200	31	12,491	-52.1		08	4.5	30	11,801	-54.3		28	22.8
175	31	13,342	-59.0		09	5.0	29	12,657	-52.9		28	23.1
150	30	14,292	-66.6		09	6.5	29	13,649	-54.3		28	21.8
125	30	15,374	-74.3		10	8.8	29	14,813	-56.4		28	19.6
100	30	16,647	-81.9		10	9.9	29	16,219	-59.2		28	15.0
80	29	17,891	-82.3		09	10.3	29	17,614	-59.9		28	9.6
70	28	18,647	-77.5		09	10.1	29	18,447	-60.8		29	7.6
60	28	19,544	-72.1		09	12.8	29	19,406	-60.6		30	4.9
50	27	20,631	-67.4		09	15.6	28	20,545	-59.7		35	3.1
40	26	21,996	-61.1		09	15.2	28	21,945	-58.5		05	3.6
30	26	23,808	-55.9		10	7.0	27	23,761	-57.4		05	6.7
25	26	24,978	-52.9		14	.7	25	24,915	-56.6		06	7.9
20	24	26,425	-50.7		27	4.8	20	26,349	-55.1		06	10.9
15	23	28,308	-48.8		26	10.9	10	28,205	-53.4			
10	18	30,994	-44.8		26	15.6						
7	9	33,401	-42.7									

Note: All observations scheduled at 1200, G.C.T. Pressures shown under [illegible] record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dy- [illegible] given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and di- [illegible] less than 6° above the horizon, or any obstruction above the horizon. The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes, dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

° Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G. C. T.

† Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun. JANUARY 1973

Sun's zenith distance

ALBUQUERQUE, N. MEX.

Date	A M				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Jan.									
3------	0.96	----	----	----	----	1.21	1.04	0.93	0.82
4------	----	----	1.01	----	----	----	1.10	----	----
5------	----	1.11	----	----	----	----	----	----	----
7------	----	(.85)	----	----	----	----	----	1.01	----
8------	(.94)	1.07	(1.09)	1.15	1.35	1.33	----	----	----
10------	----	----	----	----	----	----	1.09	.94	----
11------	----	----	1.18	1.38	1.39	1.39	----	----	----
12------	----	----	----	----	----	1.35	----	----	----
13------	1.02	1.11	1.23	1.36	1.40	1.37	1.20	1.08	.99
14------	1.06	1.15	1.25	1.39	1.41	1.37	1.23	1.10	1.00
15------	1.07	(1.12)	1.26	----	----	----	----	----	----
16------	.93	1.06	1.20	1.35	1.37	1.35	(1.14)	(1.01)	----
18------	1.07	1.15	1.26	1.37	1.40	1.37	1.24	1.12	1.04
19------	----	----	----	(1.34)	----	(1.32)	----	----	----
20------	----	(1.02)	(1.16)	----	----	----	----	----	----
21------	1.02	1.12	1.23	1.33	1.38	1.34	(1.12)	----	----
23------	.93	1.04	1.12	1.31	1.38	1.32	1.20	1.10	1.01
24------	1.05	1.13	1.20	1.34	1.39	1.35	1.13	1.08	.96
25------	1.02	1.14	1.24	1.39	1.43	1.40	1.22	1.10	1.02
26------	----	1.11	----	----	----	----	----	----	----
27------	.88	1.06	1.10	1.28	(1.35)	1.28	1.14	1.01	.91
28------	1.01	1.13	1.24	1.39	1.43	1.40	1.24	1.13	1.01
31------	----	----	----	----	(1.30)	(1.25)	----	----	----
Averages	1.00	1.10	1.19	1.34	1.39	1.35	1.17	1.05	0.97

OMAHA, NEBR.

	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
	NO DATA RECEIVED								

Sun's zenith distance

TUCSON, ARIZ.

Date	A. M				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Jan.									
1-----	----	----	1.08	----	----	----	----	1.04	0.94
2-----	----	----	----	----	1.31	1.28	1.14	1.03	.93
3-----	0.96	1.06	----	1.34	1.39	1.34	1.21	----	1.01
4-----	1.05	1.15	1.26	----	----	1.34	1.26	----	----
7-----	----	----	----	1.27	1.31	----	----	----	----
9-----	----	----	----	----	----	----	1.20	1.07	.97
10----	----	----	----	----	----	----	1.15	.96	.86
11----	.86	.98	1.16	1.32	1.42	1.34	----	1.03	----
12----	----	----	1.19	1.32	----	----	1.20	1.08	.96
13----	1.01	----	1.22	1.36	1.42	1.35	1.20	1.05	.93
14----	1.04	1.14	1.26	1.40	1.46	1.40	1.25	1.11	1.03
16----	.97	1.07	1.22	----	1.42	----	----	----	----
17----	----	----	----	1.40	1.48	1.36	1.20	1.09	1.00
18----	1.06	1.12	1.25	1.41	1.47	1.40	----	----	----
19----	----	----	----	----	----	1.36	----	----	----
20----	----	----	----	----	1.42	1.36	1.17	1.06	.96
21----	.98	1.08	1.21	----	----	1.32	----	----	----
22----	.84	.99	1.07	1.20	1.31	----	1.09	----	----
23----	.97	1.08	1.21	1.36	1.44	1.36	1.25	1.12	1.02
24----	1.06	1.16	1.27	1.40	1.49	1.12	1.24	1.09	.99
25----	1.03	1.13	1.24	1.38	1.47	1.38	1.21	1.08	.97
26----	.92	1.07	----	----	1.44	1.37	1.22	1.07	----
27----	.95	1.05	1.17	1.33	1.40	1.33	1.18	1.07	.98
28----	1.01	1.11	1.23	1.36	1.41	1.39	1.24	1.13	1.04
31----	----	----	----	1.27	1.39	1.30	1.10	.96	.85
Averages	0.98	1.08	1.20	1.34	1.41	1.36	1.20	1.06	0.96

MADISON, WIS.

	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Jan.									
1-----	S 0.96	S 1.08	1.24	----	S 1.32	----	S 1.26	S 1.15	S 1.05
2-----	S .82	S 1.01	S 1.20	----	S 1.27	----	----	----	----
5-----	----	S 1.03	S 1.19	----	S 1.29	----	1.19	1.04	.93
6-----	S .93	1.04	1.18	----	----	----	----	----	----
9-----	S 1.01	S 1.11	S 1.24	----	S 1.35	----	S 1.29	S 1.15	S 1.04
10----	S 1.03	S 1.14	S 1.19	----	----	----	----	----	----
11----	S .98	S 1.09	S 1.21	----	S 1.31	----	S 1.23	S 1.15	S .99
24----	S .85	S .93	S 1.05	----	S 1.27	----	S 1.16	S 1.03	S .90
25----	S .89	S 1.00	S 1.14	----	S 1.31	----	M 1.18	M 1.03	M .91
Averages	0.93	1.04	1.18	----	1.26	----	1.22	1.09	.97

( )	Clouds Present
*	Values corresponding to true solar noon
BD	Blowing Dust
BN	Blowing Sand
D	Dust
DI	Intense Dust
DM	Moderate Dust
DS	Slight Dust
F	Fog
GF	Ground Fog
H	Haze
HI	Intense Haze
HM	Moderate Haze
HS	Slight
I	Intense Haze-indeterminable
K	Smoke
KI	Intense Smoke
KM	Moderate Smoke
KS	Slight Smoke
M	Moderate Haze-indeterminable
N	Sand
S	Slight Haze-indeterminable

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska. JANUARY 1973

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	- 64	5	- 4	- 2	4	- 28	1	- 64	- 40	- 31	- 38	-134	-122	-112	-122	-100	- 36	- 69	- 52	- 54	- 22	- 11	- 47	- 81	- 64	- 27	8	- 17	4	- 12	- 74	- 50

The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp Station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (< 3900 A) at Ames, Iowa.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	5.24	1.99	1.09	6.70	6.58	6.09	5.60	6.46	6.82	6.58	6.70	6.46	6.46	6.46	4.14	5.36	1.46	1.21	3.77	4.02	2.55	5.24	6.70	7.55	7.19	6.21	1.95	8.28	8.04	7.31	6.09	5.46

These data are from an I-V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder.

This instrument has not been checked by the NOAA, National Weather Service.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code [illegible] defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

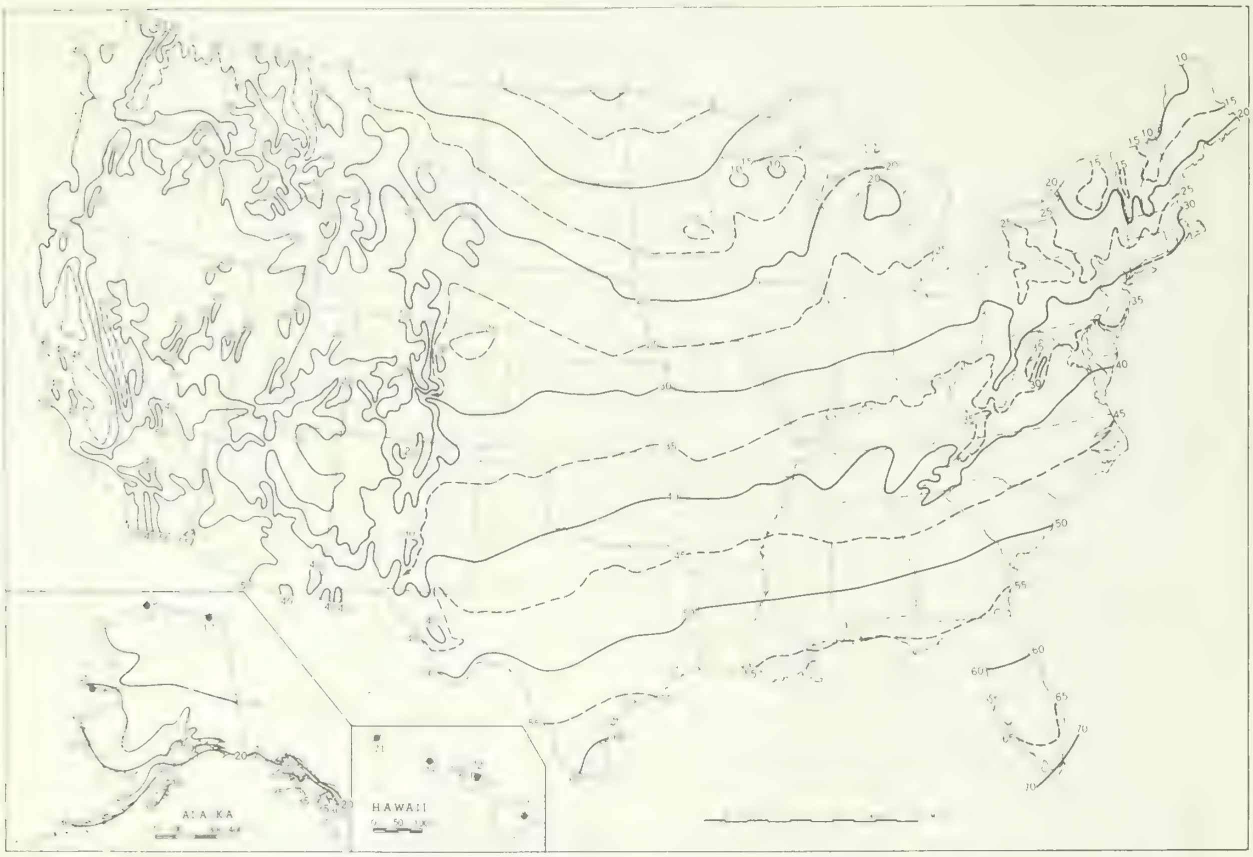
Units Milli-atmo-cms.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3

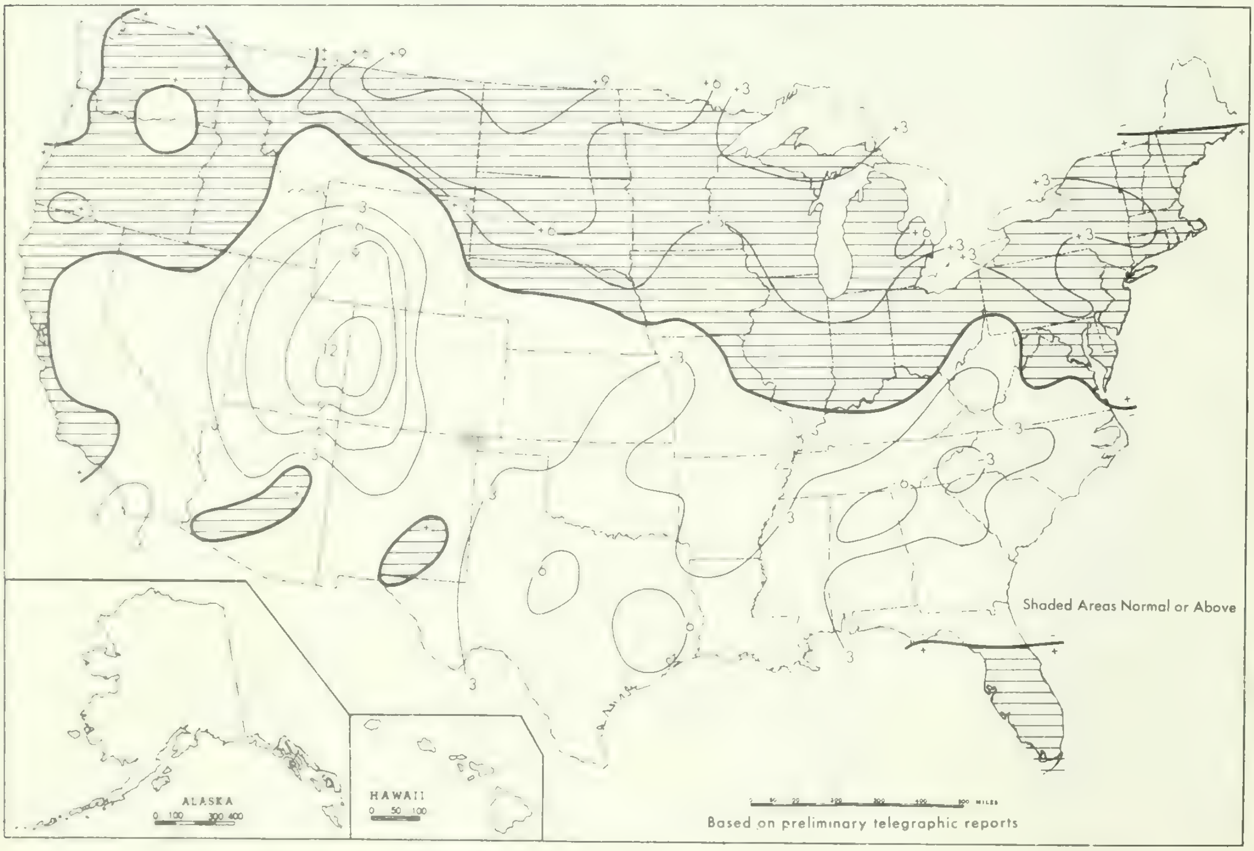
Data not received in time for publication.

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical [illegible] extending from ground level to the top of the atmosphere at the location of the station. The amount of [illegible] standard temperature and pressure, e.g., 300 milli-atmo-cm ozone implies an ozone layer 0.3 centimeter thick. The code [illegible] designates the type of observation made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), January


10
15
20
25
30
35
40
45
50
55
60
65
70
ALASKA
HAWAII
0 50 100

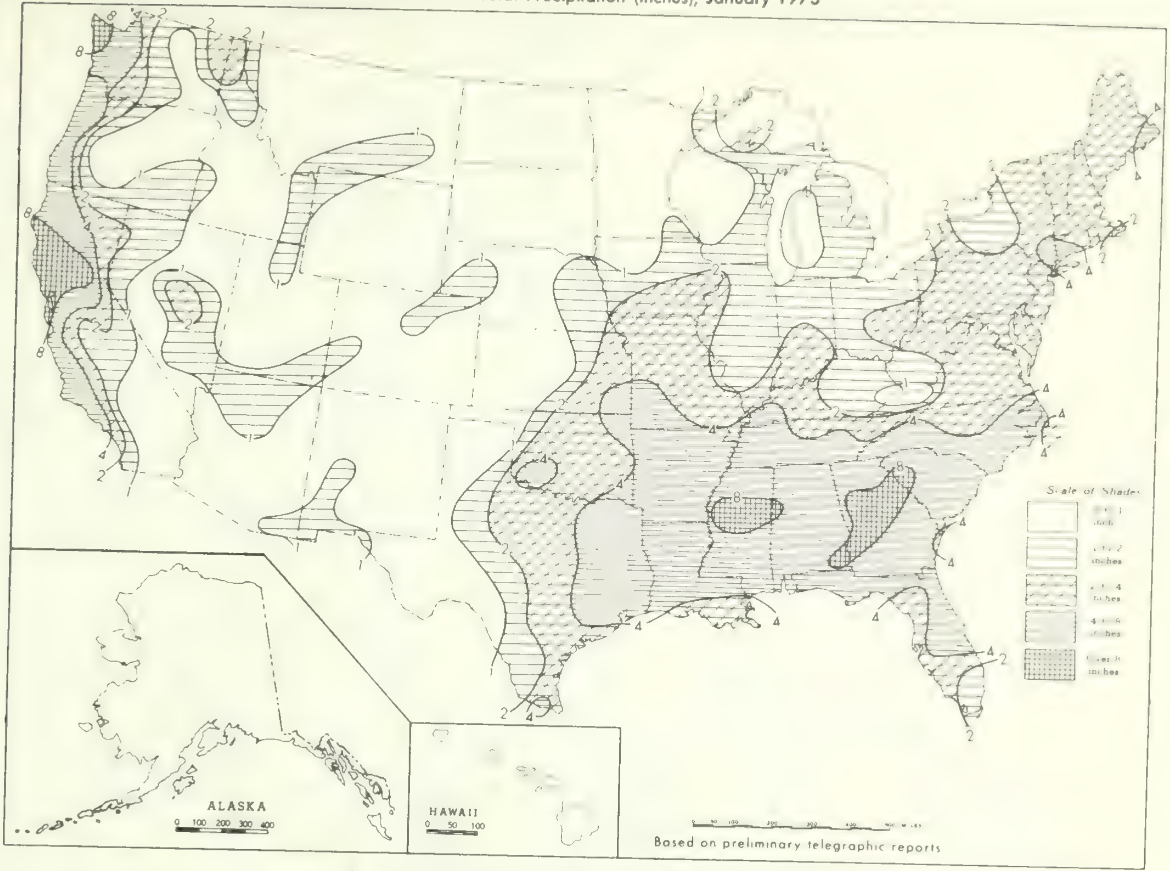
B. Temperature Departure from 30 - Year Mean (°F 1931-60), January 1973


+9
+6
+3
-3
-6
-9
-12
ALASKA
0 100 300 400
HAWAII
0 50 100
MILES

Shaded Areas Normal or Above

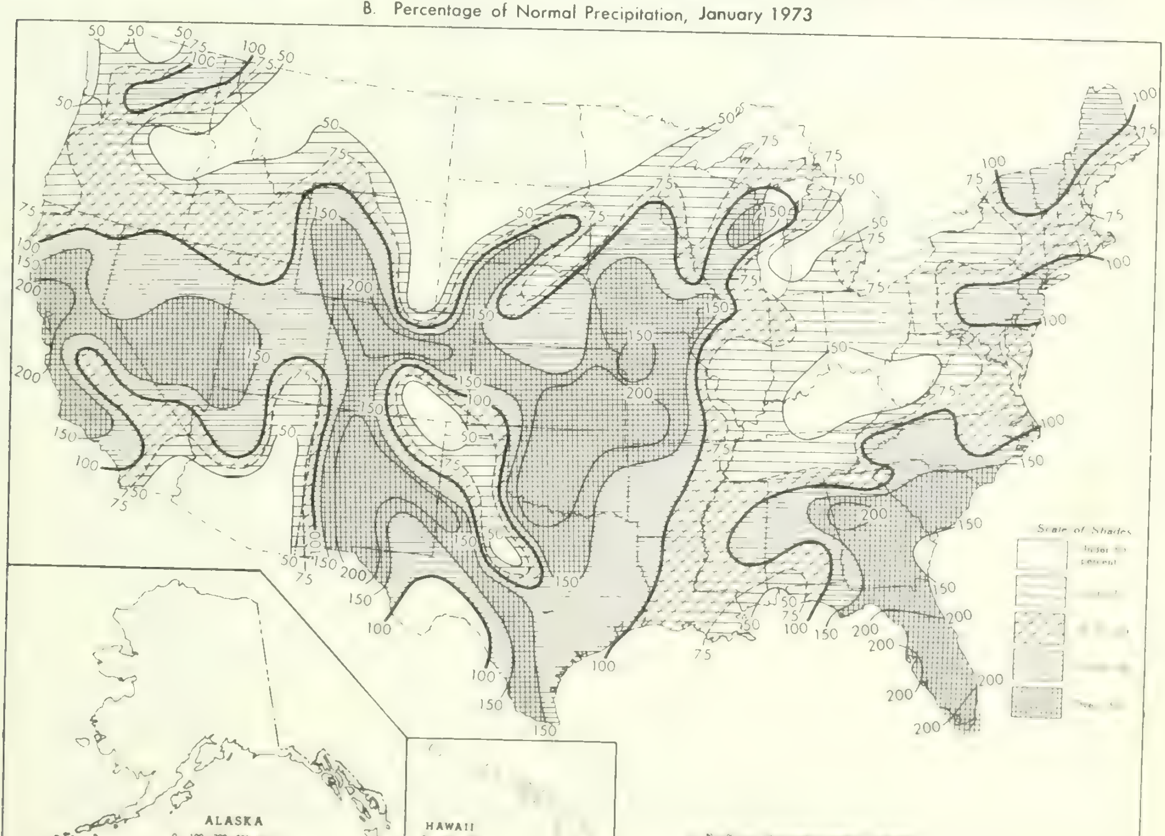
Based on preliminary telegraphic reports

Chart II. A. Total Precipitation (Inches), January 1973


Scale of Shades
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 8 inches
Over 8 inches
ALASKA
0 100 200 300 400
HAWAII
0 50 100

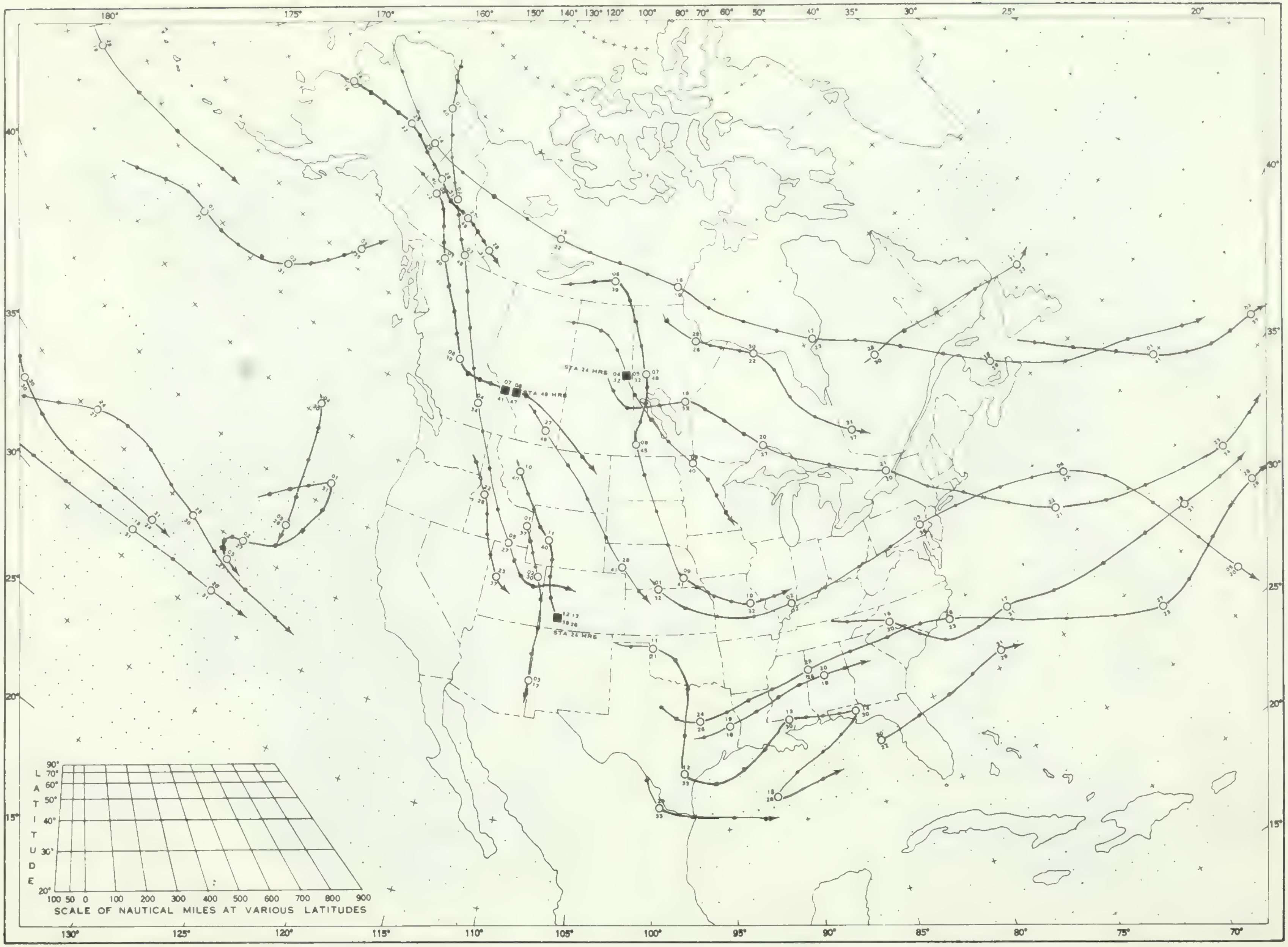
Based on preliminary telegraphic reports

B. Percentage of Normal Precipitation, January 1973


Scale of Shades
Under 50 percent
ALASKA
0 100 200 300 400
HAWAII
0 50 100

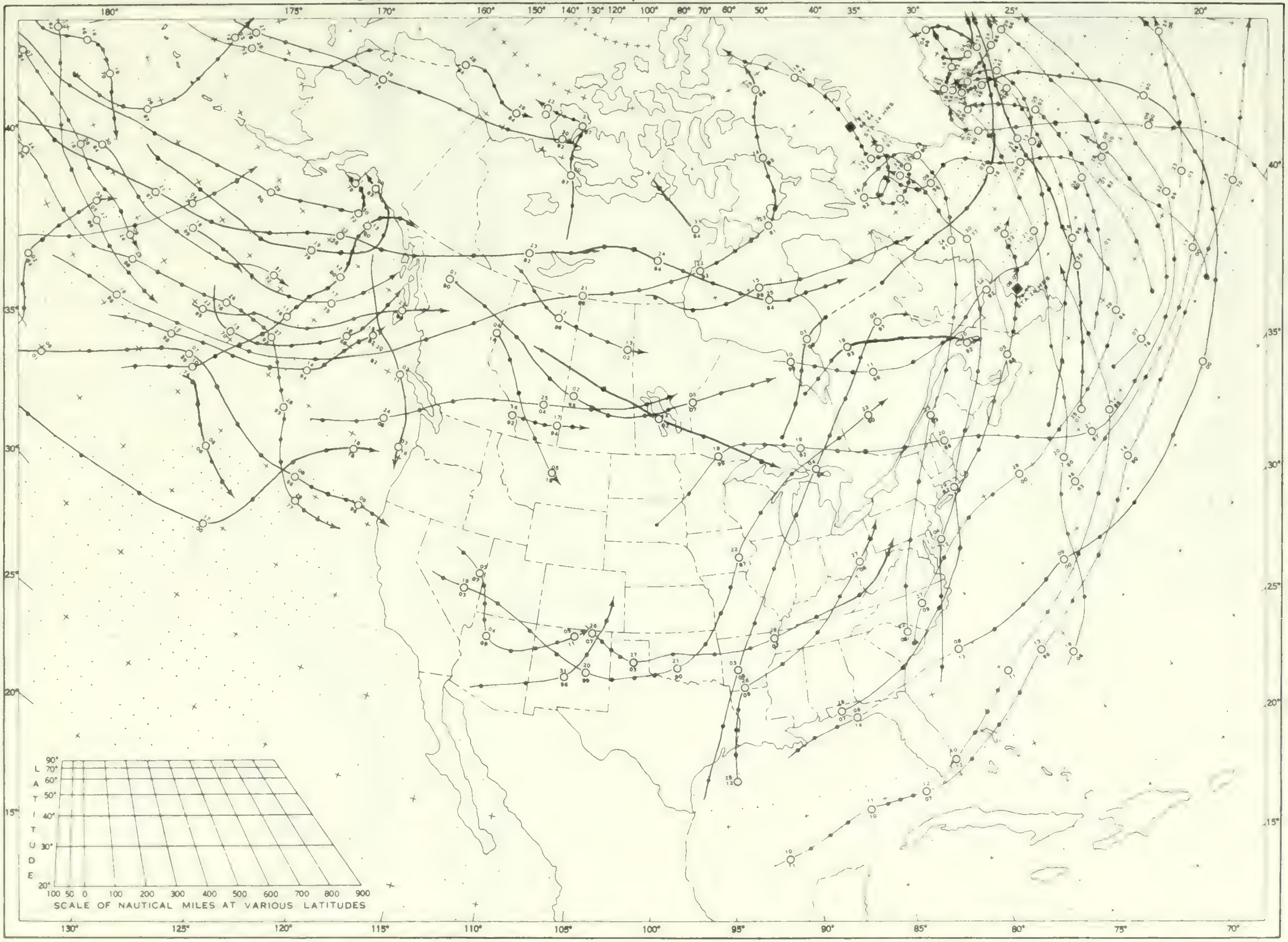
Based on preliminary telegraphic reports

Chart III. Tracks of Centers of Anticyclones at Sea Level, January 1973


STA 24 HRS
STA 48 HRS
STA 24 HRS
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, January 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
40°
35°
30°
25°
20°
15°
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

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National Oceanic and Atmospheric Administration
Environmental Data Service

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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

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I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina 28801.

William H. Haggard
Director, National Climatic Center

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

FEBRUARY 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

Lucius W. Dye, Climatologist

HIGHLIGHTS:

1. A pool of very cold air persisted over western Wyoming.
2. The Far West and North Central averaged warmer than normal.
3. February was unusually stormy over the Southwest and along the Atlantic Coast.

TEMPERATURE--February temperatures averaged warmer than normal over the Far West and the northern and central Great Plains and below normal over most of the rest of the Nation. Parts of the northern Great Plains averaged more than 6° warmer than normal.

The Far West was warmer than normal most of the month. The western slopes of the central Rocky Mountains were cool through most of February. Temperatures over the Great Plains changed irregularly in response to the storms crossing them. Southerly winds warmed the Great Plains in the first week. Canadian air cooled the Great Plains at the beginning of the second week of February. The temperature at Butte, Mont., plunged to 36° below zero on the morning of the 7th. Freezing weather reached the mouth of the Rio Grande. Brownsville, Texas, registered 26° on the 10th. Cold weather continued over most of the Nation at midmonth. Subzero weather reached the central Appalachians. Elkins, W. Va., recorded -13° on the 18th. Subfreezing temperatures reached the Florida Panhandle where Tallahassee registered 31° on the 20th.

A pool of cold air remained over western Wyoming to the end of the month. Minimum temperatures at Big Piney, Wyo., ranged from -1° to -25° from the 13th through the 25th. The average minimum temperature at Big Piney during that 13-day period was 15° below zero.

The Great Plains warmed in the fourth week of February; but the South and much of the East continued cool. On the afternoon of the 22d, the thermometer at Bismarck, N. Dak., climbed to 53° which was 1° warmer than the maximum temperature at Atlanta, Ga., that day.

A cold high centered north of Lake Superior brought subzero weather to northern New England and northeastern New York in the last few days of February. Warming occurred over the rest of the East and over the South. Afternoon temperatures on the last day of the month were in the seventies from southern California to southern Texas and the sixties along the Gulf. Along the northern border, they were mostly in the fifties from the Pacific Ocean to the western edge of the Great Plains and near or below freezing eastward to New England. One of the coldest afternoon temperatures on the 28th was 16° at Caribou, Maine.

PRECIPITATION--The heaviest rains in February fell along the Pacific Coast and over a broad area from southern Texas to New England and southward to the Gulf of Mexico. Totals were mostly only a fraction of an inch from the Great Basin across the Rocky Mountains and northern and central Great Plains to the Upper Great Lakes. Many stations in that area received less than 0.25 inch of moisture in February. A variety of winter weather covered the eastern half of the Nation in the first few days of February. Snow fell over parts of the central Great Plains. Freezing rain was mixed with the snow in parts of Wisconsin and Michigan. Thunderstorms popped up in the Southeast and a storm off the Pacific Coast intensified and produced generous rain along the coastal regions of California. The weather worsened near the end of the first week of February. Dense fog blanketed the middle Mississippi River Valley and rainshowers fell along a weather front which moved into eastern Texas. Snow fell along the eastern slopes of the Rocky

Mountains and the western edge of the Great Plains. Freezing drizzle slicked the roads in the western portion of the central Great Plains. The unpleasant weather spread over the eastern United States, snow in the north, rain in the south, and freezing drizzle sandwiched between the snow belt and the rain belt. Cyclogenesis occurred over the eastern Gulf early on the 9th. The new storm intensified, moved northeastward, crossed the Florida Peninsula, and produced once-in-a-century amounts of snow from Alabama to North Carolina and lesser amounts in Mississippi to Virginia. Snow fell along the Gulf Coast in Mississippi. Freezing rain mixed with the snow forming a sheet of ice 3 to 4 inches thick, closing businesses, schools, bridges, roads, and highways. From 12 to 20 inches of snow fell in parts of Alabama, Georgia, and South Carolina.

On the 11th, a storm intensified over the Great Basin. It dumped heavy snow in the western mountains and lighter amounts in the western Great Plains. Depths of 10 to 12 inches were common along the Mogollon Rim in Arizona, and 20 inches accumulated south of Flagstaff. Many mountain areas in Utah received over 2 feet of new snow, and 8 to 10 inches fell in lower areas. As the storm moved over the Great Plains it dumped from 6 to 10 inches of snow from the central Great Plains to the Great Lakes. On the morning of the 15th, Houghton, Mich., measured 25 inches of snow on the ground. Northerly winds drifted the snow badly, creating blizzard conditions. The strong winds and drifted snow hampered highway travel. As the stormy weather spread northeastward, snow, sleet, rain, and dangerous mixtures of those elements slowed travel and made the care and feeding of livestock difficult.

Other winter storms occurred in the last half of February. One of the worst of these dumped 11.5 inches of new snow on Flagstaff, Ariz., bringing the seasonal total at Flagstaff to 116.7 inches, the greatest amount in more than 20 years.

February ended with a new storm dumping light to heavy rain along the Pacific coast and snow from the coastal ranges across the Great Basin to the Continental Divide. Fog covered the Great Plains and rain dampened the middle Mississippi Valley.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

FEBRUARY 1973

STATE	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Robertsdale 1 E	76	8	Florence	8	17	Geneva	9.42	Calera 2 SW	1.87
Alaska	Ketchikan	52	17	Chandalar Lake	-61	1	Little Port Walter	21.66	2 Stations	.00
Arizona	Tucson Univ of Arizona	82	26+	Hawley Lake	-18	2	Crown King	7.60	Copper Mine TP	.31
Arkansas	Morobay Lock No 8	77	6	Calico Rock	7	10	Keiser	5.35	Fort Smith WSO AP	1.10
California	Culver City	81	20	Bridgeport	-15	20+	Camp Hi Hill Opios 57E	25.83	Twenty-Nine Palms	.14
Colorado	Rye	73	28	Taylor Park	-35	16+	Wolf Creek Pass 1 E	2.56	Stratton 3 NE	.00
Connecticut	Norwich Pub Util Plt	57	2	Norfolk 2 SW	-11	1	Cockaponset Ranger Sta	4.55	Woodbury	2.53
Delaware	Georgetown 5 SW	65	3	Wilmington Porter Resvr	6	17	Middletown 1 WSW	3.63	Dover	2.49
Florida	Arcadia	88	25	Fountain 3 SSE	15	11	Tallahassee WSO AP	7.16	Arcadia	.59
Georgia	Surrency 2 WNW	79	7	Appling 1 NW	6	12	Morgan 1 W	9.92	Resaca	1.63
Hawaii	Lualualei 804, Oahu	88	21	2 Stations	28	9	Puohoka Moa 2 343, Maui	29.80	20 Stations	.00
Idaho	Riggins Ranger Station	67	27	Island Park Dam	-22	15+	Island Park Dam	2.88	Leadore No. 2	.00
Illinois	Harrisburg	67	1	Freeport	-17	17	Brookport Dam 52	2.77	Chenda	.34
Indiana	Evansville	65	1	Waterloo	-21	17	North Vernon 2 SW	2.08	Portland 1 SW	.39
Iowa	Sigourney	66	24	2 Stations	-24	16	Corning	D 3.74	Lake Park	.33
Kansas	2 Stations	70	28+	4 Stations	0	16+	Hiawatha	3.01	3 Stations	.00
Kentucky	Pikeville	70	2	Bernheim Forest	- 3	17	Murray	3.58	Uniontown Dam 49	1.36
Louisiana	3 Stations	79	7	3 Stations	16	11+	Simmesport 1 SE	6.53	Shreveport WSO AP	1.52
Maine	4 Stations	53	3	2 Stations	-35	27+	Machias	5.41	Middle Dam	1.16
Maryland	Salisbury	65	3	Savage River Dam	-16	17	Annapolis USN Academy	7.01	Westernport UPRC	2.14
Massachusetts	5 Stations	57	3+	Chester 2	-20	1	Rochester	5.06	Petersham 3 N	1.97
Michigan	2 Stations	55	2	2 Stations	-30	17	Montague	2.72	Escanaba	.45
Minnesota	Redwood Falls FAA AP	53	3	2 Stations	-42	16	Red Wing	1.44	3 Stations	T
Mississippi	Wiggins 4 SE	79	8	University	12	17	Wiggins 4 SE	8.72	Goshen Springs 2 NNE	2.32
Missouri	Ozark Beach	70	5	Bethany	- 6	9	Tarkio	3.23	St. Louis Gateway Arch	.52
Montana	Dupuyer 7 WNW	68	23	Butte FAA AP	-36	7	Summit	1.34	Volborg	.00
Nebraska	3 Stations	65	28+	Agate 3 E	-28	8	Falls City	3.17	3 Stations	T
Nevada	2 Stations	75	27+	North Fork 13 N	-20	1	Lake Valley Steward	4.23	Kings River Valley	.02
New Hampshire	2 Stations	55	3+	First Conn Lake	-40	19+	Mount Washington	5.72	Newport	1.05
New Jersey	2 Stations	62	2	Newton	- 2	17	Princeton Water Works	4.96	Paterson	.07
New Mexico	Jal	79	4	Eagle Nest	-19	3	Queen Ranger Station	3.71	Vermejo Park	T
New York	Glenham	60	3	Canton 4 SE	-36	17	Dobbs Ferry	4.61	Cherry Valley 2 NNE	.76
North Carolina	Longwood	73	27	Grandfather Mountain	- 7	17	Ft. Bragg Water Plant	D 8.64	Hot Springs 2	1.81
North Dakota	Linton	61	28	Dunn Center 2 SW	-34	14	Killdeer 8 NW	.96	Petersburg 2 N	.00
Ohio	Marietta Sewage TMT PL	64	2	Montpelier 1 WSW	-22	17	Waterloo	2.82	Findlay FAA AP	.53
Oklahoma	Healdton 2 N	77	12	Boise City 2 E	4	9	Daisy 2 E	4.31	Regnier	.02
Oregon	Coquille City	78	21	Seneca	- 8	1	Port Orford 5 E	7.26	McDermitt 26 N	.05
Pennsylvania	2 Stations	64	3	2 Stations	-29	18+	Neshaminy Falls	4.50	Greenville	1.00
Puerto Rico	San Sebastian 2 WNW, P.R.	95	5	Adjuntas Substation, P.R.	47	10+	Corozal Substation, P.R.	7.73	Good Hope School, V.I.	.17
Rhode Island	Providence WSO AP	57	2	North Scituate 4 W	- 1	1	Kingston	3.95	Block Island WSO AP	2.21
South Carolina	Ridgeland 5 NE	79	6	Kingstree 1 SE	0	13+	Bamberg	10.70	Sullivans Island	2.98
South Dakota	2 Stations	67	23	Flandreau	-38	16	Wagner	.91	3 Stations	T
Tennessee	2 Stations	71	6	Mountain City No 2	- 3	18	Jackson Exp Sta	6.12	Greeneville Exp Sta	1.59
Texas	Laredo No 2	93	4	2 Stations	4	10	Cypress 1 SW	9.84	2 Stations	T
Utah	Saint George	71	26	Scofield	-27	16	New Harmony	5.60	Castleton	.00
Vermont	2 Stations	53	3	Enosburg Falls	-30	18	Mount Mansfield	4.22	Manchester Center	1.14
Virginia	2 Stations	68	2+	Mt Lake Biological Sta	- 8	17	Woolwine 4 S	5.85	Clinchco	1.13
Washington	2 Stations	68	22	Winthrop 1 WSW	- 8	7	Quinault Ranger Sta	7.94	Wenatchee	.04
West Virginia	Logan 1 W	68	3	Canaan Valley	-16	18	Seneca State Forest	4.75	Moorefield 2 SSE	1.35
Wisconsin	6 Stations	49	5+	Minong 5 WSW	-36	16	Montello	2.30	Superior	.12
Wyoming	Torrington Exp Farm	65	27	Bondurant 3 NW	-36	9	Bondurant 3 NW	3.80	2 Stations	T

+ And also on an earlier date or dates.

Note: Dates in the above table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

METRIC UNITS

State and station	Elevation, ground	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, ice pellets: Total	Snow, ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb	Mb	C	C	C	C	C		C				C	%	Mm.	Mm.	Mm			Mm.	Mm.	M.p.s.		M.p.s							%
ALABAMA																																
BIRMINGHAM	[illegible]	[illegible]	[illegible]	[illegible]	- [illegible]	[illegible]	[illegible]	[illegible]	24	- 9.4	[illegible]	0	18	- [illegible]	[illegible]	59	- 75	24	6	2	0	0	0.8	34	13.0	SE	1	1	14	13	[illegible]	[illegible]
HUNTSVILLE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.4	[illegible]	- [illegible]	[illegible]	0	17	- [illegible]	[illegible]	123	- 10	[illegible]	6	3	T	0	0.8	36	11.2	34	8+	2	11	15	7.2	
MOBILE	[illegible]	[illegible]	[illegible]	[illegible]	4.7	[illegible]	- [illegible]	[illegible]	[illegible]	- [illegible]	[illegible]	0	6	[illegible]	[illegible]	86	- 30	40	8	2	91	76	1.0	35	10.3	16	13	9	5	14	5.9	
MONTGOMERY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.9	[illegible]	[illegible]	- 5.0	17	0	11	[illegible]	[illegible]	117	7	59	5	2	79	51	1.3	33	11.2	SE	14	5	13	10	5.9	59
ALASKA																																
ANCHORAGE	[illegible]	[illegible]	[illegible]	- [illegible]	-[illegible]	-[illegible]	- [illegible]	[illegible]	[illegible]	-[illegible]	12	B 0	[illegible]	-12.8	[illegible]	3	- 15	2	2	0	25	330	0.8	4	14.3	13	19	10	6	12	5.4	84
ANNETTE	34	[illegible]	[illegible]	[illegible]	- [illegible]	2.4	[illegible]	[illegible]	[illegible]	- [illegible]	9	0	17	[illegible]	[illegible]	245	28	52	17	0	559	[illegible]	2.5	11	17.4	15	16	6	3	19	7.5	
BARROW	[illegible]			-21.[illegible]	-28.[illegible]	-2[illegible]	2.8	- [illegible]	[illegible]	-3[illegible]	1[illegible]	0	28			4	T	2	4	0	46	178			13.9	12	3	10	4	14	5.8	
BARTER ISLAND	[illegible]	[illegible]	[illegible]	-[illegible]	[illegible]	-[illegible]	[illegible]	- [illegible]	4	-[illegible]	[illegible]	0	28	[illegible]	[illegible]	1	- 8	1	1	0	13	229	1.3	23	23.2	27	2	9	9	10	5.5	
BETHEL	38	[illegible]	[illegible]	- [illegible]	-[illegible]	-[illegible]	[illegible]	2.8	23	[illegible]	2	0	28	-1[illegible]	66	17	- 12	12	6	0	231	356	3.9	4	15.6	4	11	10	5	13	5.5	
BETTLES	[illegible]	[illegible]	[illegible]	-[illegible]	-28.[illegible]	[illegible]		- 4.4	[illegible]	-39.4	14+	0	28			5		5	1	0	[illegible]	1448	2.8	32	8.9	36	1	16	5	7	3.8	
BIG DELTA	[illegible]			[illegible]	-21.4	-1[illegible]		[illegible]	[illegible]	-41.1	1	0	28			3			2	0	99											
COLD BAY	[illegible]	[illegible]	[illegible]	1.4	- [illegible]	- [illegible]	[illegible]	[illegible]	[illegible]	- 9.4	[illegible]	0	[illegible]	- 1.[illegible]	[illegible]	41	- 40	19	15	0	292	152	3.1	14	25.9	17	3	1	3	24	8.9	
FAIRBANKS	[illegible]	[illegible]	[illegible]	-[illegible]	[illegible]	-[illegible]	[illegible]	[illegible]	[illegible]	-37.[illegible]	1	0	28	-[illegible]	[illegible]	3	- 10	3	2	0	46	406	1.2	2	7.6	1	11	14	9	5	4.0	
GULKANA	[illegible]			-12.4	-[illegible]	-[illegible]		1.7	[illegible]	-4[illegible]	[illegible]	0	[illegible]			7		3	4	0	112	254			10.3	18	20	13	6	9	4.8	
HOMER	[illegible]	[illegible]	[illegible]	- 1.[illegible]	-[illegible]	- [illegible]		[illegible]	6	-16.[illegible]	14	0	[illegible]	- 8.[illegible]	[illegible]	32	- 5	15	8	0	135	178	2.1	5	11.2	7	19	11	3	14	5.4	
JUNEAU	4	[illegible]	[illegible]	[illegible]	- 7.8	- 4.1	- 1.[illegible]	[illegible]	[illegible]	-18.9	[illegible]	0	[illegible]	- 8.9	[illegible]	100	22	21	14	0	531	432	3.3	10	15.6	12	20	8	2	18	6.7	39
KING SALMON	15	[illegible]	[illegible]	[illegible]	-[illegible]	- [illegible]	[illegible]	[illegible]	19+	-21.7	28	0	27	-10.[illegible]	[illegible]	3	- 21	2	4	0	20	T	2.1	7	17.4	15	1	10	4	14	5.8	
KODIAK	[illegible]	[illegible]	[illegible]	[illegible]	- 2.9	- [illegible]	[illegible]	[illegible]	2	- 8.9	1	0	[illegible]	- [illegible]	[illegible]	91	- 33	33	15	0	632	381	0.7	36	15.6	13	19	7	4	17	6.9	
KOTZEBUE	[illegible]	[illegible]	[illegible]	-11.6	-[illegible]	-15.4	[illegible]	- [illegible]	7+	-32.8	16	0	28	-19.4	[illegible]	10	3	5	8	0	132	1016	5.1	9	25.9	11	3	11	4	13	5.5	
MC GRATH	[illegible]	[illegible]	[illegible]	-11.[illegible]	-27.[illegible]	-19.4	- [illegible]	[illegible]	[illegible]	-4[illegible]	13	0	[illegible]	-23.3	66	10	- 19	9	4	0	203	508	0.8	35	10.3	6	12	15	2	11	4.6	
NOME	4	[illegible]	[illegible]	- 7.7	-1[illegible]	-[illegible]	2.9	- 1.7	4	-31.7	2	0	28	-1[illegible]	71	6	- 18	2	7	0	102	381	4.0	8	17.4	11	3	12	5	11	5.0	67
ST. PAUL ISLAND	7	[illegible]	1002.1	- 1.2	- [illegible]	- [illegible]	1.2	2.8	[illegible]	-13.9	13	0	27	- 4.4	91	85	54	22	21	0	701	660	3.5	6	30.0	17	3	1	2	25	9.2	
SHEMYA	37	[illegible]	994.1	[illegible]	- [illegible]	- 1.4	- 0.7	[illegible]	[illegible]	- 8.9	1	0	27	- [illegible]	[illegible]	59	1	15	19	0	254	127	2.7	21	30.0	23	21	2	8	18	7.8	
SUMMIT	[illegible]			-11.[illegible]	-1[illegible]	-15.8		0.0	[illegible]	-32.2	1	0	28			6		3	5	0	155	889						13	6	9	4.3	
TALKEETNA	105			- 4.2	-2[illegible]	-12.2	- 3.1	[illegible]	[illegible]	-33.3	1	0	28			10	- 34	9	4	0	206	813			11.2	2	12	16	2	10	4.5	
UNALAKLEET	5			- 9.2	-14.[illegible]	-12.0		- [illegible]	[illegible]	-2[illegible]	2	0	28			6		3	3	0	58	533			19.2	10	13	14	4	10	4.6	
YAKUTAT	9	1010.2	1011.3	1.6	- 8.2	- 3.3	- 1.4	6.1	23	-20.0	11	0	22	- 7.2	79	223	14	50	15	0	904	1372	2.1	10	20.1	13	20	11	4	13	5.6	
ARIZONA																																
FLAGSTAFF	2135	786.3	1019.1	4.1	- 7.8	- 1.8	- 0.5	10.0	26	-18.3	2	0	28	- 6.7	70	94	49	26	12	1	859	508	0.2	12	10.7	SW	11	6	3	19	7.4	55
PHOENIX	340	977.7	1016.8	20.3	6.1	14.2	2.2	26.1	26	1.7	1	0	0	4.4	56	35	13	21	9	2	0	0	1.6	11	13.9Y	S	11	8	5	15	6.3	77
TUCSON	788	927.2	1016.[illegible]	18.2	5.6	11.9	0.3	25.0	26	0.6	14+	0	0	2.8	60	41	19	27	7	0	0	0	1.6	15	16.1	S	11	10	9	9	5.3	68
WINSLOW	1492	852.7	1019.6	11.2	- 1.0	5.1	2.1	19.4	27	- 8.9	2	0	16	- 2.2	67	52	40	18	11	1	272	51	0.8	22	15.6	20	11	4	5	19	7.1	
YUMA	59	1009.5	1016.6	21.4	8.3	14.9	0.8	26.1	27+	4.4	1	0	0	4.4	54	13	4	8	4	0	0	0	0.9	36	12.1	SW	11	12	6	10	5.0	74
ARKANSAS																																
FORT SMITH	136	1005.1	1022.2	11.1	- 1.9	4.6	- 1.9	21.1	4	- 8.3	10	0	22	- 1.7	67	28	- 59	24	3	0	T	0	0.9	34	11.6		2	7	7	14	6.8	55
LITTLE ROCK	78	1012.5	1022.3	11.2	- 0.1	5.6	- 1.3	22.2	5	- 7.2	10	0	15	- 1.1	65	75	- 35	40	6	2	T	0	0.6	33	15.2	SW	1	10	3	15	6.2	75
CALIFORNIA																																
BAKERSFIELD	145	999.3	1017.0	19.4	8.6	14.1	3.0	24.4	27+	2.8	1	0	0	7.2	68	12	- 17	6	7	1	0	0	1.6	11	11.2	18	23+	3	15	10	6.8	
BISHOP	1252	873.7		11.5	- 1.9	4.8	- 0.3	17.2	17	- 6.1	25	0	21			40	15	22	6		T	T										
BLUE CANYON	1609			5.5	- 0.4	2.6	- 0.2	13.9	20	- 2.8	15+	0	21			306	47	51	17		1933	1499			13.0	19	4	3	4	21	8.3	
EUREKA U	13			13.8	6.9	10.4	1.4	17.8	25+	2.8	19+	0	0			98	- 43	28	17		0	0			12.5	N	17	4	4	20	7.9	58
FRESNO	100	1005.1	1017.0	16.0	6.1	11.1	0.8	20.0	25+	1.7	16+	0	0	7.8	85	94	38	28	13	3	0	0	1.4	11	11.6	SE	11	3	7	18	7.9	53
LONG BEACH	8	1016.3	1017.7	19.2	9.1	14.2	1.7	26.7	20	5.0	5	0	0	8.9	74	126	68	39	13	1	0	0	0.6	18	12.5	18	11	7	5	16	6.5	
LOS ANGELES	30	1013.5	1017.1	18.7	10.8	14.7	1.8	25.6	20	7.2	17	0	0	9.4	75	124	51	46	11	0	0	0	0.5	17	17.0Y	S	11	6	7	15	6.8	
LOS ANGELES U	82			20.1	11.0	15.6	1.6	26.7	20	8.3	17+	0	0			200	116	59	11		0	0			9.8	SW	27+	6	7	15	6.5	45
MT SHASTA R	1080	890.6	1016.3	8.3	- 0.6	3.9	1.1	15.6	21	- 6.1	19+	0	17	- 0.6	79	236	86	81	18		213	127	1.0	14								
OAKLAND	2	1015.9	1016.1	14.7	9.1	11.9	1.5	18.3	21	5.6	19	0	0	8.9	84	151	69	34	13	0	0	0	1.7	15	13.4	15	26	3	5	20	7.8	
RED BLUFF	104	1003.1	1016.0	15.1	5.9	10.5	0.7	22.2	21	1.7	1	0	0	5.6	79	166	82	41	16	1	0	0	0.5	16	15.6	SE	24	4	5	19	7.9	58
SACRAMENTO	5	1015.2	1016.1	15.7	7.7	11.7	2.2	19.4	25	1.7	1	0	0	8.3	84	143	67	46	16	3	0	0	1.0	14	11.2	SW	27	2	6	20	8.2	51
SANDBERG R	1377	861.2		7.8	1.4	4.6	- 0.6	13.3	25	- 1.7	15	0	9			289	223	95	14		157	51			17.4	17	3	4	5	19	7.7	
SAN DIEGO	4	1016.6	1017.6	19.6	11.4	15.5	2.1	23.9	20	8.3	1	0	0	8.3	65	41	- 13	14	12	1	0	0	0.8	24	14.8	S	11	6	10	12	6.1	78
SAN FRANCISCO	2	1015.2	1016.0	15.4	7.8	11.6	1.1	20.0	21	4.4	19+	0	0	8.9	85	173	85	36	15	0	0	0	1.4	16	13.0	17	24	3	4	21	7.9	
SAN FRANCISCO U	16			15.4	10.0	12.7	1.1	20.0	21	7.8	1	0	0			161	68	32	15		0	0			11.6	SE	12					39
SANTA MARIA	72			16.7	6.6	11.7	0.7	22.2	20	1.1	16+	0	0			157	94	52	16		0	0						4	12	12	6.7	
STOCKTON	7	1015.2	1016.2	15.7	6.9	11.3	1.9	18.9	25+	1.7	20+	0	0	7.8	83	106	44	24	16	2	0	0	2.1	15	10.3	16	27+	0	7	21	8.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb.	C.	C.	C.	C.	C.		C.				C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
COLORADO																																
ALAMOSA	2297	771.8		0.9	-18.4	- 8.8	- 4.1	8.9	28	-31.1	3	0	28			3	- 1	2	5		91	51						11	7	10	4.0	
COLORADO SPRINGS	1873	810.7	1020.6	6.2	- 5.9	0.2	0.4	15.0	27	-12.8	9	0	27	-11.1	46	2	- 7	1	2	0	58	51	1.8	5	11.6	36	17	10	7	11	5.1	
DENVER	1610	836.4	1018.4	8.6	- 4.8	1.9	2.2	16.7	27	-13.9	8	0	28	- 7.8	53	4	- 13	3	4	0	76	51	1.3	17	8.9	SW	19+	9	10	9	5.1	80
GRAND JUNCTION	1476	855.1	1023.4	3.5	- 6.8	- 1.6	- 1.9	11.7	27	-19.4	3+	0	27	- 6.7	71	3	- 14	3	3	0	30	178	0.4	6	9.4	S	11	8	3	17	6.5	57
PUEBLO	1428	856.4	1019.4	10.7	- 7.2	1.7	0.7	18.3	27	-13.3	23	0	26	- 7.8	55	2	- 10	2	2	0	20	25	0.8	3	15.6	NW	12	9	10	9	5.5	73
CONNECTICUT																																
BRIDGEPORT	2	1019.6	1020.2	2.7	- 5.8	- 1.6	- 0.7	11.1	2	-14.4	12	0	23	- 8.9	59	102	26	58	11	0	58	76	3.7	33	17.9	17	2	10	6	12	6.0	
HARTFORD	52	1012.9	1019.8	2.3	- 7.6	- 2.7	0.1	11.1	2	-18.3	18+	0	27	-10.6	58	77	3	48	9	0	150	229	2.6	33	12.1	NW	24	7	8	13	6.3	67
DELAWARE																																
WILMINGTON	23	1017.6	1020.6	6.9	- 3.0	1.9	0.9	16.1	2	-12.2	17	0	18	- 6.1	58	87	12	51	9	0	30	25	2.4	35	12.1	31	16+	6	7	15	6.6	
DIST.OF COLUMBIA																																
WASHINGTON DULLES	88	1009.1	1021.4	6.6	- 5.4	0.6		17.8	2	-15.0	17	0	24	- 5.6	68	72		31	7	0	8	T	2.1	34	13.0	30	16+	8	4	16	6.7	
WASHINGTON NATIONAL	3	1018.6	1021.2	7.7	- 2.1	2.8	- 0.4	17.2	2	-12.8	17	0	17	- 5.0	58	68	5	34	7	1	T	T	2.0	34	14.8	N	17+	8	2	18	6.8	48
FLORIDA																																
APALACHICOLA U	4			15.7	7.5	11.6	- 2.2	22.8	27	- 0.6	17	0	2			96	- 3	49	9	2	T	0			15.2	N	9	7	8	13	6.1	83
DAYTONA BEACH	9	1019.0	1020.3	19.2	7.8	13.5	- 2.4	26.7	14	1.1	17+	0	0	6.7	67	51	- 19	31	7	0	0	0	1.5	31	10.3	29	3	9	8	11	5.4	
FORT MYERS	5	1019.6	1020.1	21.7	10.1	15.9	- 2.5	27.8	14+	2.8	11	0	0	11.1	77	57	1	28	7	2	0	0	1.0	1	14.3	31	10	9	8	11	5.5	
JACKSONVILLE	8	1019.6	1020.6	18.3	5.1	11.7	- 2.4	25.6	26	- 1.1	17+	0	4	4.4	68	129	55	51	6	3	T	0	1.3	34	19.2	NE	9	10	5	13	6.1	59
KEY WEST	1	1018.3	1019.0	22.0	16.7	19.3	- 2.0	27.2	2	10.6	12+	0	0	13.3	70	62	11	27	7	2	0	0	3.3	3	20.1	W	9	9	9	10	5.9	71
LAKELAND U	65			19.8	8.9	14.4	- 2.9	26.1	2	- 1.1	11	0	1			57	- 7	20	6		0	0						10	11	7	5.1	71
MIAMI	2	1019.0	1019.2	23.1	13.9	18.5	- 1.4	28.3	15	5.6	11	0	0	12.2	68	56	9	26	9	1	0	0	1.4	35	13.0	26	10	9	8	11	5.8	
ORLANDO	33	1015.9	1020.2	21.6	9.2	15.4	- 1.2	28.3	2	1.7	11	0	0	7.8	66	69	8	42	6	0	0	0	1.4	31	11.2	29	3	10	8	10	5.2	
PENSACOLA	34	1016.9	1021.2	16.9	5.6	11.2	- 2.2	23.3	8	- 2.8	11	0	5	5.0	70	120	12	67	7	0	48	51	1.3	1	10.3	14	13+	9	11	8	5.4	
TALLAHASSEE	17	1018.6	1020.8	17.6	3.2	10.4	- 2.7	23.9	7	- 7.8	12	0	8	4.4	70	182	76	90	8	1	10	T	0.8	36	10.3	4	9	7	9	12	6.2	
TAMPA	6	1020.3	1020.5	20.2	8.0	14.1	- 2.9	25.6	25+	0.0	11	0	1	7.8	70	65	- 8	25	6	0	0	0	1.0	35	13.0	29	10	9	9	10	5.6	61
WEST PALM BEACH	5	1018.3	1019.1	23.4	12.1	17.8	- 2.0	29.4	2	3.9	11	0	0	10.6	65	69	9	18	13	1	0	0	1.1	31	13.0	26	10	6	9	13	6.3	
GEORGIA																																
ATHENS	244	991.2	1020.7	13.0	0.3	6.7	- 1.2	20.0	27+	- 7.8	17	0	12	- 1.7	62	68	- 51	42	7	1	43	51	1.2	31	10.3	30	21	10	8	10	5.6	
ATLANTA	308	982.7	1020.6	12.1	- 0.1	6.0	- 1.8	20.0	24	- 8.9	17	0	16	- 2.8	58	87	- 27	72	5	0	T	T	1.6	32	11.6	NW	16	8	6	14	6.5	54
AUGUSTA	41	1014.9	1020.4	14.3	- 0.3	7.1	- 2.6	21.1	25+	-12.8	12	0	16	- 1.7	61	133	43	55	7	3	356	356	1.5	30	10.3	3	10+	10	7	11	5.5	
COLUMBUS	117	1006.8		14.2	1.0	7.6	- 2.2	21.7	7	-11.7	11	0	15	0.6	67	116	- 2	41	5	0	356	356	1.2	34	8.0	33	8	7	11	10	6.0	
MACON	108	1007.8	1021.0	14.8	0.7	7.8	- 2.8	22.2	27+	-12.8	11	0	14	0.6	66	145	37	60	7	1	419	330	1.2	32	11.6	SE	1	9	7	12	6.2	67
ROME	194			12.1	- 1.7	5.2	- 1.7	20.6	24	- 7.8	18+	0	20			57	- 77	19	5		T	0										
SAVANNAH	14	1019.0	1020.6	16.2	3.4	9.8	- 1.9	23.3	8	- 7.2	12	0	6	2.2	65	113	20	47	8	1	81	76	1.2	32	14.3	W	3	10	5	13	6.0	57
HAWAII																																
HILO	8	1018.0	1019.1	26.2	17.3	21.7	0.3	28.3	20+	14.4	6+	0	0	16.1	74	140	-189	69	19	0	0	0	0.2	31	8.0	E	18	4	13	11	6.4	57
HONOLULU	2	1018.6	1019.0	26.8	18.3	22.6	0.1	28.3	17+	15.0	5	0	0	15.0	66	15	- 69	5	11	0	0	0	3.9	4	13.0	NE	10	5	14	9	5.6	74
KAHULUI	15	1016.3	1018.7	26.1	15.8	20.9	- 1.1	29.4	15	10.0	5	0	0	14.4	67	21	- 44	13	9	0	0	0	4.6	5	16.1	NE	20	11	13	4	4.3	70
LIHUE	31	1015.2	1020.3	25.6	18.7	22.2	0.7	28.9	19	15.6	26	0	0	16.1	70	38	- 97	18	13	0	0	0	3.9	4	11.6	NE	21+	5	15	8	6.0	49
IDAHO																																
BOISE	865	917.4	1019.6	8.8	- 0.6	4.1	2.7	15.6	26	- 6.7	1	0	15	- 2.8	65	11	- 23	3	9	0	8	25	2.5	14	13.0	SE	26	4	6	18	7.3	61
LEWISTON	431			8.6	- 0.8	3.9	1.8	16.1	27	- 6.1	8	0	18			17	- 8	11	4		114	102			10.7Y		3+	7	2	19	7.3	
POCATELLO	1358	864.9	1022.5	2.8	- 8.4	- 2.8	- 0.1	10.0	28	-17.8	22	0	26	- 8.3	67	25	2	9	9	0	178	76	0.2	32	10.7	SW	3	6	5	17	7.1	53
ILLINOIS																																
CAIRO U	96			7.6	- 0.8	3.4	- 1.4	18.3	1	- 9.4	9	0	14			55	- 38	22	10		8	T			15.2	N	8	10	8	10	5.7	57
CHICAGO O HARE	201	995.9	1021.3	1.8	- 5.5	- 1.8	1.4	10.0	4	-16.7	17+	0	24	- 5.6	76	35	- 3	19	7	1	236	102	0.5	31	13.0	31	21	5	5	18	7.2	
CHICAGO MIDWAY	185	998.3	1021.7	2.4	- 4.4	- 1.0	1.4	11.1	4	-14.4	16+	0	21	- 5.6	72	32	- 8	15	7	1	226	152	0.2	32	11.6	NW	15	7	1	20	7.3	50
MOLINE	177	999.3	1021.7	2.4	- 6.1	- 1.8	1.7	12.8	24	-26.1	17	0	23	- 6.1	75	49	15	19	8	0	218	127	0.6	32	11.6	NW	21	8	4	16	6.4	53
PEORIA	199	997.0	1021.9	2.6	- 6.0	- 1.7	0.3	15.0	24	-20.6	17	0	25	- 5.0	79	25	- 18	9	8	0	69	25	0.6	25	12.5	NW	21	7	5	16	6.7	50
ROCKFORD	221	993.6	1021.7	0.9	- 6.7	- 2.8	1.4	9.4	4	-23.9	17	0	25	- 6.1	79	40	3	20	7	2	175	102	0.9	2	10.3	36	15+	8	4	16	6.6	
SPRINGFIELD	179	999.0	1022.0	3.9	- 5.4	- 0.7	- 0.5	16.1	24	-17.8	17	0	24	- 3.9	80	21	- 25	7	9	0	79	25	1.1	26	13.4	W	1	9	7	12	5.8	57
INDIANA																																
EVANSVILLE	116	1007.8	1022.3	6.3	- 3.4	1.4	- 1.7	16.7	1	-12.2	9	0	23	- 4.4	67	42	- 39	13	9	0	41	25	0.8	33	11.6	NW	21	6	8	14	6.4	51

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No of days: Max 32.2 °C or above	Temperature: No of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: 25 mm or more	Precipitation: No of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear 0-3	No. of days: Partly cloudy 4-7	No. of days: Cloudy 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm.	Mm	Mm			Mm	Mm	M.p.s		M.p.s							%
INDIANA																																
FORT WAYNE	241	[illegible]	1021.7	1.7	[illegible]	2.6	[illegible]	10.6	4	24.4	17	0	25	- 6.1	78	33	- 24	[illegible]	10	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Nw	[illegible]	4	6	18	7.5	[illegible]
INDIANAPOLIS	241	991.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5	-15.6	17	0	[illegible]	[illegible]	[illegible]	28	[illegible]	[illegible]	[illegible]		84	[illegible]	[illegible]	24	[illegible]	Nw	21	4	7	[illegible]	[illegible]	44
SOUTH BEND	236	[illegible]	[illegible]	[illegible]	- 5.0	- 1.1	1.8	11.1	4	-18.3	17	0	22	[illegible]	76	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31	[illegible]	5	[illegible]	21	7.9	
IOWA																																
BURLINGTON	[illegible]			[illegible]	- 5.8	- 1.4	[illegible]	[illegible]	24	[illegible]	[illegible]	0	[illegible]	- 6.1	[illegible]	42	6	[illegible]		[illegible]	[illegible]	[illegible]	0.8	[illegible]	[illegible]	32	21+	8	[illegible]	[illegible]	[illegible]	
DES MOINES	286	[illegible]	[illegible]	1.5	[illegible]	- 2.4	2.4	14.4	28	[illegible]	16	0	[illegible]	- 5.6	81	56	28	[illegible]	[illegible]	[illegible]	117	76	[illegible]	31	[illegible]	Nw	2	5	[illegible]	[illegible]	[illegible]	[illegible]
DUBUQUE	321	981.0		[illegible]	[illegible]	- 3.5	2.1	8.3	4	-25.0	17	0	27			[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]						[illegible]	[illegible]	[illegible]	[illegible]	
SIOUX CITY	334	[illegible]	1022.7	[illegible]	[illegible]	- 3.6	1.8	[illegible]	[illegible]	[illegible]	16	0	27	[illegible]	[illegible]	12	- 11	9	4	0	[illegible]	[illegible]	[illegible]	34	14.3	Nw	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
WATERLOO	265	[illegible]	[illegible]	[illegible]	- 8.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	27	[illegible]	74	38	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	[illegible]	6	5	[illegible]	[illegible]	
KANSAS																																
CONCORDIA	448	966.8	1021.6	[illegible]	[illegible]	0.7	[illegible]	16.7	[illegible]	-15.6	16+	0	26	[illegible]	80	17	- 7	11	[illegible]	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	N	[illegible]	9	6	[illegible]	5.8	[illegible]
DODGE CITY	787	[illegible]	[illegible]	[illegible]	[illegible]	1.9	[illegible]	17.8	[illegible]	11.7	8	0	[illegible]	[illegible]	[illegible]	9	- 9	9	4	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	N	1	10	4	14	6.1	[illegible]
GOODLAND	1114	889.9	1020.4	7.4	- 5.1	[illegible]	1.3	16.1	25	-15.5	8	0	28	4.4	[illegible]	1	12	1	[illegible]	[illegible]	[illegible]	25	1.7	[illegible]	[illegible]	33	13	12	6	10	4.9	
TOPEKA	267	[illegible]	[illegible]	5.9	- 3.8	[illegible]	[illegible]	[illegible]	24	-14.4	16	0	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	N	[illegible]	8	4	16	6.8	45
WICHITA	[illegible]	[illegible]	1021.2	[illegible]	[illegible]	2.0	- 0.4	15.6	4	-10.6	16+	0	24	- 2.2	78	[illegible]	7	[illegible]	[illegible]	0	[illegible]	T	0.5	35	17.0	N	1	7	7	14	6.5	[illegible]
KENTUCKY																																
COVINGTON	265	988.8	1021.4	[illegible]	- 4.1	0.6	- 0.1	15.0	5	[illegible]	17	0	21	[illegible]	75	[illegible]	- 34	14	[illegible]	[illegible]	79	25	0.8	[illegible]	12.5	31	21	6	5	17	7.3	
LEXINGTON	294	985.4	1021.9	6.7	- 3.2	1.8	0.3	17.2	25	-16.1	17	0	18	- 3.3	[illegible]	40	- 47	18	11	0	36	T	0.7	22	12.5	15	1	6	5	17	7.1	
LOUISVILLE	145	1003.4	1021.7	7.2	- 2.4	2.4	0.3	16.7	5	[illegible]	17	0	20	[illegible]	70	41	- 43	14	10	0	28	T	[illegible]	28	[illegible]	Nw	21	7	6	15	6.7	51
LOUISIANA																																
ALEXANDRIA	28	1018.0	1022.3	15.3	3.1	9.2	- 2.4	25.6	6	- 7.2	11	0	7			129	3	74	5	2	T	T	0.8	35	11.2	2	8	7	8	[illegible]	6.3	
BATON ROUGE	[illegible]	[illegible]	[illegible]	16.6	4.7	10.7	- 2.3	25.0	6	- 4.4	11+	0	4	5.0	72	92	- 20	37	8	2	46	51	0.9	1	13.0	32	13	8	6	14	5.9	
LAKE CHARLES	3	1021.0	[illegible]	15.0	5.4	10.8	- 2.7	22.2	26+	- 2.8	10	0	3	6.1	75	75	- 40	35	7	3	T	T	1.3	4	11.2	2	8	7	7	14	6.2	
NEW ORLEANS	1	1020.7	1021.5	17.1	5.7	11.4	2.5	25.6	6	- 2.8	11+	0	4	6.1	71	137	36	49	9	3	15	25	[illegible]	36	13.0	35	9	10	4	14	5.9	
SHREVEPORT	77	1012.5	1021.9	[illegible]	4.1	9.7	- 3.4	24.4	6+	- 6.1	10	0	6	1.1	61	39	- 65	29	6	1	T	T	0.4	31	10.3	36	9+	6	5	17	6.9	53
MAINE																																
CARIBOU	190	993.2		- 4.9	-16.6	-10.8	0.1	6.7	3	-32.2	1	0	28			73	22	22	13		706	787						10	4	14	6.1	
PORTLAND	13	1016.3	1018.8	- 0.3	- 9.3	- 4.8	0.3	9.4	3	-23.9	1	0	27	-11.7	60	65	- 31	44	11	0	168	254	2.4	34	15.6	[illegible]	2	6	8	14	6.5	53
MARYLAND																																
BALTIMORE	45	1015.6	1021.2	6.3	- 3.8	1.3	- 0.8	14.4	2	-13.3	18	0	18	- 6.1	62	72	- 2	31	8	[illegible]	30	25	1.9	32	15.6	SE	2	8	4	16	6.6	57
MASSACHUSETTS																																
BLUE HILL [illegible]	192			1.6	- 7.3	- 2.8	- 0.3	12.8	2	-17.8	18+	0	27			77	- 18	48	9		102	51			27.7	S	2					47
BOSTON	5	1018.0	1018.9	2.9	[illegible]	- 1.1	- 0.1	12.2	3+	-16.1	1	0	23	- 8.9	58	54	- 30	29	10	0	64	25	[illegible]	32	19.7	[illegible]	2	5	7	16	7.0	44
WORCESTER	301	980.4	1018.9	0.9	- 9.1	- 4.1	- 0.1	12.8	3+	-18.9	18+	0	28	-10.0	65	84	10	62	9	0	147	356	2.7	32	13.4	29	3	5	8	15	6.8	
MICHIGAN																																
ALPENA	[illegible]	995.9	1022.7	- 2.8	-13.9	- 8.4	- 0.9	5.0	28	-27.2	17	0	28	-12.8	69	15	- 26	5	8	0	211	152	0.4	29	10.3	N	15	3	8	17	7.9	37
DETROIT	189			- 0.2	- 7.2	- 3.7	- 1.0	11.1	2	-17.2	17	0	27	- 8.3	68	23	- 30	5	11	0	229		0.7	31	10.3	29	21+					
DETROIT METRO.	193	996.6	1021.7	0.2	- 7.7	- 3.7	- 0.8	11.1	2	-20.0	17	0	27	- 7.8	74	27	- 22	5	12	0	325	102	1.0	36	14.8	Nw	21	6	5	17	7.2	46
FLINT	235	992.6	1021.6	0.1	- 8.7	- 4.3	- 0.3	11.7	2	-25.6	17	0	25	- 9.4	67	30	- 14	7	12	0	424	254	0.2	30	11.2	33	21	4	7	17	7.7	
GRAND RAPIDS	239	991.5	1022.0	- 0.6	- 9.7	- 5.1	- 0.8	7.8	2+	-28.3	17	0	27	- 8.9	73	29	- 15	7	11	0	335	178	0.6	7	13.9	SE	1	5	2	21	8.0	36
HOUGHTON LAKE	350	978.0	1022.2	- 2.3	-13.1	- 7.7	- 0.4	5.0	28	-31.1	17	0	28	-11.1	75	34	1	10	12	1	386	229	0.4	34	8.9	31	21	3	6	19	7.8	
LANSING	256	988.8	1021.8	- 1.1	-10.8	- 5.9	- 1.6	10.6	2	-24.4	17	0	27	-10.0	71	37	- 13	9	11	0	541	254	0.0	21	11.6	W	21	5	3	20	7.7	42
MARQUETTE [illegible]	206			- 2.8	- 9.9	- 6.4	0.4	3.3	3	-18.9	17	0	28			25	- 17	10	11		325	533			11.6	S	28	0	7	21	8.7	23
MUSKEGON	191	998.3	1022.4	- 0.3	- 8.5	- 4.4	- 0.9	6.7	2+	-25.6	17	0	28	- 8.3	74	42	- 4	12	14	1	495	152	0.7	6	11.6	33	21	6	0	22	7.9	
SAULT STE MARIE	220	994.6	1022.5	- 5.4	-13.9	- 9.7	- 0.6	2.2	2	-26.7	16	0	28	-12.8	78	40	2	16	14	0	434	406	0.8	6	9.8	SE	1	4	4	20	7.9	51
MINNESOTA																																
DULUTH	435	968.5	1022.7	- 5.3	-15.1	-10.2	1.6	4.4	22	-34.4	16	0	28	-13.3	77	7	- 17	4	8	0	76	356	0.5	29	12.5	Nw	22	6	6	16	7.0	45
INTERNATIONAL FALLS	359	977.3	1023.2	- 5.6	-19.8	-12.7	1.2	2.8	22	-41.1	16	0	28	-17.8	64	7	- 11	4	7	0	124	356	0.8	23	9.8	2	13	8	5	15	6.4	
MINNEAPOLIS	254	991.2	1022.9	- 1.7	- 9.9	- 5.8	3.3	6.1	22	-24.4	16	0	28	-10.0	71	21	2	10	5	0	287	229	0.5	1	13.4	S	11	4	6	18	7.5	48
ROCHESTER	395	972.6	1022.6	- 2.0	-11.2	- 6.6	2.2	3.3	4	-26.1	17+	0	28	- 8.9	81	22	2	11	7	1	201	127	0.2	35	13.0	17	11	4	8	16	7.2	
ST CLOUD	313	984.1	1023.5	- 2.6	-13.9	- 8.2	2.1	5.6	22+	-32.8	16	0	28			8	- 12	6	6		102	178						5	3	20	7.5	

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
MISSISSIPPI																																
JACKSON	94	1009.8	1022.0	15.1	1.4	8.3	- 2.0	23.3	5	- 7.8	11	0	15	2.8	73	107	- 19	58	7	2	T	0	0.8	35	14.8	[illegible]	1	9	9	10	5.6	[illegible]
MERIDIAN	88	1010.5	1021.9	15.9	1.9	8.9	- 1.4	22.8	26+	- 6.7	11	0	13	2.2	68	100	- 29	43	4	3	T	0	0.9	36	8.9	[illegible]	9	3	15	10	6.1	
MISSOURI																																
COLUMBIA REGIONAL	270	988.8	1022.4	4.8	- 3.7	0.6	- 0.3	16.1	24+	-13.9	9	0	22	- 3.9	76	42	- 4	19	7	1	61	51	1.0	27	13.9	[illegible]	1	8	6	14	6.4	[illegible]
KANSAS CITY	309	984.1	1022.0	5.6	- 3.6	1.0	0.0	17.8	28	-14.4	16	0	22	- 5.0	66	34	3	19	6	0	8	25	0.7	27	[illegible]	N	24+	8	5	15	6.4	61
ST JOSEPH	247			5.4	- 4.5	0.4	0.9	18.3	28	-17.8	9	0	23			56	28		6				0.8	31	13.0	[illegible]	1	9	[illegible]	16	6.4	
ST LOUIS	163	1001.0	1022.2	6.4	- 3.7	1.4	- 0.1	20.0	24	-13.9	9	0	21	- 2.9	78	26	- 25	10	7	0	76	51	1.2	26	12.5	[illegible]	1	5	10	13	6.6	54
SPRINGFIELD	386	975.3	1022.0	7.8	- 3.5	2.2	- 0.7	20.0	4	-12.2	9	0	22	- 3.3	71	22	- 32	12	7	1	T	T	0.4	29	13.0	[illegible]	1	6	6	16	6.8	47
MONTANA																																
BILLINGS	1087	893.0	1020.7	3.6	- 6.7	- 1.6	1.9	13.9	25	-22.2	7	0	26	- 9.4	58	11	- 4	8	5	0	137	76	3.7	24	13.0	SW	9	9	8	11	5.8	69
GLASGOW	696	936.0	1021.3	0.6	- 9.9	- 4.7	5.6	11.1	22	-23.3	13	0	28	- 9.4	73	2	- 8	2	2	0	30	25	1.0	7	14.3	31	5	7	10	11	5.9	
GREAT FALLS	1116	889.6	1021.3	4.8	- 7.4	- 1.3	3.2	15.6	22	-20.0	7	0	23	-11.7	50	7	- 12	3	3	0	46	T	3.8	22	13.4	SW	25	5	5	18	7.2	63
HAVRE	788	925.5	1021.4	1.0	-11.1	- 5.1	3.7	13.3	28	-27.2	15+	0	27	-10.6	69	[illegible]	9	9	7	0	282	152	1.6	25	13.0	SW	2	8	5	15	6.5	56
HELENA	1167	882.8	1023.7	1.7	-11.9	- 5.1	- 0.2	12.8	27	-26.1	8+	0	28	-11.7	63	3	- 8	2	4	0	46	51	1.3	28	11.6	W	17	7	6	15	6.3	65
KALISPELL	904	914.0	1021.8	3.1	- 8.7	- 2.8	1.4	12.2	26	-19.4	9+	0	27	- 7.2	74	16	- 10	9	7	0	211	178	0.7	1	13.0	[illegible]	5	7	3	18	6.6	
MILES CITY	801	924.5	1020.7	2.8	- 8.6	- 2.9	3.6	15.0	28	-23.9	14	0	28	- 7.8	72	8	- 1		5	0	84		1.2	23								
MISSOULA	972	906.4	1021.9	4.6	- 5.8	- 0.6	3.3	14.4	26	-13.9	8+	0	27	- 5.6	74	4	- 18	3	4	0	[illegible]	51	0.2	26	[illegible]	NW	4	7	1	20	7.1	60
NEBRASKA																																
GRAND ISLAND	561	953.6	1022.0	3.3	- 5.9	- 1.3	2.0	15.0	23	-21.1	16	0	27	- 6.1	73	11	- 7	5	7	0	119	51	1.3	32	13.0	35	1	9	7	12	5.9	
LINCOLN	360	978.0	1022.3	2.7	- 6.7	- 2.0	0.2	14.4	28+	-20.0	16	0	27	- 6.1	76	16	- 7	6	6	0	137	51	1.0	34	15.2	N	1	8	4	16	6.5	47
NORFOLK	471			1.3	- 7.9	- 3.3	1.8	12.8	23	-25.6	16	0	27			12	- 8	7	5		150	127						7	5	16	6.5	
NORTH PLATTE	846	920.8	1022.0	6.4	- 8.3	- 0.9	1.3	16.7	23	-18.3	8	0	28	- 7.2	70	3	- 11	2	2	0	10	T	1.2	32	12.5	NW	13	9	10	9	5.1	63
OMAHA	298	985.1	[illegible]	2.3	- 6.2	- 1.9	1.2	16.1	28	-20.6	16	0	27	- 5.0	78	22	- 2	12	5	0	117	51	1.0	34	15.2	NW	2	8	4	16	6.6	42
SCOTTSBLUFF	1206	881.1	1021.5	6.0	- 8.4	- 1.2	0.4	16.7	27	-24.4	9	0	28	- 7.8	66	11	1	5	5	0	150	102	1.7	33	10.7	31	18	10	9	9	4.9	
VALENTINE	789			4.8	- 8.7	- 1.9	3.1	18.3	23	-21.7	15	0	28			6	- 8	4	4		66	51			13.4	N	13	11	7	10	[illegible]	55
NEVADA																																
ELKO	1539	844.6	1019.2	4.6	- 5.3	- 0.3	1.9	10.0	24	-19.4	1	0	27	- 6.1	67	24	2	8	7	1	140	76	0.4	5	7.6	21	10	6	4	18	7.1	
ELY	1906	808.0	1019.3	4.4	-10.1	- 2.8	0.2	8.9	25	-20.6	19+	0	28	- 7.8	73	18	T	8	6	1	254	178	2.4	19	17.4	[illegible]	11	5	5	18	7.6	54
LAS VEGAS	659	940.4	1017.9	15.0	4.5	9.8	1.0	20.0	27	- 1.7	2	0	1	0.0	55	42	30	13	8	1	0	0	0.4	24	13.4	SW	11	7	10	11	[illegible]	[illegible]
RENO	1342	864.9	1016.6	9.2	- 2.9	3.2	1.2	13.9	24+	- 6.7	20+	0	25	- 3.3	67	42	16	19	10	0	208	102	0.6	17	14.3	SW	26+	3	8	17	7.4	60
WINNEMUCCA	1311	868.6	1018.3	8.4	- 2.9	2.8	2.6	13.9	24	-15.0	1	0	25	- 2.2	76	8	- 15	4	6	1	28	51	1.4	8	11.2	NE	21	8	3	17	6.8	47
NEW HAMPSHIRE																																
CONCORD	104	1006.4	1019.5	- 1.4	-11.8	- 6.6	- 1.4	9.4	2	-28.3	1	0	28	-12.2	68	49	- 14	33	7	0	142	406	2.6	31	10.3	NW	24+	6	9	13	6.4	54
MT WASHINGTON OBS	1909			-10.9	-18.8	-14.9	- 0.2	2.2	2	-26.7	25	0	28			145	13	35	20	0	894	432			51.0	NW	14	7	6	15	6.9	41
NEW JERSEY																																
ATLANTIC CITY	[illegible]	1017.6	1020.[illegible]	6.6	- 3.6	1.5	0.0	16.1	2	-12.2	18+	0	20	- 4.4	68	92	13	55	9	1	10	T	2.2	33	15.6	16	2	4	12	12	6.6	[illegible]
ATLANTIC CITY	3			7.2	0.1	3.6	1.5	15.0	2	- 8.9	17	0	15			89	3	48	9						19.7	N	10					
NEWARK	2	1019.0	1020.1	5.2	- 3.8	0.7	0.3	16.7	2	-13.3	17	0	19	- 7.8	57	86	15	[illegible]	8	0	15	T	[illegible]	[illegible]	13.4	26	3+	9	4	15	6.4	
TRENTON	17			4.8	- 3.8	0.5	- 0.3	16.1	2	-14.4	17	0	19			78	32	64	8		8	T			15.2	[illegible]	2	8	6	14	6.2	57
NEW MEXICO																																
ALBUQUERQUE	1619	839.1	1020.1	7.9	- 3.7	2.2	- 2.2	17.2	27	-10.0	2	0	27	- 5.0	63	8	- 1	4	7	0	46	51	[illegible]	[illegible]	[illegible]	[illegible]	8	7	9	12	6.1	61
CLAYTON	1515			9.6	- 5.1	2.3	0.1	18.9	4	-13.3	9	0	27			6	- 4	3	3		56	25						9	6	13	5.5	
ROSWELL	1112	892.0	1016.7	13.3	- 0.4	6.4	- 0.8	24.4	28+	-11.1	9	0	15	- 2.8	59	23	14	9	5	0	191	76	[illegible]	20	15.2	NW	12	9	9	10	5.6	58
NEW YORK																																
ALBANY	84	1010.5	1021.5	0.3	-11.5	- 5.6	- 0.9	9.4	2	-29.4	18	0	27	-11.1	67	34	- 22	13	8	0	318	203	[illegible]	[illegible]	12.1	W	[illegible]	[illegible]	9	14	[illegible]	[illegible]
BINGHAMTON	485	[illegible]	1020.8	- 1.8	-11.4	- 6.6	- 2.1	10.6	2	-24.4	17	0	28	-11.7	70	57	- 6	21	11	1	[illegible]	152	[illegible]	29	11.6	N	16+	5	6	17	7.1	51
BUFFALO	[illegible]	[illegible]	[illegible]	- 0.6	- 9.6	- 5.1	- 0.7	13.9	2	-20.6	17	0	27	- 9.4	71	65	- 19	17	17		[illegible]	178	1.0	25	[illegible]	W	19+	4	6	18	7.5	[illegible]
NEW YORK	[illegible]	1014.6	[illegible]	4.5	- 4.0	0.3	- 0.5	14.4	2	-13.9	17	0	21	- 8.3	57	116	43	77	8	0	[illegible]	25	2.2	[illegible]	[illegible]							46
NEW YORK KENNEDY	4	1019.3	[illegible]	5.8	- 2.4	1.7	1.9	13.3	2	-11.7	17+	0	16	- 6.7	56	66	- 8	34	9	0	[illegible]	[illegible]	[illegible]	[illegible]	17.4	16	2	8	7	[illegible]	[illegible]	
NEW YORK LA GUARDIA	[illegible]	1019.3	1020.4	4.2	- 3.7	0.3	- 0.6	13.9	2	-13.3	17	0	19	- 8.3	54	77	- 2	48	8		25	T	[illegible]	[illegible]	16.5		2	[illegible]	6	[illegible]	[illegible]	
ROCHESTER	167	1001.4	[illegible]	- 0.6	-10.3	- 5.4	- 1.5	15.0	2	-20.0	17	0	26	- 8.3	78	43	- 21	9	13	0	467	229	1.3	28	11.6	W	2	3	5	20	[illegible]	46
SYRACUSE	125	[illegible]	1021.6	- 0.4	-11.4	- 5.9	1.6	11.7	2	-23.9	17+	0	26	- 9.4	74	43	36	24	13	1	348	178	1.7	[illegible]	13.4	NW	3	[illegible]	5	17	[illegible]	[illegible]

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation, ground	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C.	C	C	C	C.		C				C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
ASHEVILLE	652	942.4	1020.4	10.0	- 2.8	3.6	- 0.2	18.3	5	-12.2	18	0	22	- 3.3	67	107	5	71	9	0	13	25	2.4	34	14.3	33	22+	6	8	14	6.1	74
CAPE HATTERAS	2	1019.3	1019.6	10.8	1.9	6.3	- 1.7	19.4	2+	- 5.6	19	0	13	2.2	76	121	11	49	10	0	84	76	2.9	35	19.7	4	10	11	2	15	6.0	51
CHARLOTTE	224	994.2	1020.5	10.9	- 2.1	4.4	- 2.3	20.0	2	-11.1	12	0	19	- 4.4	58	113	23	74	8	1	25	25	1.1	35	12.5	N	27	11	5	12	5.8	62
GREENSBORO	273	988.2	1020.7	9.0	- 3.3	2.8	- 2.2	18.9	2	-13.3	18	0	24	- 5.0	63	90	6	60	7	0	T	T	1.3	33	15.2	NW	21	10	6	12	5.6	55
RALEIGH	132	1004.1	1020.5	10.9	- 2.0	4.4	- 1.7	19.4	2	-14.4	12	0	17	- 4.4	59	140	58	82	7	2	114	127	1.1	33	14.5	2	10	10	8	10	5.3	52
WILMINGTON	9	1018.6	1019.9	13.7	1.0	7.4	- 1.9	21.1	2+	- 9.4	12	0	13	0.6	67	123	36	36	8	3	318	203	1.5	34	18.8	N	10	10	7	11	5.6	63
NORTH DAKOTA																																
BISMARCK	502	959.7	1022.4	0.2	-11.4	- 5.6	4.7	14.4	28	-26.1	14	0	27	- 9.4	77	2	- 9	2	2	0	30	25	0.7	33	15.2	NW	20	9	7	12	6.1	65
FARGO	274	988.8	1023.3	- 3.9	-13.6	- 8.7	3.1	4.4	22	-28.3	16	0	28	-11.1	82	3	- 10	2	5	0	36	51	0.3	3	15.6	N	13	2	7	19	7.7	46
WILLISTON	579	950.2	1021.9	- 0.4	-11.2	- 5.8	5.1	12.8	22	-25.0	14	0	28	- 9.4	78	3	- 9	2	4	0	46	25	0.3	26	14.4	NW	20+	5	6	17	6.8	52
OHIO																																
AKRON	368	974.9	1021.2	2.2	- 7.2	- 2.5	- 0.7	15.0	2	-22.2	17	0	23	- 7.8	69	59	1	17	14	1	251	102	0.6	28	10.7	30	16+	4	6	18	7.6	
CINCINNATI ABBE OB.	232			6.0	- 2.8	1.6	- 0.1	15.6	5	-16.7	17	0	19			34	- 37	12	11		36	25			10.7	NW	21					50
CLEVELAND	237	991.2	1021.6	1.6	- 6.2	- 2.3	- 0.3	13.9	2	-18.3	17	0	22	- 7.8	68	61	2	18	15	0	518	305	0.5	29	13.0	SE	1	3	6	19	7.9	41
COLUMBUS	247	990.5	1021.7	3.8	- 4.6	- 0.3	0.2	13.9	5	-17.8	17	0	21	- 7.2	61	33	- 26	12	9	0	46	25	0.5	29	12.5	W	21	3	7	18	7.9	35
DAYTON	305	984.1	1021.5	4.6	- 5.5	- 0.4	0.2	15.0	5	-19.4	17	0	23	- 5.6	69	33	- 26	12	10	0	91	51	0.7	24	11.6	W	21	5	5	18	7.3	45
MANSFIELD	395			2.2	- 6.9	- 2.3	- 1.0	12.2	2	-20.6	17	0	23			35	- 31	15	12	0	229	76	1.3	25	10.7	30	21	4	6	18	7.7	
TOLEDO	204	995.6	1021.9	0.4	- 8.1	- 3.8	- 1.2	11.7	2	-24.4	17	0	26	- 8.9	68	27	- 21	10	11	0	295	127	0.7	35	13.4	NW	21	4	7	17	7.5	42
YOUNGSTOWN	359	976.6	1021.2	0.4	- 8.4	- 3.9	- 1.5	13.9	2	-23.3	17	0	26	- 7.2	78	45	- 18	14	14	1	300	76	0.4	30	15.6	27	2	6	1	21	7.6	
OKLAHOMA																																
OKLAHOMA CITY	392	973.9	1021.6	9.7	- 1.1	4.3	- 0.8	20.0	4	- 8.3	9	0	17	- 1.1	74	8	- 27	6	5	0	5	T	0.5	34	15.2	NE	8+	6	6	16	6.7	46
TULSA	198	997.3	1022.2	9.6	- 0.9	4.3	- 0.4	19.4	4	- 9.4	9	0	17	- 1.1	72	19	- 26	10	5	0	56	25	0.2	26	13.0	N	8+	7	6	15	6.5	46
OREGON																																
ASTORIA	2	1014.9	1015.6	11.7	1.9	6.8	0.8	20.0	21	- 5.0	4	0	10	2.2	77	66	-185	18	15	0	0	0	1.7	10	9.4	20	25	6	4	18	7.1	
BURNS	1265			6.6	- 4.2	1.2	2.5	12.2	23	-12.8	1	0	27			11	- 21	5	8		102	76						3	5	20	7.9	
EUGENE	109	1001.7	1015.4	11.7	2.2	6.9	1.1	17.8	24	- 2.2	19	0	9	3.9	85	53	- 73	23	12	0	0	0	0.3	33	9.4	18	25	1	5	22	8.5	
MEACHAM	1234	876.1	1019.5	3.7	- 2.8	0.4	2.1	10.0	27+	- 6.7	1	0	23	- 3.3	80	38	- 64	13	9		257	305	1.0	13	7.2	16	2	3	5	20	8.0	
MEDFORD	396	967.5	1015.7	14.3	1.5	7.9	3.4	21.7	21	- 4.4	19+	0	11	2.2	73	14	- 47	4	6	0	0	0	0.2	14	11.2	15	24+	5	4	19	7.6	
PENDLETON	452	964.1	1018.8	7.6	- 0.4	3.6	0.6	17.2	25	- 7.8	12	0	20	- 2.8	68	28	- 2	13	8	0	150	152	0.0	4	10.3	28	17	3	3	22	8.5	
PORTLAND	6	1015.2	1016.6	11.8	2.6	7.2	1.6	17.2	25+	- 3.3	13+	0	6	1.7	74	49	- 58	15	10	0	T	T	2.8	11	18.8	E	21	4	3	21	7.9	52
SALEM	60	1008.1	1015.6	12.3	0.9	6.6	1.1	18.9	21	- 4.4	19	0	12	1.1	73	41	- 94	19	11	0	0	0	0.3	31	13.0	18	25	3	7	18	7.8	
SEXTON SUMMIT R	1169	880.8	1014.5	8.1	0.9	4.5	2.2	13.9	21	- 2.2	18	0	11			64	- 41	13	15		46	127	4.2	15	16.5	18	25	5	5	18	7.4	
PACIFIC AREA																																
GUAM TAGUAC R	110			28.2	21.7	24.9	- 0.8	29.4	21	17.8	8	0	0			75	- 14	17	18	0	0	0			11.2	E	16					57
JOHNSTON	2	1015.6	1015.9	25.8	22.4	24.1	- 0.9	27.2	19	20.6	21+	0	0	19.4	75	22	- 17	6	11	0	0	0	8.7	7	19.2	E	21	8	12	8	5.6	69
KOROR R	29	1008.1	1011.8	31.2	23.9	27.6	0.7	32.2	26+	22.8	27+	2	0	22.8	79	31	-150	6	16	0	0	0	5.0	6	10.7	NE	16	0	8	20	8.5	69
KWAJALEIN	2	1010.2	1010.8	30.3	25.0	27.7	1.0	31.1	28+	23.3	21+	0	0	22.2	75	13	- 41	6	9	0	0	0	7.6	6	12.5	6	21+	0	1	27	9.4	
MAJURO	3	1009.8	1010.2	29.8	25.5	27.7	0.8	30.6	27+	23.9	28+	0	0	22.8	77	47	-170	28	11	0	0	0	6.2	6	13.4	E	21	0	9	19	8.4	64
PAGO PAGO	4	1008.1	1008.4	31.3	24.9	28.1		32.8	19	23.3	26	4	0	24.4	83	214		55	20	1	0	0	0.9	36	12.1	NW	19	0	2	26	9.1	59
PONAPE R	37	1004.7	1009.8	30.2	23.9	27.1	0.1	31.1	16+	20.0	5	0	0	22.8	78	94	-153	22	20	0	0	0	4.1	6	10.3	NE	18	0	4	24	9.0	72
TRUK MOEN ISLAND	2	1010.5	1010.8	29.5	25.2	27.3	0.3	30.6	28+	23.9	19+	0	0	23.3	79	58	-101	19	17	0	0	0	6.1	5	11.6	NE	11	0	4	24	9.3	57
WAKE	3	1016.6	1016.9	27.4	21.2	24.3	- 0.7	28.9	28+	19.4	20+	0	0	18.9	74	43	9	29	11	0	0	0	6.2	7	16.5	NE	21	11	12	5	4.5	75
YAP R	13			30.6	23.9	27.3	0.4	31.1	24+	22.2	5+	0	0			25	- 92	8	12	0	0	0			9.8	NE	28	1	15	12	7.2	75
PENNSYLVANIA																																
ALLENTOWN	118	1006.4	1020.9	3.8	- 6.8	- 1.5	0.1	13.3	2	-16.7	17	0	25	- 9.4	58	67	T	32	8	1	25	25	2.3	33	15.6	28	2	7	8	13	6.5	
ERIE	223	993.9	1021.8	- 0.4	- 8.8	- 4.6	- 0.3	13.9	2	-24.4	17	0	26	- 8.3	75	51	- 8	18	12	1	320	127	0.3	21	14.8	29	2	7	2	19	7.1	
HARRISBURG	103	1008.1	1021.3	4.4	- 4.7	- 0.2	- 0.5	13.9	2	-15.0	17	0	24			64	5	24	7	0	145	127	1.7	33	14.8	W	2	7	5	16	6.6	52
PHILADELPHIA	2	1019.6	1020.5	5.5	- 3.7	0.9	0.2	15.6	2	-13.3	17	0	20	- 7.8	55	75	4	38	9	0	T	T	2.1	34	12.5	NW	17+	7	6	15	6.5	54
PITTSBURGH	347	975.6	1021.2	2.6	- 6.2	- 1.8	- 0.2	15.6	2	-21.7	17	0	23	- 6.1	74	46	- 10	13	15	1	155	51	1.2	30	11.2	30	21+	5	3	20	7.6	36
SCRANTON	283	985.1	1020.8	0.7	- 9.1	- 4.2	- 2.1	12.8	2	-20.0	17	0	27	-10.6	63	33	- 18	13	9	0	79	51	1.4	32	13.9	SW	2	5	5	18	7.3	52
WILLIAMSPORT	160	1002.0	1021.8	1.8	- 9.6	- 3.4	- 1.8	13.3	2	-23.3	18	0	25	- 9.4	66	70	6	41	9	1	211	152	1.6	31	9.8	27	22	8	1	19	7.0	
RHODE ISLAND																																
BLOCK ISLAND	34			3.2	- 3.7	- 0.2	0.4	12.8	2	-12.8	18+	0	18			56	- 27	37	7		53	25										
PROVIDENCE	16	1016.6	1019.0	3.7	- 6.3	- 1.3	- 0.1	13.9	2	-16.7	18	0	24	- 8.3	62	90	11	55	8	0	81	25	2.7	35	13.4	3	11+	5	9	14	6.6	57

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M	Mb	Mb.	C.	C.	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1018.3	1020.4	14.3	1.3	7.8	- 3.0	23.9	26	-11.1	12	0	14	1.1	68	141	58	56	10	0	180	178	1.4	33	17.0Y	W	3+	12	5	11	5.6	65
CHARLESTON J	3			13.8	4.7	9.3	- 2.0	21.1	26	- 3.3	12+	0	7			122	44	50	9		137	127			14.3	W	3					
COLUMBIA	65	1012.5	1020.7	14.1	- 0.8	6.7	- 2.4	21.7	2	-15.0	12	0	17	- 1.1	63	146	51	63	8	1	406	381	1.1	32	11.2	1	10	12	3	13	5.6	50
GRNVLLE-SPRTNBRG	296	985.1	1020.3	12.0	- 0.9	5.6	- 1.7	20.0	25+	- 8.9	11	0	14	- 2.2	64	124	21	76	9	1	0	0	1.1	36	12.5	N	10+	11	5	12	5.3	63
SOUTH DAKOTA																																
ABERDEEN	395	973.6	1022.4	1.0	- 9.6	- 4.3	5.2	10.0	22	-28.3	16	0	28	- 7.8	79	4	- 13	4	1	0	51	51	0.6	3	13.0	1	13	7	6	15	6.4	
HURON	393	973.6	1022.1	- 0.2	- 8.8	- 4.5	4.1	9.4	28	-26.7	16	0	26	- 8.3	76	11	- 5	9	4	0	157	127	0.3	35	15.6	N	13	6	8	14	6.6	52
RAPID CITY	964	906.5	1021.2	5.3	- 8.8	- 1.7	2.7	17.2	23	-20.0	15	0	28	- 8.9	62	8	- 4	5	4	0	79	51	2.1	34	17.0	NW	12	9	10	9	5.1	70
SIOUX FALLS	432	968.8	1022.4	- 0.9	- 9.0	- 4.9	2.2	8.3	3	-30.6	16	0	27	- 8.9	72	11	- 13	8	5	0	188	152	0.5	34	11.2	36	21+	7	6	15	6.7	
TENNESSEE																																
BRISTOL	459	965.1	1020.9	8.2	- 2.8	2.7	- 1.7	16.7	25	-12.2	17	0	19	- 3.9	67	52	- 39	14	9	0	30	25	1.3	30	12.5	29	21	7	6	15	6.7	
CHATTANOOGA	203	996.[illegible]	1021.6	9.4	- 3.4	3.1	- 3.8	17.2	25	-11.1	18	0	21	- 4.4	63	96	- 41	43	8	1	T	T	1.2	34	12.5	[illegible]	1	6	7	15	6.9	47
KNOXVILLE	299	985.4	1021.4	9.9	- 1.2	4.4	- 1.9	17.8	26+	-10.6	17	0	17	- 2.8	64	66	- 56	22	11	1	T	T	1.5	33	13.4	SW	2	5	7	16	7.1	39
MEMPHIS	79	1011.9	1022.4	9.8	- 0.4	4.7	- 2.0	19.4	5+	- 8.9	17	0	13	- 2.8	61	92	- 27	52	7	2	T	T	0.7	35	12.5	2	8	6	9	13	6.6	65
NASHVILLE	180	999.7	1021.8	9.8	- 1.3	4.3	- 1.3	20.0	5	- 9.4	17+	0	16	- 2.8	66	92	- 22	34	9	1	T	T	0.9	31	11.6	SE	[illegible]	4	8	16	7.5	43
OAK RIDGE R	276			9.2	- 2.4	3.4	- 1.6	16.7	26+	-11.1	17	0	19			87	- 60	27	7		5	T			14.3Y		2	6	4	18	7.1	
TEXAS																																
ABILENE	544	957.0	1021.1	12.9	0.8	6.9	- 2.2	26.1	4	- 6.7	10	0	13	1.1	72	41	13	15	6	0	76	25	0.9	21	15.6	[illegible]	28	7	9	12	6.2	58
AMARILLO	1098	893.0	1018.9	10.7	- 2.4	4.2	- 1.0	20.6	4	-10.6	9	0	21	- 3.3	66	11	- 5	7	5	1	107	76	1.6	26	18.3	W	12	9	7	12	5.8	64
AUSTIN	182	999.7	1022.[illegible]	15.2	5.1	10.2	- 1.9	24.4	4	- 4.4	10	0	4	3.9	70	52	- 13	15	6	1	23	51	0.8	1	13.9	N	8	6	5	17	6.8	[illegible]
BROWNSVILLE	6	1019.6	1020.3	20.0	9.7	14.8	- 2.9	27.2	13	- 3.3	10	0	3	10.6	80	120	83	61	9	1	T	T	1.3	6	12.5	NW	8	4	7	17	7.5	41
CORPUS CHRISTI	12	1019.6	1021.2	18.9	7.7	13.3	- 2.4	27.2	6	- 2.2	10	0	4	8.9	81	36	- 7	11	7	0	28	25	2.5	5	15.2	NE	17+	6	6	16	6.9	51
DALLAS	147	1004.1	1021.9	14.1	3.5	8.8	- 0.9	25.6	4	- 3.9	10	0	5	1.7	64	44	- 21	31	4	0	T	T	0.4	26	13.0	NW	7	6	5	17	6.7	
DEL RIO	313	984.4	1021.4	16.3	5.0	10.7	- 2.8	25.0	26+	- 5.0	10	0	4	4.4	71	35	12	13	8	0	69	76	1.1	10	13.0	33	8	8	4	16	7.0	
EL PASO	1194	884.5	1018.6	15.8	0.8	8.3	- 1.2	25.0	28+	- 6.7	10	0	13	- 0.6	60	43	33	17	9	1	117	76	0.4	34	16.1	W	12	9	7	12	5.9	67
FORT WORTH	164	1001.4	1022.1	14.3	3.3	8.8	- 0.7	26.7	4	- 5.0	10	0	7	2.8	69	49	- 8	40	5	0	T	0	0.8	30	12.5	1	8+	6	5	17	7.0	
GALVESTON	2			14.7	8.7	11.7	- 2.1	21.1	26	- 0.6	9	0	1			67	- 7	25	7		41	25			16.5	NE	9					52
HOUSTON INTERCONTINENTAL	29	1018.6	1022.4	17.4	4.1	10.8	- 1.3	26.7	5	- 5.6	10	0	7	6.1	80	86	- 6	39	8	1	71	25	0.5	3	11.2	32	8	7	6	15	6.6	[illegible]
LUBBOCK	992	906.2	1019.9	11.1	- 2.0	4.6	- 1.6	23.3	4	- 8.3	23	0	20	- 1.7	70	32	18	13	5	0	244	76	0.9	24	21.5	25	12	9	7	12	5.8	
MIDLAND	869	919.7	1019.8	13.1	0.1	6.6	- 2.5	23.9	5+	- 5.6	9+	0	15	0.6	74	41	26	18	6	0	99	25	0.2	19	16.1	3	7	10	7	11	5.7	
PORT ARTHUR	5	1021.7		16.4	4.6	10.6	- 2.8	23.9	13	- 5.6	10	0	7	6.1	78	76	- 37	27	11	2	10	T	0.8	4	12.1	NE	8	10	5	13	5.8	58
SAN ANGELO	580	952.9	1021.0	15.2	0.8	8.0	- 2.3	28.3	4	- 9.4	10	0	10	2.2	72	46	23	15	7	0	147	76	0.6	24	13.0	28	12	9	7	12	6.0	
SAN ANTONIO	240	993.6	1022.0	17.2	4.8	11.1	- 1.9	26.1	13	- 6.1	10	0	6	5.0	70	70	28	23	10	2	53	51	1.2	3	14.8	N	8	6	5	17	7.1	37
VICTORIA	32	1017.6	1021.6	18.6	6.3	12.4	- 2.0	26.7	6	- 4.4	10	0	4	7.2	78	70	10	27	6	1	25	25	1.5	4	17.0Y	N	8	5	7	16	7.0	
WACO	153	1003.4	1022.1	13.6	3.3	8.4	- 2.4	23.9	4	- 6.1	10	0	7	3.9	77	39	- 23	14	6	0	T	T	0.4	27	12.5	35	8+	7	3	18	6.7	
WICHITA FALLS	303	984.1	1021.7	12.9	0.6	6.7	- 1.5	25.6	4	- 6.7	10	0	14	1.1	73	27	- 8	10	6	1	117	25	0.6	30	19.2	36	25	8	7	13	6.2	
UTAH																																
MILFORD	1533	846.9		3.9	- 7.3	- 1.7	- 0.4	11.7	27+	-22.8	2	0	28			15	- 2	11	7		41	356			13.0	SW	11	4	8	16	7.5	54
SALT LAKE CITY	1286	873.7	1021.4	5.0	- 4.7	0.2	- 0.1	13.3	26	-18.3	2	0	23	- 4.4	72	23	- 7	9	8	1	91	127	0.7	18	11.6	S	11	3	9	16	7.2	53
WENDOVER	1291	873.0		4.3	- 3.5	0.4	- 0.1	11.1	27+	-10.6	2	0	24	- 3.9	74	17	9	9	5		91	51						5	5	18	7.0	
VERMONT																																
BURLINGTON	101	1008.1	1021.4	- 4.1	-15.3	- 9.7	- 1.6	7.8	3	-29.4	18	0	28	-14.4	67	39	- 6	14	9	0	470	203	0.6	35	13.4	NW	5	8	4	16	6.7	50
VIRGINIA																																
LYNCHBURG	279			7.7	- 3.2	2.2	- 1.6	17.2	26	-15.0	18	0	22			75	7	42	8		43	25			11.6	NE	10	9	7	12	5.8	50
NORFOLK	7	1019.3	1020.2	8.9	- 0.4	4.3	- 1.1	18.9	2	- 9.4	17	0	17	- 2.8	63	82	0	35	13	1	119	102	2.4	36	19.7	36	10	12	2	14	5.5	56
RICHMOND	50	1014.2	1020.7	9.7	- 2.5	3.6	- 0.8	19.4	2	-11.7	18+	0	18	- 4.4	63	79	5	49	8	1	10	T	1.4	35	11.6	N	17+	9	7	12	5.8	59
ROANOKE	358	977.7	1020.7	7.9	- 3.7	2.1	- 1.9	17.2	26	-13.9	18	0	23	- 7.2	55	75	2	42	8	0	36	T	2.1	32	13.4	28	15	8	7	13	6.0	
WALLOPS ISLAND	3			6.3	- 1.4	2.5		13.3	3	-10.6	17	0	17			125		54	10		8	T			22.4Y	5	2					
WASHINGTON																																
OLYMPIA	59	1008.8	1016.3	10.7	- 1.3	4.7	- 0.3	17.8	22	- 7.2	5	0	19	1.7	83	43	-125	12	14	1	0	0	0.3	19	12.5	23	28	2	4	22	8.4	
QUILLAYUTE	55	1008.1	1015.5	10.1	1.0	5.6	0.9	16.1	22	- 5.0	5	0	13	2.2	81	150	-162	36	15	0	0	0	1.3	9	10.3	[illegible]	25	3	8	17	7.6	35
SEATTLE-TACOMA	122	999.7	1016.2	10.3	2.9	6.6	1.7	19.4	21	- 1.7	5	0	4	1.1	72	48	- 60	15	10	1	T	T	0.9	6	9.8	SW	16	6	2	20	7.7	40
SEATTLE	5			11.1	3.1	7.1	0.2	19.4	21	- 1.1	5	0	2			51	- 38	19	12		0	0			11.2Y	WSW	28					
SPOKANE	718	933.3	1018.8	5.4	- 2.2	1.6	2.7	13.3	26	- 7.2	9+	0	22	- 3.3	73	12	- 35	4	7	0	89	76	1.3	8	10.7	SW	25	8	4	16	6.8	52

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min 0 C or lower	Temperature: Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Ice pellets: Total	Precipitation: Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C.	C	C	C	C		C.				C	%	Mm.	Mm	Mm.			Mm	Mm.	M.p.s.		M.p.s.							%
WASHINGTON																																
STAMPEDE PASS	1206	877.8		1.1	- 3.6	- 1.2	1.8	6.1	24	- 7.8	5	0	27			39	-223	9	14		231	1600						4	4	20	7.8	
WALLA WALLA	289			8.1	0.4	4.2	2.7	18.9	26	- 3.9	7	0	18			43	5	25	8		246	229			8.9	3	24	2	4	22	8.6	47
YAKIMA	321	982.0	1017.6	8.1	- 1.8	3.2	2.1	15.6	27	- 6.7	8	0	24	- 2.2	73	6	- 16	4	4	0	64	51	1.5	29	1[illegible].3	20	25	5	2	21	7.8	
WEST INDIES																																
SAN JUAN P.R.	4	1014.6	1016.8	28.[illegible]	22.6	25.7	2.2	31.1	10	20.0	11	0	0	18.9	68	23	- 50	6	13	0	0	0	2.3	8	13.[illegible]	N	3	6	17	5	5.1	64
WEST VIRGINIA																																
BECKLEY	763	92[illegible].2	1021.0	4.4	- 5.1	- 0.3	- 1.6	15.0	2	-20.0	17	0	22	- 5.6	71	68	- 21	14	15	0	277	127	1.3	26	12.5	29	21+	3	6	19	7.9	
CHARLESTON	286	98[illegible]	1021.[illegible]	7.[illegible]	- 3.7	1.7	- 1.3	18.9	2	-16.7	17	0	20	- 3.9	70	61	- 28	14	14	1	74	25	1.[illegible]	27	13.4	26	1	3	3	22	8.1	
ELKINS	594	94[illegible]		4.8	- 6.8	- 1.0	- 1.6	18.9	2	-25.0	18	0	24			64	- 19	14	13		251	76						3	4	21	7.9	
HUNTINGTON	252	99[illegible].2	1021.2	6.1	- 4.1	1.0	- 2.2	16.7	5	-15.0	17	0	21	- 4.4	69	52	- 25	22	9		48	T	0.8	25	1[illegible].3	27	21+	3	4	21	8.[illegible]	
PARKERSBURG	187			5.4	- 3.8	0.8	- 1.1	17.2	2	-16.[illegible]	17	0	18			49	- 23	15	12		23	T			15.2	W	21+					42
WISCONSIN																																
GREEN BAY	208	995.6	1022.4	- 0.9	- 9.2	- 5.1	2.7	4.4	3	-20.0	17	0	28	- 8.9	73	18	- 9	9	11	0	145	102	1.4	34	13.0	NW	2[illegible]	4	8	16	7.4	45
LA CROSSE	198	997.[illegible]	1023.3	0.4	- 8.4	- 4.0	3.0	8.9	4	-21.7	17	0	28	- 7.8	76	35	8		10	1	229		0.4	1								
MADISON	262	989.2	1021.9	- 0.1	- 8.8	- 4.4	2.5	6.7	4+	-26.7	17	0	26	- 7.8	76	30	2	12	10	0	152	76	0.8	36	13.4	NW	21	7	6	15	6.8	46
MILWAUKEE	205	995.6	1021.8	- 0.7	- 6.6	- 3.7	1.7	5.6	4	-17.2	17+	0	27	- 7.8	73	38	3	11	11	0	251	102	0.8	34	13.9	NW	21+	6	4	18	7.[illegible]	48
WYOMING																																
CASPER	1627	838.1	1021.7	1.0	- 9.3	- 4.2	- 1.0	9.4	28+	-25.0	7	0	28	- 9.4	68	14	- 1	7	6	0	287	152	5.9	22	15.6	21	23	10	9	9	5.0	
CHEYENNE	1867	811.4	1020.5	4.8	- 7.4	- 1.3	1.3	12.2	27+	-22.8	8	0	27	-11.1	53	2	- 12	2	2	0	15	25	3.8	29	18.8	NW	18	10	8	10	5.0	67
LANDER	1696	8[illegible].0	1025.5	- 4.3	-16.1	-10.2	- 5.8	5.0	26	-28.3	9	0	28	-14.4	75	7	- 10	3	5	0	251	406	0.2	20	7.2	SW	18+	10	8	10	5.6	73
SHERIDAN	1208	879.8	1021.3	5.2	- 8.9	- 1.8	2.7	13.9	28	-23.3	7	0	28	- 8.9	63	10	- 9	7	6	0	208	102	0.8	31	13.4	NW	18	8	11	9	5.3	73

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	629	2542	2071
HUNTSVILLE	618	2695	2479
MOBILE	368	1435	1425
MONTGOMERY	502	1919	1885
ALASKA			
ANCHORAGE	1448	8378	7725
ANNETTE	797	4869	4767
BARROW	2193	12434	13360
BARTER ISLAND	2287	12686	13165
BETHEL	1576	8927	9160
BETTLES	2029	11532	
BIG DELTA	1737	10219	
COLD BAY	960	6471	6425
FAIRBANKS	1864	10438	10695
GULKANA	1939	10886	
HOMER	1201	7357	
JUNEAU	1126	6576	6210
KING SALMON	1268	7996	7885
KODIAK	936	5008	5862
KOTZEBUE	1701	9950	10778
MC GRATH	1902	10344	10497
NOME	1517	9065	9584
ST. PAUL ISLAND	1102	7159	7174
SHEMYA	[illegible]	6307	6258
SUMMIT	1722	10373	
TALKEETNA	1537	8942	8311
UNALAKLEET	1530	9053	
YAKUTAT	1082	6592	6143
ARIZONA			
FLAGSTAFF	1006	5613	4973
PHOENIX	200	1260	1473
TUCSON	320	1796	1477
WINSLOW	658	3563	3794
YUMA	167	1026	1058
ARKANSAS			
FORT SMITH	688	3287	2670
LITTLE ROCK	637	2830	2650
CALIFORNIA			
BAKERSFIELD	205	1804	1731
BISHOP	676	3668	3203
BLUE CANYON	788	4291	3542
EUREKA U	395	2934	3043
FRESNO	358	2255	1967
LONG BEACH	203	1089	1168
LOS ANGELES	177	892	1183
LOS ANGELES U	136	743	938
MT SHASTA R	720	4388	3953
OAKLAND	318	2018	1992
RED BLUFF	386	2462	1959
SACRAMENTO	325	2282	2089
SANDBERG R	685	3561	2842
SAN DIEGO	131	819	994
SAN FRANCISCO	334	2130	2033
SAN FRANCISCO U	277	2084	1984
SANTA MARIA	326	2098	1924
STOCKTON	344	2207	2106
COLORADO			
ALAMOSA	1360	7258	6205
COLORADO SPRINGS	912	5150	4545
DENVER	820	4742	4484
GRAND JUNCTION	999	5151	4358
PUEBLO	832	4622	4072
CONNECTICUT			
BRIDGEPORT	996	4143	4019
HARTFORD	1051	4575	4577
DIST.OF COLUMBIA			
WASHINGTON DULLES	[illegible]	3781	
WASHINGTON NATIONAL	777	3103	3236
DELAWARE			
WILMINGTON	820	3400	3690
FLORIDA			
APALACHICOLA U	332	1057	1095
DAYTONA BEACH	251	678	724
FORT MYERS	141	342	380
JACKSONVILLE	329	1063	1044
KEY WEST	37	61	99
LAKELAND U	207	585	562
MIAMI	64	138	195
ORLANDO	169	488	655
PENSACOLA	350	1295	1244
TALLAHASSEE	393	1318	1247
TAMPA	223	584	581
WEST PALM BEACH	81	179	222
GEORGIA			
ATHENS	583	2260	2335
ATLANTA	617	2457	2353
AUGUSTA	563	2023	1957
COLUMBUS	536	1829	1949
MACON	529	1793	1778
ROME	654	2673	2647
SAVANNAH	423	1410	1520
IDAHO			
BOISE	708	4400	4323
LEWISTON	719	4155	4093
POCATELLO	1057	5603	5113
ILLINOIS			
CAIRO U	745	3332	3040
CHICAGO O HARE	1012	4842	4834
CHICAGO MIDWAY	967	4701	4526
MOLINE	1013	4880	4812
PEORIA	1005	4868	4534
ROCKFORD	1061	5090	5057
SPRINGFIELD	957	4469	4152
INDIANA			
EVANSVILLE	844	3870	3510
FORT WAYNE	1046	4646	4616
INDIANAPOLIS	937	4221	4242
SOUTH BEND	977	4612	4682
IOWA			
BURLINGTON	989	4867	4619
DES MOINES	1039	5384	5102
DUBUQUE	1095	5606	5466
SIOUX CITY	1099	5367	5226
WATERLOO	1130	5792	5483
KANSAS			
CONCORDIA	883	4594	4159
DODGE CITY	822	4360	3780
GOODLAND	881	5016	4472
TOPEKA	864	4344	3994
WICHITA	816	4215	3612
KENTUCKY			
COVINGTON	888	3970	3946
LEXINGTON	827	3495	3568
LOUISVILLE	796	3458	3549
LOUISIANA			
ALEXANDRIA	456	2077	1592
BATON ROUGE	384	1472	1319
LAKE CHARLES	370	1621	1225
NEW ORLEANS	351	1433	1154
SHREVEPORT	429	2164	1799
MAINE			
CARIBOU	1464	7424	6950
PORTLAND	1157	5483	5311
MARYLAND			
BALTIMORE	854	3572	3558
MASSACHUSETTS			
BLUE HILL OBS R	1064	4684	4517
BOSTON	971	4125	4031
WORCESTER	1120	5219	4977
MICHIGAN			
ALPENA	1338	6008	5909
DETROIT	1101	4620	4512
DETROIT METRO	1103	4840	4692
FLINT	1136	4992	4932
GRAND RAPIDS	1178	5164	5024
HOUGHTON LAKE	1307	6017	5882
LANSING	1218	5347	4977
MARQUETTE U	1239	6117	5790
MUSKEGON	1137	4965	4719
SAULT STE MARIE	1406	6521	6283
MINNESOTA			
DULUTH	1429	7564	7117
INTERNATIONAL FALLS	1561	7681	7747
MINNEAPOLIS	1208	6275	6226
ROCHESTER	1251	6448	6121
ST CLOUD	1333	6919	6561
MISSISSIPPI			
JACKSON	503	2078	1817
MERIDIAN	467	1988	1898
MISSOURI			
COLUMBIA REGIONAL	890	4264	3952
KANSAS CITY	868	4327	3942
ST JOSEPH	896	4545	4219
ST LOUIS	849	4014	3748
SPRINGFIELD	808	3860	3499
MONTANA			
BILLINGS	994	5738	5122
GLASGOW	1152	6499	6676
GREAT FALLS	983	5668	5475
HAVRE	1173	6212	6362
HELENA	1174	6638	5860
KALISPELL	1059	6216	5919
MILES CITY	1063	5981	5712
MISSOULA	946	5849	5924
NEBRASKA			
GRAND ISLAND	980	5161	4904
LINCOLN	1018	5117	4772
NORFOLK	1086	5502	5217
NORTH PLATTE	967	5611	4930
OMAHA	1014	5116	4748
SCOTTSBLUFF	980	5341	4840
VALENTINE	1013	5737	5429
NEVADA			
ELKO	931	5656	5300
ELY	1059	5862	5403
LAS VEGAS	428	2460	2257
RENO	760	4705	4547
WINNEMUCCA	780	4976	4835
NEW HAMPSHIRE			
CONCORD	1250	5925	5342
MT WASHINGTON OBS	1672	9491	9372
NEW JERSEY			
ATLANTIC CITY	842	3481	3503
ATLANTIC CITY U	738	3098	3331
NEWARK	882	3541	3760
TRENTON U	891	3641	3695
NEW MEXICO			
ALBUQUERQUE	811	3757	3384
CLAYTON	805	4275	3778
ROSWELL	594	3068	2663
NEW YORK			
ALBANY	1198	5167	5035
BINGHAMTON	1250	5422	5184
BUFFALO	1173	4975	4971
NEW YORK U	903	3615	3576
NEW YORK KENNEDY	831	3330	3745
NEW YORK LA GUARDIA	904	3720	3517
ROCHESTER	1189	4779	4810
SYRACUSE	1217	4928	4889
NORTH CAROLINA			
ASHEVILLE	737	3081	3401
CAPE HATTERAS R	597	1828	1970
CHARLOTTE	693	2725	2532
GREENSBORO	774	3191	2972
RALEIGH	692	2809	2692
WILMINGTON	546	1892	1894
NORTH DAKOTA			
BISMARCK	1201	6667	6557
FARGO	1361	7057	6843
WILLISTON	1213	6864	6802
OHIO			
AKRON	1043	4380	4436
CINCINNATI ABBE OB	834	3777	3642
CLEVELAND	1033	4428	4419
COLUMBUS	934	4181	4227
DAYTON	941	4244	4187
MANSFIELD	1037	4430	4275
TOLEDO	1106	4865	4725
YOUNGSTOWN	1116	4911	4648
OKLAHOMA			
OKLAHOMA CITY	701	3504	2975
TULSA	700	3454	3061
OREGON			
ASTORIA	574	3447	3476
BURNS U	857	5320	4988
EUGENE	567	3549	3297
MEACHAM	894	5747	5299
MEDFORD	519	3560	3614
PENDLETON	738	4203	3846
PORTLAND	560	3236	3303
SALEM	586	3629	3309
SEXTON SUMMIT R	689	4423	4083
PENNSYLVANIA			
ALLENTOWN	995	4316	4299
ERIE	1146	4824	4870
HARRISBURG	926	3862	3953
PHILADELPHIA	874	3624	3840
PITTSBURGH	1006	4315	4399
SCRANTON	1131	4872	4635
WILLIAMSPORT	1089	4653	4409
PITTSBURG	937	3914	3975
RHODE ISLAND			
BLOCK ISLAND	926	3824	3872
PROVIDENCE	984	4245	4265
SOUTH CAROLINA			
CHARLESTON	524	1647	1688
CHARLESTON U	450	1460	1479
COLUMBIA	583	2072	2046
GRNVLLE-SPRTNBRG	641	2563	2435
SOUTH DAKOTA			
ABERDEEN	1135	6208	6341
HURON	1144	5955	6123
RAPID CITY	1008	5594	5227
SIOUX FALLS	1166	6042	5836
TENNESSEE			
BRISTOL	779	3187	3216
CHATTANOOGA	767	3161	2626
KNOXVILLE	697	2929	2760
MEMPHIS	679	3021	2607
NASHVILLE	702	2925	2837
OAK RIDGE R	745	3022	2981
TEXAS			
ABILENE	574	2845	2163
AMARILLO	706	3835	3131
AUSTIN	405	1925	1437
BROWNSVILLE	190	890	526
CORPUS CHRISTI	262	1168	805
DALLAS	477	2338	1948
DEL RIO	381	1645	1339
EL PASO	499	2311	2276
FORT WORTH	475	2354	1987
GALVESTON U	329	1290	1016
HOUSTON INTERCON	379	1701	1408
LUBBOCK	688	3364	2862
MIDLAND	587	2779	2179
PORT ARTHUR	389	1708	1216
SAN ANGELO	514	2367	1901
SAN ANTONIO	362	1733	1312
VICTORIA	301	1431	1000
WACO	492	2345	1694
WICHITA FALLS	577	2959	2328
UTAH			
MILFORD	1003	5602	4790
SALT LAKE CITY	909	4834	4513
WENDOVER	896	4823	4413
VERMONT			
BURLINGTON	1410	6047	5925
VIRGINIA			
LYNCHBURG	809	3298	3216
NORFOLK	703	2548	2635
RICHMOND	735	2981	3047
ROANOKE	812	3309	3210
WALLOPS ISLAND	791	2990	
WASHINGTON			
OLYMPIA	681	4134	3657
QUILLAYUTE	638	4069	3847
SEATTLE-TACOMA	586	3592	3560
SEATTLE	558	3387	3089
SPOKANE	838	4914	4867
STAMPEDE PASS R	980	6337	6206
WALLA WALLA U	705	3910	3652
YAKIMA	760	4590	4504
WEST VIRGINIA			
BECKLEY	936	4079	3991
CHARLESTON	832	3530	3423
ELKINS	966	4195	4194
HUNTINGTON	866	3690	3405
PARKERSBURG U	877	3676	3603
WISCONSIN			
GREEN BAY	1172	5763	5800
LA CROSSE	1119	5730	5665
MADISON	1143	5663	5720
MILWAUKEE	1101	5322	5432
WYOMING			
CASPER	1124	6026	5223
CHEYENNE	980	5676	5112
LANDER	1432	6874	5665
SHERIDAN	1010	5893	5471

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

COOLING DEGREE DAYS

(Base 65°F.)

FEBRUARY 1973

State and station	Current season: This month	Current season: Period January through this month	Normals January through this month
ALABAMA			
BIRMINGHAM	0	0	
HUNTSVILLE	0	0	
MOBILE	1	1	
MONTGOMERY	0	0	
ALASKA			
ANCHORAGE	0	0	
ANNETTE	0	0	
BARROW	0	0	
BARTER ISLAND	0	0	
BETHEL	0	0	
BETTLES	0	0	
BIG DELTA	0	0	
COLD BAY	0	0	
FAIRBANKS	0	0	
GULKANA	0	0	
HOMER	0	0	
JUNEAU	0	0	
KING SALMON	0	0	
KODIAK	0	0	
KOTZEBUE	0	0	
MC GRATH	0	0	
NOME	0	0	
ST. PAUL ISLAND	0	0	
SHEMYA	0	0	
SUMMIT	0	0	
TALKEETNA	0	0	
UNALAKLEET	0	0	
YAKUTAT	0	0	
ARIZONA			
FLAGSTAFF	0	0	
PHOENIX	0	0	
TUCSON	0	0	
WINSLOW	0	0	
YUMA	0	0	
ARKANSAS			
FORT SMITH	0	0	
LITTLE ROCK	0	0	
CALIFORNIA			
BAKERSFIELD	0	0	
BISHOP	0	0	
BLUE CANYON	0	0	
EUREKA U	0	0	
FRESNO	0	0	
LONG BEACH	0	0	
LOS ANGELES	0	1	
LOS ANGELES U	2	11	
MT SHASTA R	0	0	
OAKLAND	0	0	
RED BLUFF	0	0	
SACRAMENTO	0	0	
SANDBERG R	0	0	
SAN DIEGO	0	0	
SAN FRANCISCO	0	0	
SAN FRANCISCO U	0	0	
SANTA MARIA	0	0	
STOCKTON	0	0	
COLORADO			
ALAMOSA	0	0	
COLORADO SPRINGS	0	0	
DENVER	0	0	
GRAND JUNCTION	0	0	
PUEBLO	0	0	
CONNECTICUT			
BRIDGEPORT	0	0	
HARTFORD	0	0	
DIST.OF COLUMBIA			
WASHINGTON DULLES	0	0	
WASHINGTON NATIONAL	0	0	
DELAWARE			
WILMINGTON	0	0	
FLORIDA			
APALACHICOLA U	0	7	
DAYTONA BEACH	14	59	
FORT MYERS	27	158	
JACKSONVILLE	0	23	
KEY WEST	93	342	
LAKELAND U	14	84	
MIAMI	81	293	
ORLANDO	28	116	
PENSACOLA	0	0	
TALLAHASSEE	0	15	
TAMPA	15	90	
WEST PALM BEACH	60	237	
GEORGIA			
ATHENS	0	0	
ATLANTA	0	0	
AUGUSTA	0	0	
COLUMBUS	0	0	
MACON	0	0	
ROME	0	0	
SAVANNAH	0	0	
HAWAII			
HILO	180	413	
HONOLULU	219	471	
KAHULUI	139	299	
LIHUE	199	390	
IDAHO			
BOISE	0	0	
LEWISTON	0	0	
POCATELLO	0	0	
ILLINOIS			
CAIRO U	0	0	
CHICAGO O HARE	0	0	
CHICAGO MIDWAY	0	0	
MOLINE	0	0	
PEORIA	0	0	
ROCKFORD	0	0	
SPRINGFIELD	0	0	
INDIANA			
EVANSVILLE	0	0	
FORT WAYNE	0	0	
INDIANAPOLIS	0	0	
SOUTH BEND	0	0	
IOWA			
BURLINGTON	0	0	
DES MOINES	0	0	
DUBUQUE	0	0	
SIOUX CITY	0	0	
WATERLOO	0	0	
KANSAS			
CONCORDIA	0	0	
DODGE CITY	0	0	
GOODLAND	0	0	
TOPEKA	0	0	
WICHITA	0	0	
KENTUCKY			
COVINGTON	0	0	
LEXINGTON	0	0	
LOUISVILLE	0	0	
LOUISIANA			
ALEXANDRIA	2	2	
BATON ROUGE	2	2	
LAKE CHARLES	1	1	
NEW ORLEANS	9	9	
SHREVEPORT	2	2	
MAINE			
CARIBOU	0	0	
PORTLAND	0	0	
MARYLAND			
BALTIMORE	0	0	
MASSACHUSETTS			
BLUE HILL OBS R	0	0	
BOSTON	0	0	
WORCESTER	0	0	
MICHIGAN			
ALPENA	0	0	
DETROIT	0	0	
DETROIT METRO.	0	0	
FLINT	0	0	
GRAND RAPIDS	0	0	
HOUGHTON LAKE	0	0	
LANSING	0	0	
MARQUETTE U	0	0	
MUSKEGON	0	0	
SAULT STE MARIE	0	0	
MINNESOTA			
DULUTH	0	0	
INTERNATIONAL FALLS	0	0	
MINNEAPOLIS	0	0	
ROCHESTER	0	0	
ST CLOUD	0	0	
MISSISSIPPI			
JACKSON	0	1	
MERIDIAN	0	0	
MISSOURI			
COLUMBIA REGIONAL	0	0	
KANSAS CITY	0	0	
ST JOSEPH	0	0	
ST LOUIS	0	0	
SPRINGFIELD	0	0	
MONTANA			
BILLINGS	0	0	
GLASGOW	0	0	
GREAT FALLS	0	0	
HAVRE	0	0	
HELENA	0	0	
KALISPELL	0	0	
MILES CITY	0	0	
MISSOULA	0	0	
NEBRASKA			
GRAND ISLAND	0	0	
LINCOLN	0	0	
NORFOLK	0	0	
NORTH PLATTE	0	0	
OMAHA	0	0	
SCOTTSBLUFF	0	0	
VALENTINE	0	0	
NEVADA			
ELKO	0	0	
ELY	0	0	
LAS VEGAS	0	0	
RENO	0	0	
WINNEMUCCA	0	0	
NEW HAMPSHIRE			
CONCORD	0	0	
MT WASHINGTON OBS	0	0	
NEW JERSEY			
ATLANTIC CITY	0	0	
ATLANTIC CITY U	0	0	
NEWARK	0	0	
TRENTON U	0	0	
NEW MEXICO			
ALBUQUERQUE	0	0	
CLAYTON	0	0	
ROSWELL	0	0	
NEW YORK			
ALBANY	0	0	
BINGHAMTON	0	0	
BUFFALO	0	0	
NEW YORK U	0	0	
NEW YORK KENNEDY	0	0	
NEW YORK LA GUARDIA	0	0	
ROCHESTER	0	0	
SYRACUSE	0	0	
NORTH CAROLINA			
ASHEVILLE	0	0	
CAPE HATTERAS R	1	1	
CHARLOTTE	0	0	
GREENSBORO	0	0	
RALEIGH	0	0	
WILMINGTON	0	1	
NORTH DAKOTA			
BISMARCK	0	0	
FARGO	0	0	
WILLISTON	0	0	
OHIO			
AKRON	0	0	
CINCINNATI ABBE OB.	0	0	
CLEVELAND	0	0	
COLUMBUS	0	0	
DAYTON	0	0	
MANSFIELD	0	0	
TOLEDO	0	0	
YOUNGSTOWN	0	0	
OKLAHOMA			
OKLAHOMA CITY	0	0	
TULSA	0	0	
OREGON			
ASTORIA	0	0	
BURNS U	0	0	
EUGENE	0	0	
MEACHAM	0	0	
MEDFORD	0	0	
PENDLETON	0	0	
PORTLAND	0	0	
SALEM	0	0	
SEXTON SUMMIT R	0	0	
PACIFIC AREA			
GUAM TAGUAC R	341	672	
JOHNSTON	298	628	
KOROR R	470	976	
KWAJALEIN	477	986	
MAJURO	476	974	
PAGO PAGO	500	1025	
PONAPE R	447	951	
TRUK MOEN ISLAND	463	983	
WAKE	309	676	
YAP R	457	918	
PENNSYLVANIA			
ALLENTOWN	0	0	
ERIE	0	0	
HARRISBURG	0	0	
PHILADELPHIA	0	0	
PITTSBURGH	0	0	
SCRANTON	0	0	
WILLIAMSPORT	0	0	
RHODE ISLAND			
BLOCK ISLAND	0	0	
PROVIDENCE	0	0	
SOUTH CAROLINA			
CHARLESTON	0	1	
CHARLESTON	0	0	
COLUMBIA	0	0	
GRNVLLE-SPRTNBRG	0	0	
SOUTH DAKOTA			
ABERDEEN	0	0	
HURON	0	0	
RAPID CITY	0	0	
SIOUX FALLS	0	0	
TENNESSEE			
BRISTOL	0	0	
CHATTANOOGA	0	0	
KNOXVILLE	0	0	
MEMPHIS	0	0	
NASHVILLE	0	0	
OAK RIDGE R	0	0	
TEXAS			
ABILENE	0	0	
AMARILLO	0	0	
AUSTIN	0	1	
BROWNSVILLE	21	40	
CORPUS CHRISTI	14	27	
DALLAS	0	0	
DEL RIO	0	0	
EL PASO	0	0	
FORT WORTH	0	1	
GALVESTON U	0	1	
HOUSTON INTERCON	4	5	
LUBBOCK	0	0	
MIDLAND	0	0	
PORT ARTHUR	2	2	
SAN ANGELO	0	0	
SAN ANTONIO	0	[illegible]	
VICTORIA	10	13	
WACO	0	0	
WICHITA FALLS	0	0	
UTAH			
MILFORD	0	0	
SALT LAKE CITY	0	0	
WENDOVER	0	0	
VERMONT			
BURLINGTON	0	0	
VIRGINIA			
LYNCHBURG	0	0	
NORFOLK	0	0	
RICHMOND	0	0	
ROANOKE	0	0	
WALLOPS ISLAND	0	0	
WASHINGTON			
OLYMPIA	0	0	
QUILLAYUTE	0	0	
SEATTLE-TACOMA	0	0	
SEATTLE	0	0	
SPOKANE	0	0	
STAMPEDE PASS R	0	0	
WALLA WALLA U	0	0	
YAKIMA	0	0	
WEST INDIES			
SAN JUAN P.R.	379	817	
WEST VIRGINIA			
BECKLEY	0	0	
CHARLESTON	0	0	
ELKINS	0	0	
HUNTINGTON	0	0	
PARKERSBURG U	0	0	
WISCONSIN			
GREEN BAY	0	0	
LA CROSSE	0	0	
MADISON	0	0	
MILWAUKEE	0	0	
WYOMING			
CASPER	0	0	
CHEYENNE	0	0	
LANDER	0	0	
SHERIDAN	0	0	

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				Ø ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE	
								PROPERTY	CROPS			PROPERTY	CROPS			PROPERTY	CROPS			PROPERTY	CROPS			PROPERTY	CROPS			PROPERTY	CROPS
Alabama																				5	6								
Alaska*																													
Arizona												4																	
Arkansas*																													
California								2	4		2	4														11	2	7	
Colorado*																													
Connecticut												4												4				5	
Delaware*																													
Florida	1	1		1	5																								
Georgia	4	2		5	5													2	2	7								6	C
Hawaii																											4	2	
Idaho*																													
Illinois*																													
Indiana												4																	
Iowa*																													
Kansas																								4					
Kentucky*																													
Louisiana											2	4								5									
Maine												34												4				4	
Maryland*																													
Massachusetts										1	1	5								4				4				5	
Michigan												4																	
Minnesota*																													
Mississippi	1	1		1	3															2	2			2	2				
Missouri*																													
Montana												2																	
Nebraska*																													
Nevada*																													
New Hampshire																								4				4	
New Jersey	3	1			3																							4	
New Mexico*																													
New York												4																	
North Carolina												5	4					2	3	6	5					2		6	5
North Dakota*																													
Ohio												4																	
Oklahoma*																													
Oregon*																													
Pacific Area*																													
Pennsylvania												4																	
Puerto Rico*																													
Rhode Island												4												5					
South Carolina																		9		7	4							5	3
South Dakota*																													
Tennessee												4		1		4													
Texas	1	1		1	4																								
Utah*																													
Vermont																								4				3	
U.S. Virgin Is.*																													
Virginia*																													
Washington																4													
West Virginia*																													
Wisconsin*																													
Wyoming*																													

Includes crop damage.
C Crop damage.
* No occurrence of storms or unusual weather phenomena reported.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
Ø For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5 Million
7 $5 Million to $50 Million
8 $50 Million to $500 Million
9 $500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

FEBRUARY 1973

Elmer R. Nelson, Office of Hydrology

Widespread and extensive flooding occurred in the Carolinas during February. In North Carolina some crests were the highest in 20 years. In South Carolina, Black Creek near Florence reached its highest level in over 90 years, necessitating the evacuation of people from cottages and mobile homes. Damage from the widespread and extensive flooding will run into millions of dollars.

Date (February)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	ATLANTIC SLOPE DRAINAGE		
2-3	Urban and street flooding occurred throughout Connecticut, Rhode Island, the eastern two-thirds of Massachusetts, and at a few isolated places in Vermont and New Hampshire. Flash flooding of small streams was observed in parts of Connecticut, Massachusetts, Rhode Island, and Rockland and Westchester Counties in New York. There was also some minor flooding due to ice jams at a few isolated locations in Vermont and New Hampshire.	0	N.A.
2-5	Moderate flooding occurred on the lower Housatonic River in Connecticut. Crests on the 3d ranged from 2.5 feet above flood stage at Gaylordsville to 6.2 feet above flood stage at Stevenson, Conn. Minor overflows occurred on the Farmington River at Simsbury, Conn; the Blackstone at Woonsocket, R.I; the Pemigewasset at Plymouth, N.H., and the Charles River at Charles River Village, Mass. (5th-8th). Some damage resulted to homes and businesses. Nearly ly 150 homes were evacuated in Connecticut.	0	N.A.
2-9	Heavy precipitation (2.0 inches) on the 2d and 3d caused considerable flooding on streams in New Jersey. Heavy flooding occurred in the Raritan Basin where streams crested 5 to 6 feet above flood stage. In the Delaware Basin, Assunpink Creek, at Trenton, N.J., crested 6.5 feet above flood level. At least 107 persons were evacuated from their homes in the East Trenton area. Hundreds of factory workers were evacuated by boats from the lowlands section of East Trenton.	0	N.A.
2-5	Flood stages were exceeded by about 4 feet in the lower reaches of the James River in Virginia. The river remained above flood stage around 12 hours in the upper reaches to around 2.5 days in the lower reaches. Rainfall causing this overflow averaged around 2 inches in the James Basin and 1.75 inches in the Appomattox Basin. A schoolchild was drowned after falling into a drainage ditch near Newport News.	1	N.A.
2-23	Widespread and extensive flooding occurred in eastern North Carolina due to heavy rainfall on the 1st. Precipitation averaged nearly 3 inches, with some localities reporting as much as 5 to 6 inches during the 12-hour period. Some crests were the highest reported in 20 years. Minor overflow continued in the lower Roanoke River all month. Damage ran into millions of dollars.	0	N.A.

Date (February)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	ATLANTIC SLOPE DRAINAGE (Continued)		
Dec. 17-1/	Major flooding occurred on streams in South Carolina and in southeastern and northwestern North Carolina. The Broad River at Blair, S.C., and the Edisto River at Givhans Ferry State Park reached their highest level since October 1964. Extensive lowland flooding occurred on the Congaree River below Columbia, S.C., to Lake Marion. The crest at Columbia was the highest since April 1969. The Wateree River reached its highest crest at Camden, S.C., since August 1967. The Pee Dee River reached its highest stage at Cheraw, S.C., in the last 7 years and at Peedee since 1945. Three hundred families were evacuated from their homes along the Waccamaw River. Black Creek near Florence, S.C., reached its highest level in over 90 years, necessitating the evacuation of people from cottages and mobile homes. Damage in this area was estimated at $350,500.	0	$504
1-28	Minor flooding occurred on streams in Georgia. The heaviest damage occurred in the Oconee Basin in eastern Laurens County where an earthen dam washed out and released water from a 75-acre lake. A number of bridges and culverts were damaged or destroyed as the excess water moved downstream.	0	137
	EAST GULF OF MEXICO DRAINAGE		
3-7 13-14	Overflow on the Flint River ranged from 4.5 feet above flood stage at Albany, Ga., to slightly more than 1 foot over flood level in the lower reaches of the river. Peachtree Creek in Atlanta, Ga., crested 3.9 feet above flood stage. Damage in this area totalled $59,600.	0	120
18	Minor flooding occurred on the lower Choctawhatchee River in Florida. The overflow was due to rainfall on the 13th and 14th and delayed snowmelt runoff. A recordbreaking snowstorm occurred in northwestern Florida on the 9th and 10th.	0	N.A.
9-10 14-23	Flooding on the Tombigbee River was limited to the headwaters in Mississippi and the lower portion in Alabama. The crest at Amory, Miss., on the 15th was 3.6 feet above flood stage.	0	N.A.
Dec. 18-1/	Heavy rainfall during the first few days of February caused lowland flooding along the Pearl River in Mississippi. Additional rain on the 8th, 9th, and 14th prolonged the flooding. The crest at Jackson, Miss., on the 6th was 8.5 feet above flood stage. Flooding continued at Bogalusa, La., from December 18 into March.	0	N.A.

Date (February)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	MISSISSIPPI SYSTEM		
	Upper Mississippi Basin		
2-6	Rainfall averaging 0.75 to 1.25 inches caused flooding on tributary streams in northeastern Iowa, northern Illinois, and southern Wisconsin. Overflows at some points were augmented by ice action.	0	N.A.
Jan. 31-11,25-28	The crest on the South Skunk River at Oskaloosa, Iowa, on the 4th was 7.2 feet above flood stage and the highest since 1947. In the Des Moines Basin, the flooding on the South River at Ackworth, Iowa, on the 2d-3d ranked second to the flood of 1969. The Iowa River at Wapello, Iowa, continued in flood from January 1 to February 4. Flooding on the 25th-28th was minor and limited to the upper Iowa and the north Raccoon River.	0	Minor
	Missouri Basin		
1-8 13-16	Flooding in Missouri during the first week of the month was due to heavy rainfall on January 31 and February 1, and snowmelt runoff. Most of the flooding was in unprotected areas. Flooding on the 13th-16th was confined to the lower reaches of the Grand River.	0	Minor
1-3 13-14	Flooding in Kansas was generally light, except locally moderate on tributaries of the Kansas, Black Vermillion, and lower Marais des Cygnes. Flooding on the 13th-14th was confined to the Black Vermillion River. The crest at Frankfort, Kans., was nearly 4 feet below the crest causing agricultural flooding on the 2d-3d.	0	N.A.
2-9	Heavy rain on the last of January, along with warming temperatures over the snowfields the first part of February, caused minor flooding on the Missouri River at and below Lexington, Mo. Damage was minor due to the short duration of the flooding. A minimum of the floodplain was affected.	0	Minor
	Ohio Basin		
3-4	Main streams in east-central Illinois and west-central Indiana remained high during the first half of the month and exceeded flood stage at several points for a brief period.	0	Minor
2-4	Heavy precipitation (4 to 6 inches) over the mountains of southwestern North Carolina, during the evening of the 1st and the morning of the 2d caused 1 to 2 feet of overflow on the French Broad River at Rosman and Blantyre, N.C. Some flash flooding occurred.	0	3
6-20	Two to 4 feet of flooding occurred along the lower Ohio River in Illinois. Very little damage occurred as this flood followed the more extensive flooding of December and January when most of the damage occurred.	0	3

Date (February)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	White Basin		
Oct. 29-1/	Flooding continued along the Cache River at Patterson, Ark., for the fourth consecutive month. The lower White River continued above flood stage at Clarendon and St. Charles, Ark., all of February and in the middle section from the 9th to the 23d. The Black River at Black Rock, Ark., crested 4 feet above flood stage on the 9th, or 1.5 feet below the crest in January. Floodwaters delayed continuing efforts to harvest last year's cotton crops and prevented other farming and lumbering operations.	0	Light
	Arkansas Basin		
1-5	Heavy rains on already saturated ground caused minor flooding on the Cottonwood, Neosho, Little Arkansas, and Whitewater Rivers in Kansas. Most of the month's precipitation occurred during the first two days of February.	0	Minor
8-11	Heavy rains on the 8th caused 1 to 1.5 feet of overflow on the Arkansas River at Van Buren, Ark., and on the Illinois River at Tahlequah, Okla. Precipitation averaged 2 inches over the Illinois Basin.		
	Red Basin		
Jan. 31-19	Minor overflow occurred in bottom and pasture lands adjoining the Sulphur River from Hagansport to Naples, Tex. Major erosion of roadway occurred in Hagansport area closing Highway 37 for a few days.	0	Minor
	Lower Mississippi Basin		
2-1/	Widespread lowland flooding occurred along the Tallahatchie and Big Black Rivers in Mississippi. Timber cutting operations came to a standstill as roads became inundated. High stages on the Mississippi River produced some lowland flooding in low areas adjacent to the river. In the Long Lake community, just north of Vicksburg, Miss., some roads became flooded but no evacuation was necessary. Construction projects along the river were slowed down when rising water flooded access roads.	0	N.A.
	Atchafalaya Basin		
Dec. 20-1/	The Atchafalaya River at Morgan City, La., continued more than 1 foot above flood stage from February 13 to the 28th. A progressive rise in water levels has been occurring in the Morgan City area over the past few years.	0	N.A.

Date (February)	Flood Events	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	WEST GULF OF MEXICO DRAINAGE		
Jan. 22-21	The Calcasieu River at Hineston, La., crested more than 4.5 feet above flood stage on the 3d-4th. Flooding on the lower Sabine and Navasota Rivers in Texas was mostly minor.	0	Minor

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N.A. - Not available.
1/ - Continued at the end of the month.

FLOOD STAGE DATA

(All dates in February unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
	Ft.			Ft.	
ATLANTIC SLOPE DRAINAGE					
Pemigewasset:					
Plymouth, N.H.	11	3	4	14.9	3
Charles:					
Charles River Village, Mass	4	5	8	4.3	6
Blackstone:					
Woonsocket, R.I.	9	3	3	9.2	3
Farmington:					
Simsbury, Conn.	12	3	4	12.5	4
Housatonic:					
Gaylordsville, Conn.	8	2	5	10.6	3
Stevenson, Conn.	12	2	4	18.2	3
Ramapo:					
Mahwah, N.J.	8	2	4	9.8	3
Pompton Lakes, N.J.	2	3	4	2.75	3
Pequannock:					
Macopin Dam, N.J.	15	2	2	15.0	2
Wanaque:					
Wanaque, N.J.	5	3	4	7.3	3
Pompton:					
Pompton Plains, N.J.	16	3	5	20.6	3
Saddle:					
Lodi, N.J.	5	2	3	8.8	3
Passaic:					
Chatham, N.J.	6	2	6	6.8	2
Little Falls, N.J.	7	3	9	9.45	5
Millstone:					
Blackwells Mills, N.J.	7	2	4	13.1	3
Raritan:					
Manville, N.J.	12	2	3	16.8	3
Bound Brook, N.J.	8	2	3	13.05	3
Assunpink Creek:					
Trenton, N.J.	5	2	4	11.5	2
Neshaminy Creek:					
Langhorne, Pa.	9	2	3	11.0	3
North Branch Rancocas Creek:					
Pemberton, N.J.	2.7	3	3	2.8	3
Chemung:					
Elmira, N.Y.	10	3	3	12.0	3
Chemung, N.Y.	12	3	3	14.5	3
Appomattoax:					
Farmville, Va.	16	3	3	16.9	3
Mattoax, Va.	21	5	7	22.1	6
Mattoaca	U	U	U	9.9	3
Rivanna:					
Palmyra, Va.	17	2	3	21.1	3
James:					
Lick Run, Va.	16	2	3	17.8	3
Buchanan, Va.	17	3	3	18.2	3
Bremo Bluff, Va.	19	3	5	23.2	3
Columbia, Va.	18	3	5	U	
Cartersville, Va.	20	3	4	20.7	3
State Farm, Va.	12	3	5	U	
Richmond (Westham), Va	12	3	5	16.5	4
Richmond (City Locks), Va.	9	3	5	13.5	4
Dan:					
Danville, Va.	11	2	3	12.9	3

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
	Ft.			Ft	
ATLANTIC SLOPE DRAINAGE-Continued					
Roanoke:					
Altavista, Va.	18	2	2	19.4	2
Randolph, Va.	21	3	5	24.5	4
Williamston, N.C.	10	Dec 1	Mar 4	11.3 11.2	Dec 22 Jan 22 11-2
Fishing Creek:					
Enfield, N.C.	14	4	7	16.0	6
Tar:					
Louisburg, N.C.	20	3	4	22.0	4
Rocky Mount, N.C.	9	3	8	11.7	7
Tarboro, N.C.	19	6	11	24.4	9
Greenville, N.C.	13	6	13	16.6	11
Neuse:					
Neuse, N.C.	14	2	9	20.4	5
Smithfield, N.C.	13	2	11	23.8	4
Goldsboro, N.C.	14	3	21	23.2	9
Kinston, N.C.	14	5	23	20.1	15
Cape Fear:					
Fayetteville, N.C.	35	2	7	47.1	4
William O. Huske L&D(near) Tarheel, N.C.	42	2	11	60.5	5
Lock No 2, Elizabethtown, N.C.	20	2	12	32.6	6
Lock No 1	24	7	9	24.7	7
Yadkin:					
Elkin, N.C.	16	2	2	17.1	2
Yadkin College, N.C.	18	3	3	22.2	3
Rocky:					
Norwood, N.C.	15	2	3	25.9	2
Lynches:					
Effingham, S.C.	14	4 17	11 18	16.7 14.3	5 17, 18
Lumber:					
Lumberton, N.C.	9	Dec 17	1	12.3 11.2 14.3 15.6 12.6	Dec 23 Jan 24 6 16 Mar 10
Little Pee Dee:					
Galivants Ferry, S.C.	9	Jan 20	Mar 25	11.4 11.7 10.0	11 18 Mar 11
Waccamaw:					
Conway, S.C.	7	12	Mar 8	9.0	17
Black:					
Kingstree, S.C.	12	4	24	14.1	7, 18
Pee Dee:					
Cheraw, S.C.	30	2	6	40.8	4
Peedee, S.C.	19	Jan 25	24	26.4	8
Saluda:					
West Pelzer, S.C.	9	2	3	9.3	3
Chappells, S.C.	14	2	3	16.8	3
Broad:					
Gaffney (nr), S.C.	10	2	3	13.2	2
Blair, S.C.	14	2	6	27.4	3
Congaree:					
Columbia, S.C.	19	3	5	22.0	4
South Fork Catawba:					
McAdenville, S.C.	10	2	3	12.5	2
Wateree:					
Lake Wateree, S.C.	100	3	6	102.6	3

FLOOD STAGE DATA

(All dates in February unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–	To–	Crest Stage	Date
	Ft			Ft	
ATLANTIC SLOPE DRAINAGE-Continued					
Wateree-Continued:					
Camden, S.C.	23	4	4	23.8	4
Santee:					
Jamestown, S.C.	10	9	23	16.6	13
North Fork Edisto:					
Orangeburg, S.C.	8	4 14	9 21	9.1 9.4	5 16
Edisto:					
Givhans Ferry State Park, S.C.	10	2	Mar 21	14.5 12.4	20 Mar 12
Savannah:					
Wade Plantation, Ga.	15	3	26	#16.7	19
Clyo, Ga.	11	1	1	#15.5 #15.9	20 Mar 30
Ogeechee:					
Midville, Ga.	6	3	11	# 6.9	4
Scarboro, Ga.	8	1	28	#10.6	5
Eden, Ga.	9	6	1	#12.3 #10.6	10 Mar 14
Ocmulgee:					
Macon, Ga.	18	4	4	#20.1	4
Lumber City, Ga.	15	11	15	#15.4	12
Oconee:					
Milledgeville, Ga.	20	3	3	#21.6	3
Mt. Vernon, Ga.	16	4 20	14 20	#17.4 #16.1	9 20
Altamaha:					
Charlotte, Ga.	15	5	26	#18.9	14
Satilla:					
Waycross, Ga.	16	11	19	#17.2	15
EASTERN GULF OF MEXICO DRAINAGE					
Flint:					
Albany, Ga.	20	3	5	#24.5	4
Bainbridge, Ga.	25	6 13	7 14	26.2 25.6	6 14
Choctawhatchee:					
Caryville, Fla.	12	18	18	#12.0	18
Tombigbee:					
Amory, Miss.	20	9 14	10 19	20.6 23.6	9 15
Coffeeville L&D, Ala.	13	18	23	#44.4	20
Pearl:					
Ofahoma, Miss.	14	17	20	M	M
Jackson, Miss.	18	1 14	13 25	26.5 23.5	6 20
Monticello, Miss.	19	3 10 14	6 12 18	19.6 19.4 21.65	4 11 15
Bogalusa, La.	15	Dec 18	1/	19.7 19.3	Dec 26 19
Pearl River, La.	12	7	25	14.2	16, 17
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Kickapoo:					
Steuben (nr), Wis.	8	2	3	8.0	2
Turkey:					
Garber, Iowa	17	2	2	18.95	2
Wapsipinicon:					
DeWitt, Iowa	10	2	3	10.8	3
East Branch Pecatonica:					
Blanchardville, Wis.	17	2	2	17.2	2

River and station	Flood stage	Above flood stages -dates From–	To–	Crest Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Cont'd.					
Upper Mississippi Basin-Continued					
Pecatonica:					
Martintown, Wis.	11	2	6	14.35	4
Freeport, Ill.	13	3	4	13.05	3
Plum:					
Savanna, Ill.	22	2	2	23.45	2
Green River:					
Genesco, Ill.	8	2	2	8.1	2
Rock:					
Joslin, Ill.	12	4	5	12.5	4
Moline, Ill.	12	5	6	12.0	5-6
Blackhawk Creek:					
Hudson, Iowa	12	1	3	#16.2	2
Iowa:					
Marshalltown, Iowa	13	1 25	6 25	#17.2 #13.4	2 25
Wapello, Iowa	10	Jan 1 7	4 U	#15.0 #12.7 #10.3	Jan 21 2 8
Pope Creek:					
Keithsburg, Ill.	17	2	2	22.7	2
North Skunk:					
Sigourney, Iowa	16	4	5	#20.4	4
Skunk:					
Ames, Iowa	10	2	2	#12.7	2
Oskaloosa, Iowa	15	Jan 31 11	8 11	#22.4 #15.3	4 11
Brighton, Iowa	14	6	10	#17.1	7
North Raccoon:					
Jefferson, Iowa	10	26	28	#12.9	27
South Raccoon:					
Redfield, Iowa	14	1	1	#14.85	1
Raccoon:					
Van Meter, Iowa	13	1	2	#15.1	2
Des Moines, Iowa	12	1	2	#12.8	2
North:					
Norwalk, Iowa	18	2	2	#22.2	2
Middle:					
Indianola (nr), Iowa	19	1	2	#22.3	2
South:					
Ackworth, Iowa	19	2	3	27.3	2
White Breast Creek:					
Dalles, Iowa	22	2	3	U	
Cedar Creek:					
Bussey, Iowa	16.5	1	2	21.3	2
Des Moines:					
Des Moines, Iowa	21	2	2	21.1	2
Tracy, Iowa	14	5	9	15.1	6
Eddyville, Iowa	15	1	9	16.4	6
Illinois:					
Havana, Ill.	14	Dec 31	13	18.0 14.5	Jan 10 8
Beardstown, Ill.	14	Dec 31	13	19.4 14.8	Jan 8 2
Mississippi:					
Cape Girardeau, Mo.	32	8	9	32.0	8
Missouri Basin					
Bazile Creek:					
Niobrara, Nebr.	315	23	25	15.5	24

FLOOD STAGE DATA

(All dates in February unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–	Above flood stages -dates To–	Crest * Stage	Crest * Date
	Ft.			Ft.	
Missouri Basin-Cont'd.					
Nishnabotna:					
Hamburg, Iowa	18	1	2	19.5	2
Tarkio:					
Fairfax, Mo.	17	1	1	18.3	1
One-Hundred Two:					
Maryville, Mo.	14	1	2	17.0	2
Little Platte:					
Smithville, Mo.	24	1	2	25.6	2
Platte:					
Agency, Mo.	20	1	2	23.5	2
Chapman Creek:					
Chapman, Kans.	19	1	1	19.0	1
Lyon Creek:					
Woodbine, Kans.	17	1	2	24.7	1
Smoky Hill:					
Mentor, Kans.	16	2	2	#16.4	2
Black Vermillion:					
Frankfort, Kans.	19	2 13	3 14	25.9 22.15	2 13
Vermillion Creek:					
Wamego, Kans.	24	1	2	#25.1	1
Mill Creek:					
Paxico, Kans.	19	1	1	#26.6	1
Soldier Creek:					
Topeka, Kans.	12	1	2	#13.65	1
Delaware:					
Muscotah, Kans.	25	1	3	#26.0	2
Wakarusa:					
Lawrence, Kans.	23	1	3	#28.2	2
Stranger Creek:					
Easton, Kans.	15	1	3	#19.0	2
Grand:					
Pattonsburg, Mo.	25	1	4	28.25	2
Gallatin, Mo.	21	2	4	22.5	2
Chillicothe, Mo.	24	2	5	30.0	3
Sumner, Mo.	26	2 13	7 15	33.6 29.1	4 14
Brunswick, Mo.	12	1 15	8 16	18.1 12.3	3 15
Pottawatomie Creek:					
Lane, Kans.	23	3	3	23.0	3
Marais des Cygnes:					
Reading, Kans.	18	1	2	21.6	1
Ottawa, Kans.	27	2	2	#27.1	2
Osawatomie, Kans.	28	2	3	31.0	3
Lacygne, Kans.	25	3	4	#28.0	4
Missouri:					
Lexington, Mo.	22	2	3	23.0	3
Glasgow, Mo.	25	4	5	25.1	4
Boonville, Mo.	21	3	5	22.5	3
Hermann, Mo.	21	3	9	24.5	5
St. Charles, Mo.	25	4	8	27.6	6
Ohio Basin					
Embarass:					
Lawrenceville, Ill.	11	4	4	#11.1	2
Little Wabash:					
Wilcox, Ill.	16	3 16	4 16	17.25 16.25	3 16
Ohio Basin - Continued					
Wabash:					
Montezuma, Ind.	14	3	6	#16.3	5
French Broad:					
Rosman, N.C.	8	2	2	9.2	2
Blantyre, N.C.	17	2	4	18.8	3
Ohio:					
Dam 53, Grand Chain, Ill.	42	9	19	43.8	11
Cairo, Ill.	40	6	20	43.9	11
White Basin					
Black:					
Pocahontas, Ark.	17	Jan 24	2	18.65	Jan 28
Black Rock, Ark.	14	Jan 21	17	19.5 18.0	Jan 23 9
Cache:					
Patterson, Ark.	7	Oct 29	1/	10.0 9.4 8.2 9.4 9.2 9.4	Nov [illegible] Dec 16 Jan 7 Jan 24 10 Mar 17,18
White:					
Georgetown, Ark.	21	9	23	21.9	14
Des Arc, Ark.	24	12	19	24.6	14
Clarendon, Ark.	26	Jan 25	Mar 8	27.0 28.5	Jan 30 16
St. Charles, Ark.	25	Jan 29	1/	26.7	19
Arkansas Basin					
Little Arkansas:					
Sedgwick, Kans.	18	1	3	#22.4	1
Whitewater:					
Towanda, Kans.	22	1	2	#23.0	2
Cottonwood:					
Florence, Kans.	22	1	2	#23.7	2
Plymouth, Kans.	28	1	4	#32.6	2
Emporia, Kans.	20	2	5	#22.9	3
Neosho:					
Neosho Rapids, Kans.	22	2	3	#23.8	3
Chanute, Kans.	23	2	2	#23.35	2
Oswego, Kans.	17	3	4	#17.8	3
Commerce, Okla.	15	2	4	#15.1	3-4
Illinois:					
Tahlequah, Okla.	11	9	10	#12.4	9
Arkansas:					
Van Buren, Ark.	22	Jan 22 8	3 11	23.0 23.0	Jan 29 9
Red Basin					
Sulphur:					
Hagansport, Tex.	44	1 8	2 11	45.5 46.9	1 8
Naples, Tex.	22	Jan 31	19	24.9	2-3
Ouachita:					
Camden, Ark.	26	Jan 24 8	[illegible] 16	30.8 30.1	Jan 26 13
Lower Mississippi Basin					
St. Francis:					
St. Francis, Ark.	18	Jan 4	12	21.05 19.0	Jan 22 9
Tallahatchie:					
Swan Lake, Miss.	26	Jan 7 9	3 Apr 16	28.0 27.6 31.55	Jan 9 20 Mar 18
Big Black:					
West, Miss.	12	2	8	14.95	3

FLOOD STAGE DATA

(All dates in February unless otherwise specified)

FEBRUARY 1973

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Continued					
Lower Mississippi Basin-Continued					
Big Black-Continued:					
Bovina, Miss.	28	2	4	28.1	3
Atchafalaya Basin					
Atchafalaya:					
Morgan City, La.	7	Dec 20	1	8.6	Jan 21
				8.4	20
				9.9	Mar 24
WEST GULF OF MEXICO DRAINAGE					
Calcasieu:					
[illegible], La.	12	Jan 22	20	15.1	Jan 24
				16.65	3-4
Lake Fork:					
Quitman, Tex.	16	11	12	17.0	11
Sabine:					
Mineola, Tex.	14	10	13	15.6	12
Deweyville, Tex.	14	Jan 30	21	14.5	5
Navasota:					
Bryan 17 NE, Tex.	12	Jan 26	4	13.7	Jan 30

River and station	Flood stage	Above flood stages -dates		Crest*	
		From—	To—	Stage	Date
	Ft.			Ft.	
PACIFIC SLOPE DRAINAGE					
Sacramento:					
Ord. Ferry, Calif.	W110.5	7	8	111.5	8
Moulton Weir, Calif.	W 76.8	7	9	E 78.0	8
		10	13	M	
		15	16	M	
Colusa Weir, Calif.	W 61.8	5	26	E 65.4	8
		27	Mar 10	M	
Colusa, Calif.	W 63	7	9	64.3	8
		10	13	63.7	11
		15	16	63.5	16
		28	Mar 2	M	
Tisdale Weir, Calif.	W 45.5	Jan 10	Mar 16	E 49.2	Jan 13
				E 49.4	Jan 18
				E 49.6	Jan 20
				E 48.4	8
Fremont Weir, Calif.	W 33.5	Jan 12	1	E 36.8	Jan 20
		7	22	35.7	12
		28	Mar 13	M	
Rio Vista, Calif.	W 8	10	16	8.1	10
				8.5	11
				8.2	12
				8.5	14
				8.2	15
				8.1	16

* Provisional
# Highest Stage observed
1/ Continued at end of the month
E Estimated
M Missing
W Warning Stage

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	86	-8.5	-13.1	35	2.1
1000	23	203	-9.5	-14.2	34	2.4
950	28	571	-8.3	-13.0	31	4.2
900	28	991	-8.7	-13.1	31	5.9
850	28	1,433	-9.4	-15.2	31	7.5
800	28	1,902	-9.9	-17.8	30	8.1
750	28	2,399	-11.1	-19.7	29	9.5
700	28	2,927	-13.3	-22.7	28	10.7
650	28	3,489	-15.6	-25.9	28	11.8
600	28	4,089	-19.0	-29.4	27	13.4
550	28	4,731	-23.1	-32.3	27	15.2
500	28	5,423	-27.6	-36.2	27	16.9
450	28	6,173	-32.7	-40.9	26	18.5
400	28	6,993	-38.6	-45.5	26	19.6
350	28	7,901	-44.9		26	22.2
300	28	8,915	-50.5		26	25.5
250	28	10,094	-53.7		26	25.9
200	28	11,527	-53.1		26	26.0
175	28	12,391	-51.4		27	22.7
150	28	13,391	-52.1		26	22.4
125	28	14,569	-53.4		26	21.0
100	28	16,000	-54.8		26	18.9
80	28	17,418	-57.3		26	17.2
70	28	18,262	-57.2		26	15.9
60	28	19,234	-58.7		26	14.3
50	28	20,377	-59.5		26	12.8
40	27	21,772	-60.7		26	12.0
30	25	23,559	-61.4		25	10.9
25	25	24,690	-61.3		25	12.1
20	25	26,077	-60.6		25	12.5
15	24	27,885	-58.0		24	14.1
10	19	30,462	-51.0		25	20.0

ALBUQUERQUE, N. MEX.
839 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	1,619	-1.5	-5.4	05	1.5
800	28	2,003	.0	-8.2	01	1.4
750	28	2,518	-2.3	-10.3	30	2.9
700	28	3,062	-5.6	-13.3	28	4.9
650	28	3,641	-8.4	-17.6	28	7.1
600	28	4,258	-11.9	-22.7	27	9.1
550	28	4,919	-15.9	-28.8	26	11.2
500	28	5,630	-21.0	-34.0	26	12.2
450	28	6,400	-26.6	-37.2	27	13.4
400	28	7,239	-33.2	-41.7	27	16.6
350	28	8,168	-39.6	-44.0	27	21.1
300	28	9,205	-46.0		26	26.2
250	28	10,405	-50.7		26	35.8
200	27	11,841	-53.6		27	39.0
175	26	12,696	-54.6		27	37.6
150	24	13,689	-56.5		27	33.8
125	24	14,837	-59.9		27	27.7
100	20	16,223	-63.1		27	21.9
80	19	17,587	-64.6		27	17.0
70	17	18,404	-64.1		28	11.4
60	17	19,346	-64.5		28	7.0
50	17	20,460	-64.7		29	4.6
40	17	21,823	-64.6		31	3.6
30	15	23,591	-63.3		03	3.2
25	13	24,715	-62.8		04	2.3
20	10	26,105	-60.7		30	3.4
15	7	27,910	-55.6			

AMARILLO, TEXAS
893 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	1,095	-.7	-3.9	26	2.0
850	28	1,490	2.8	-6.1	29	4.2
800	28	1,980	1.7	-10.3	30	5.0
750	28	2,498	-.9	-13.6	29	5.6
700	28	3,046	-3.8	-15.7	29	5.7
650	28	3,627	-7.3	-19.5	29	6.4
600	28	4,246	-11.3	[illegible]	28	7.8
550	28	4,908	-15.7	-28.4	28	9.9
500	28	5,620	-20.5	-33.2	28	14.0
450	28	6,391	-26.2	-35.7	28	16.8
400	28	7,232	-32.6	-41.3	27	20.2
350	28	8,163	-39.2	-44.3	27	24.2
300	28	9,201	-45.9		27	29.5
250	28	10,401	-50.6		27	39.3
200	28	11,842	-54.0		27	43.7
175	28	12,697	-54.8		27	44.0
150	28	13,680	-56.4		27	37.4
125	27	14,834	-59.6		27	31.3
100	26	16,217	-63.4		27	28.7
80	26	17,582	-64.6		27	20.9
70	26	18,398	-65.0		28	15.5
60	26	19,338	-65.2		28	11.8
50	25	20,450	-65.0		28	9.1
40	24	21,817	-64.5		29	7.0
30	22	23,577	-63.8		29	5.3
25	19	24,696	-62.8		30	5.3
20	16	26,080	-61.7		30	4.3
15	14	27,882	-57.1		27	9.9
10	9	30,549	-48.9			

* ANCHORAGE, ALASKA
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	45	-10.0	-12.8	02	1.5
1000	19	154	-5.7	-11.7	12	2.3
950	28	499	-5.7	-14.1	04	3.0
900	28	923	-6.9	-15.6	07	2.5
850	28	1,369	-7.9	[illegible]	13	3.8
800	28	1,838	-10.4	-20.3	15	4.2
750	28	2,333	-13.0	-23.4	15	4.7
700	28	2,856	-15.8	[illegible]	15	3.4
650	28	3,411	-19.2	-31.4	15	2.4
600	28	4,002	-22.9	-34.5	18	1.8
550	28	4,634	-27.0	[illegible]	24	1.2
500	28	5,315	-31.7	-41.0	29	1.7
450	28	6,052	-36.6	-44.5	32	1.2
400	28	6,859	-42.5	-49.9	35	1.1
350	28	7,752	-48.2		35	2.1
300	28	8,754	-52.7		32	2.4
250	27	9,922	-53.3		27	3.3
200	27	11,367	-51.0		26	3.9
175	26	12,233	-49.3		25	5.6
150	26	13,245	-48.9		26	5.3
125	26	14,445	-48.4		26	5.9
100	26	15,916	-48.0		24	4.4
80	26	17,386	-48.3		25	3.9
70	26	18,265	-48.8		24	4.1
60	26	19,276	-49.6		24	3.7
50	26	20,468	-50.3		25	2.4
40	26	21,920	-51.8		21	.8
30	26	23,781	-52.7		07	.9
25	26	24,956	-53.4		05	2.5
20	25	26,380	-54.4		05	4.2
15	[illegible]	28,243	-54.3		06	5.8
10	12	30,851	-55.0			

* ANNETTE, ALASKA
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	[illegible]	1.7	[illegible]	[illegible]	[illegible]
1000	23	[illegible]	2.4	[illegible]	[illegible]	[illegible]
950	28	525	.1	-4.5	14	[illegible]
900	28	957	-1.7	[illegible]	17	[illegible]
850	28	1,410	-4.1	[illegible]	19	[illegible]
800	28	1,887	-6.5	-11.6	[illegible]	[illegible]
750	28	2,368	-9.6	[illegible]	[illegible]	8.2
700	28	2,918	-12.7	[illegible]	[illegible]	9.1
650	28	3,480	-16.2	[illegible]	[illegible]	9.9
600	28	4,078	-20.1	[illegible]	[illegible]	10.0
550	28	4,717	-24.4	[illegible]	23	10.6
500	28	5,405	-29.1	-35.5	23	10.4
450	28	6,151	-34.2	-34.9	24	11.3
400	28	6,964	-40.3	[illegible]	24	12.8
350	28	7,865	-46.8		25	12.2
300	28	8,869	-53.1		25	13.1
250	28	10,035	-55.9		25	11.3
200	28	11,457	-54.6		25	[illegible]
175	28	12,316	-52.1		27	[illegible]
150	27	13,313	-51.1		27	[illegible]
125	27	14,498	-51.7		28	8.6
100	27	15,948	-51.4		28	7.5
80	27	17,395	-52.0		29	6.4
70	27	18,260	-52.3		30	5.3
60	26	19,253	-53.2		31	4.2
50	24	20,417	-54.7		31	[illegible]
40	22	21,837	-55.6		33	[illegible]
30	20	23,659	-57.0		01	2.9
25	17	24,766	-59.0		02	3.7
20	14	26,169	-60.4		05	5.2
15	8	27,969	-61.1			

ATHENS, GEORGIA
991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	246	1.8	-3.0	31	1.1
1000						
950	28	590	4.3	-5.2	29	1.9
900	28	1,030	2.8	-8.6	29	3.0
850	28	1,491	1.0	-10.7	29	5.0
800	28	1,977	-.1	-14.9	28	7.0
750	28	2,492	-2.3	-16.9	27	8.9
700	28	3,037	-5.1	-20.1	27	11.0
650	28	3,616	-7.7	-21.6	27	13.0
600	28	4,235	-11.3	-24.8	27	15.6
550	28	4,897	-15.7	-28.5	27	18.3
500	28	5,609	-20.8	-34.9	28	20.3
450	28	6,379	-26.3	-39.2	27	23.0
400	28	7,221	-32.1	-42.9	27	27.7
350	28	8,155	-38.3	-46.6	27	33.5
300	28	9,196	-45.3		27	39.7
250	28	10,397	-50.7		27	47.2
200	28	11,839	-53.5		27	48.8
175	28	12,697	-54.7		27	43.1
150	28	13,679	-56.5		27	38.5
125	28	14,826	-60.2		27	33.9
100	28	16,207	-63.7		27	29.2
80	28	17,572	-65.0		27	22.0
70	28	18,387	-64.6		27	18.7
60	28	19,328	-65.3		28	13.0
50	26	20,445	-64.3		27	9.5
40	25	21,810	-63.4		27	7.6
30	24	23,585	-62.2		28	4.7
25	23	24,716	-61.1		26	5.6
20	23	26,110	-58.4		26	7.2
15	22	27,936	-54.3		26	13.6
10	13	30,545	-45.9			
7						

* BARROW, ALASKA
1030 MB

BARTER IS., ALASKA
1021 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	15	-27.0	-30.5	23	1.5
1000	27	174	-20.9	-25.6	26	1.6
950	28	549	-17.3	-22.8	26	2.0
900	28	957	-14.4	-20.4	28	3.4
850	28	1,390	-14.7	-22.5	29	3.6
800	28	1,849	-16.1	-24.7	29	3.6
750	28	2,333	-18.1	-25.5	30	4.0
700	28	2,845	-20.7	-28.6	30	5.3
650	28	3,390	-23.8	-31.5	30	6.1
600	28	3,971	-27.4	-34.3	29	6.5
550	26	4,593	-30.9	-37.1	29	7.6
500	28	5,263	-35.1	-41.9	29	8.7
450	28	5,991	-39.6	-41.1	29	10.3
400	28	6,787	-45.1		29	12.0
350	28	7,672	-50.3		29	13.9
300	28	8,664	-55.2		29	14.6
250	28	9,823	-55.7		29	14.9
200	28	11,254	-52.5		28	14.5
175	28	12,121	-50.9		28	14.2
150	26	13,127	-49.6		28	12.9
125	28	14,324	-48.7		28	15.2
100	28	15,795	-47.5		28	15.3
80	28	17,273	-47.1		27	15.4
70	28	18,158	-46.6		28	14.0
60	28	19,179	-47.3		28	14.6
50	28	20,384	-47.8		28	13.6
40	28	21,856	-48.2		29	11.1
30	27	23,755	-50.0		30	9.6
25	26	24,951	-50.9		30	8.1
20	26	26,401	-51.7		33	8.0
15	25	28,266	-52.3		34	7.3
10	23	30,907	-52.2		36	9.9
7	5	33,269	-51.0			

BETHEL, ALASKA
1004 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	27	39	-13.7	-18.6	04	3.7
1000	15	142	-6.5	-11.4	09	4.5
950	27	464	-6.1	-12.6	10	6.2
900	27	868	-5.8	-13.9	13	5.3
850	27	1,335	-7.4	-16.1	14	5.6
800	27	1,805	-9.8	-17.9	14	5.0
750	27	2,301	-12.5	-21.2	15	5.2
700	27	2,824	-15.7	-24.5	15	6.1
650	27	3,380	-18.9	-27.5	15	6.9
600	27	3,972	-22.2	-30.3	16	7.0
550	27	4,607	-26.4	-34.6	16	6.6
500	27	5,289	-31.0	-39.4	16	6.7
450	27	6,029	-36.1	-43.0	16	6.4
400	27	6,837	-41.9	-46.9	17	6.2
350	27	7,734	-47.1		17	5.5
300	27	8,739	-52.6		17	3.5
250	27	9,909	-54.3		18	4.0
200	27	11,346	-51.7		20	7.4
175	27	12,216	-49.5		21	7.7
150	27	13,228	-48.9		21	7.8
125	27	14,427	-48.6		22	6.7
100	26	15,891	-48.3		21	6.3
80	26	17,359	-49.0		20	7.0
70	25	18,230	-49.3		20	6.2
60	25	19,240	-49.9		20	5.6
50	25	20,430	-50.3		20	5.8
40	24	21,890	-51.1		19	4.4
30	23	23,755	-52.4		17	3.2
25	23	24,932	-53.2		12	2.5
20	22	26,370	-53.6		10	4.1
15	18	28,220	-53.9		09	3.8
10	6	30,675	-58.0			

* BISMARCK, N. DAK.
960 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	503	-8.9	-11.3	35	.4
1000						
950	25	592	-9.4	-13.9	33	.6
900	28	1,000	-6.6	-11.8	30	2.7
850	28	1,449	-5.0	-13.7	30	5.4
800	28	1,924	-6.3	-15.3	30	7.3
750	28	2,428	[illegible]	-17.5	31	8.9
700	28	2,961	-10.8	-21.6	31	10.3
650	28	3,527	-14.0	-23.8	30	11.8
600	28	4,131	-17.8	-26.7	30	13.5
550	28	4,776	-22.0	-31.3	30	14.9
500	28	5,471	-26.6	-35.1	30	15.9
450	28	6,224	-32.1	-39.9	30	17.6
400	28	7,044	-38.4	-44.9	30	18.4
350	28	7,952	-45.4		30	19.7
300	28	8,960	-53.1		30	21.6
250	28	10,116	-59.2		30	22.4
200	28	11,516	-57.6		30	21.6
175	28	12,365	-54.9		29	20.4
150	28	13,352	-54.1		29	20.2
125	27	14,528	-54.8		29	19.1
100	27	15,953	-55.5		29	17.5
80	27	17,372	-56.4		29	15.1
70	27	18,218	-57.4		30	13.7
60	26	19,184	-58.5		30	12.9
50	26	20,326	-59.8		30	11.8
40	25	21,715	-60.9		31	10.5
30	21	23,515	-62.1		33	7.2
25	20	24,638	-63.3		34	7.6
20	17	26,001	-62.8		34	8.5
15	14	27,806	-61.3		36	7.3
10	6	30,291	-57.5			

BOISE, IDAHO
918 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	871	1.2	-3.5	14	2.9
1000						
950						
900	28	1,026	1.9	-3.9	14	3.1
850	28	1,486	.4	-6.9	14	3.7
800	28	1,971	-1.8	-9.7	17	3.1
750	28	2,482	-4.6	-12.0	22	3.3
700	28	3,022	-7.7	-15.3	24	4.0
650	28	3,595	-10.7	-18.0	24	4.2
600	28	4,207	-14.5	-23.1	25	5.2
550	28	4,860	-18.9	-28.1	26	5.5
500	28	5,563	-24.1	-32.6	25	6.9
450	28	6,323	-29.8	-37.3	25	8.1
400	28	7,152	-36.3	-44.1	26	9.2
350	28	8,067	-43.7		26	9.9
300	28	9,081	-51.9		26	11.9
250	28	10,244	-58.6		26	13.3
200	28	11,643	-58.1		27	13.9
175	28	12,490	-55.5		27	15.0
150	28	13,476	-54.6		27	14.5
125	28	14,641	-55.4		27	14.5
100	28	16,059	-56.8		27	12.4
80	28	17,468	-58.2		27	10.4
70	28	18,308	-58.7		28	8.9
60	27	19,281	-59.4		29	6.8
50	27	20,421	-59.9		31	5.0
40	27	21,812	-60.9		34	4.2
30	24	23,602	-61.8		01	5.2
25	21	24,712	-62.2		01	6.3
20	17	26,092	-62.1		02	7.2
15	13	27,887	-61.5		01	7.6
10						
7						
5						

BOOTHVILLE, LA.
1021 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	1	9.8	6.9	01	2.6
1000	28	173	10.9	6.1	01	2.1
950	28	600	8.6	2.9	31	1.3
900	28	1,047	7.7	-1.3	26	3.9
850	28	1,518	6.7	-5.4	27	6.4
800	28	2,014	4.8	-10.0	28	8.2
750	28	2,538	2.5	-10.7	28	9.5
700	28	3,093	.0	-13.1	27	12.1
650	28	3,684	-3.1	-16.0	27	14.1
600	28	4,314	-6.4	-19.3	27	17.8
550	28	4,989	-10.4	-22.6	27	21.1
500	28	5,715	-15.3	-26.8	27	24.9
450	28	6,504	-20.3	-30.7	27	27.6
400	28	7,367	-26.2	-35.0	27	33.1
350	28	8,322	-33.1	-41.1	27	37.5
300	27	9,390	-39.4	-44.7	27	45.8
250	27	10,619	-46.8		28	53.0
200	27	12,072	-54.5		28	50.4
175	26	12,916	-57.1		27	48.4
150	26	13,886	-59.7		28	43.7
125	25	15,018	-64.5		28	38.8
100	25	16,365	-69.2		28	30.6
80	22	17,704	-70.2		28	20.8
70	22	18,498	-70.5		28	16.5
60	22	19,414	-69.6		28	11.8
50	22	20,509	-66.7		28	7.7
40	22	21,863	-65.1		29	4.8
30	20	23,628	-61.9		28	4.1
25	17	24,766	-59.3		26	5.9
20	17	26,176	-55.2		27	9.0
15	15	28,046	-49.1		26	14.3
10	7	30,788	-38.9			

* BROWNSVILLE, TEXAS
1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	7	12.1	10.3	01	1.1
1000	28	164	14.3	11.2	08	1.4
950	28	597	12.4	8.6	13	3.5
900	28	1,050	11.0	4.1	15	3.1
850	28	1,527	9.8	-.6	17	1.6
800	28	2,030	8.4	-3.2	23	3.3
750	28	2,561	6.4	-5.9	25	6.1
700	28	3,125	4.2	-9.4	26	9.0
650	28	3,725	1.0	-14.1	26	12.2
600	28	4,363	-3.1	-18.4	26	15.5
550	28	5,047	-7.6	-22.6	27	19.5
500	28	5,782	-12.2	-27.4	27	23.3
450	28	6,580	-17.3	-31.3	27	27.0
400	28	7,453	-22.9	-33.4	27	31.9
350	28	8,421	-29.2	-39.5	27	37.7
300	28	9,505	-36.2	-47.2	27	44.5
250	28	10,746	-45.3		27	46.1
200	28	12,204	-54.8		27	49.3
175	28	13,049	-59.1		27	47.4
150	28	14,006	-63.3		27	43.2
125	27	15,119	-67.9		27	34.9
100	27	16,442	-73.3		27	25.7
80	27	17,740	-74.7		27	18.7
70	27	18,517	-74.6		27	12.4
60	25	19,415	-72.2		28	7.6
50	24	20,496	-69.0		29	5.6
40	23	21,842	-66.1		27	4.2
30	22	23,599	-63.8		28	4.1
25	22	24,724	-61.1		28	4.4
20	22	26,123	-57.3		27	7.6
15	20	27,967	-51.5		27	12.6
10	18	30,659	-41.0		26	13.0
7	12	33,143	-31.8		23	19.2
5	7	35,523	-31.9			

BUFFALO, N. Y.
995 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	218	-6.6	-10.5	23	1.1
1000	9	252	-13.0	-16.4		
950	28	580	-6.9	-11.1	25	1.8
900	28	1,001	-7.5	-12.8	28	3.8
850	28	1,446	-8.5	-14.9	29	6.3
800	28	1,915	-9.6	-15.5	29	7.7
750	28	2,413	-11.4	-18.9	29	9.1
700	28	2,940	-13.5	-21.2	29	10.7
650	28	3,500	-16.3	-24.0	29	11.6
600	28	4,099	-19.4	-27.0	29	12.6
550	28	4,740	-23.8	-31.3	29	13.1
500	28	5,430	-28.6	-36.4	29	14.8
450	28	6,177	-33.4	-39.6	28	16.9
400	28	6,995	-39.3	-43.9	28	18.7
350	28	7,900	-45.6		28	20.0
300	28	8,910	-51.6		28	22.3
250	28	10,084	-54.7		27	25.3
200	28	11,513	-53.7		27	23.9
175	28	12,375	-52.2		27	23.0
150	28	13,373	-52.3		27	22.9
125	27	14,551	-53.5		27	21.3
100	26	15,980	-55.7		27	20.6
80	25	17,399	-57.3		27	17.3
70	25	18,241	-59.4		26	15.9
60	23	19,204	-58.9		26	14.7
50	21	20,344	-59.2		26	13.9
40	19	21,736	-60.1		26	11.3
30	18	23,528	-60.5		25	10.6
25	18	24,665	-60.0		25	10.0
20	16	26,054	-59.4		24	12.5
15	14	27,869	-56.3		25	14.9

CAPE HATTERAS, N. C.
1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	4	4.1	1.4	36	3.4
1000	28	160	6.0	-2.1	36	4.3
950	28	579	3.5	-3.6	35	5.7
900	28	1,017	2.0	-6.0	33	4.7
850	28	1,477	.6	-10.2	29	4.3
800	28	1,962	[illegible]	[illegible]	27	7.3
750	28	2,475	-3.4	-14.6	27	10.0
700	28	3,018	-6.0	-18.5	27	12.4
650	28	3,596	-8.9	-21.9	27	15.0
600	28	4,212	-12.2	-24.2	27	17.7
550	27	4,876	-16.3	-28.4	27	20.6
500	27	5,586	[illegible]	-32.8	27	22.5
450	27	6,355	-26.6	-38.5	27	24.1
400	27	7,196	-31.3	-43.3	27	26.4
350	27	8,129	-38.4	-44.1	27	30.2
300	27	9,170	-45.6		27	33.6
250	27	10,367	-51.4		27	37.2
200	27	11,808	-53.2		27	40.9
175	27	12,668	-53.7		27	41.4
150	27	13,658	-54.4		27	35.8
125	26	14,818	-57.5		27	33.1
100	26	16,217	-60.7		27	25.9
80	26	17,598	-62.6		27	20.5
70	26	18,422	-62.4		27	15.1
60	25	19,372	-62.6		27	11.4
50	25	20,496	-62.6		26	9.1
40	25	21,873	-62.3		27	6.4
30	23	23,656	-60.9		25	5.4
25	[illegible]	24,790	-60.1		26	[illegible]
20	[illegible]	26,188	-58.7		25	[illegible]
15	[illegible]	27,994	-55.3		25	[illegible]
10	8	30,624	-45.9			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* CARIBOU, MAINE
994 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	191	-13.3	-17.3	31	2.9
1000	[illegible]	252	-20.1	-25.1		
950	28	529	-12.4	-15.9	32	4.7
900	28	943	-11.9	-16.3	32	5.1
850	28	1,381	-12.6	-16.9	31	5.8
800	28	1,843	-13.0	-17.7	30	6.5
750	28	2,335	-14.1	-20.3	28	7.2
700	28	2,856	-15.8	-23.1	27	8.6
650	28	3,413	-18.0	-26.0	27	10.8
600	28	4,009	-20.7	-29.3	26	13.0
550	28	4,648	-24.2	-32.5	26	15.1
500	28	5,337	-28.6	-37.2	25	17.0
450	28	6,084	-33.8	-40.6	25	19.1
400	28	6,900	-39.5	-43.9	25	21.8
350	28	7,805	-45.4		24	24.0
300	28	8,816	-50.6		24	26.9
250	28	9,990	-54.1		24	28.7
200	28	11,428	-52.1		25	25.3
175	28	12,295	-51.3		24	24.0
150	28	13,298	-51.1		24	23.3
125	28	14,480	-52.3		25	21.7
100	28	15,918	-53.8		25	19.9
80	27	17,347	-55.2		25	[illegible]
70	27	18,198	-56.3		25	17.3
60	27	19,177	-56.9		24	16.6
50	26	20,330	-57.9		24	15.1
40	26	21,735	-58.8		24	13.8
30	25	23,533	-60.3		24	14.3
25	19	24,668	-60.8		23	14.1
20	19	26,060	-59.7		23	15.1
15	16	27,878	-57.4		23	14.0
10	[illegible]	30,475	-52.7		26	14.0
7	[illegible]	32,816	-49.0			

CHARLESTON, S. C.
1018 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	13	4.5	.6	35	1.6
1000	28	162	7.2	.5	36	2.2
950	28	584	5.9	-3.5	35	2.3
900	28	1,025	4.2	-5.5	30	2.3
850	28	1,489	2.7	-9.2	27	5.0
800	28	1,979	1.4	-13.1	27	7.1
750	28	2,496	-.7	-16.3	27	8.9
700	28	3,045	-3.3	-17.2	27	11.3
650	28	3,628	-6.3	-19.8	27	14.0
600	28	4,250	-10.0	-24.2	27	16.8
550	28	4,916	-14.2	-27.2	27	20.3
500	28	5,632	-19.1	-31.5	27	23.0
450	28	6,408	-24.3	-36.9	27	26.1
400	28	7,257	-30.1	-41.5	27	30.2
350	28	8,198	-36.8	-46.3	27	34.4
300	28	9,246	-43.7	-44.8	27	41.3
250	28	10,453	-50.3		28	48.2
200	28	11,900	-53.2		28	49.4
175	28	12,757	-55.0		28	48.5
150	28	13,737	-57.2		27	41.9
125	28	14,881	-60.9		27	37.5
100	26	16,261	-64.1		27	29.6
80	25	17,616	-65.7		27	21.7
70	25	18,428	-65.6		27	17.6
60	25	19,366	-64.9		27	13.0
50	25	20,481	-64.3		27	8.8
40	25	21,850	-63.0		27	6.3
30	25	23,629	-61.0		26	4.0
25	25	24,768	-59.0		27	5.7
20	24	26,175	-56.5		26	7.6
15	23	28,024	-51.1		25	13.9
10	[illegible]	30,721	-41.0			

CHATHAM, MASS.
1016 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	27	16	-1.5	-4.9	35	2.3
1000	23	168	-2.5	-7.2	35	3.2
950	27	548	-3.7	-7.4	32	4.3
900	27	974	-5.2	-10.9	30	4.7
850	27	1,423	-5.8	-12.7	29	6.5
800	27	1,898	-6.6	-14.4	27	8.4
750	27	2,400	-8.5	-17.1	27	9.9
700	27	2,933	-11.2	-20.6	26	11.6
650	27	3,499	-14.1	-23.5	26	12.7
600	27	4,103	-17.1	-26.6	26	14.2
550	27	4,750	-21.3	-30.8	26	16.6
500	27	5,447	-26.0	-34.4	26	18.3
450	27	6,202	-31.2	-38.5	26	19.1
400	27	7,026	-37.3	-42.0	25	20.9
350	27	7,940	-43.3		25	22.6
300	27	8,960	-49.5		25	25.7
250	27	10,141	-53.8		25	28.7
200	27	11,571	-53.6		26	27.8
175	27	12,434	-52.2		26	25.0
150	27	13,431	-52.4		26	23.8
125	26	14,601	-53.4		26	21.5
100	23	16,025	-56.0		26	19.2
80	22	17,434	-56.9		26	18.5
70	22	18,279	-57.9		26	14.1
60	22	19,249	-58.7		25	12.8
50	22	20,392	-59.6		25	11.4
40	21	21,786	-59.5		24	8.8
30	20	23,587	-59.6		24	8.4
25	18	24,726	-59.5		24	9.7
20	17	26,120	-58.6		24	7.6
15	12	27,976	-55.3		24	8.8
10	9	30,586	-49.0			

CHIHUAHUA, MEXICO
858 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	1,428	5.2	.2	24	.7
850	28	1,507	7.0	-.1	24	1.1
800	28	2,007	6.5	-2.5	23	3.3
750	28	2,534	4.1	-5.8	24	5.9
700	28	3,092	1.6	-12.0	25	8.2
650	28	3,666	-1.8	-17.3	26	10.6
600	28	4,318	-5.6	-21.9	26	13.8
550	28	4,995	-10.0	-26.9	26	16.5
500	28	5,723	-15.3	-30.0	26	21.1
450	28	6,511	-20.4	-32.7	26	24.8
400	28	7,373	-26.2	-37.0	26	29.2
350	28	8,329	-32.6	-41.9	26	34.2
300	28	9,397	-38.9	-45.6	26	40.6
250	28	10,631	-45.5		26	42.6
200	28	12,092	-53.3			
175	26	12,950	-56.9			
150	25	13,919	-61.0			
125	23	15,030	-65.5			
100	21	16,375	-69.7			
80	19	17,698	-71.6			
70	19	18,490	-70.1			
60	17	19,410	-69.7			
50	17	20,499	-68.2			
40	17	21,846	-66.3		28	4.3
30	16	23,600	-63.2		28	4.4
25	15	24,733	-61.3		27	4.4
20	13	26,136	-57.4			
15	11	28,003	-52.1			
10	9	30,682	-43.7			

* COLD BAY, ALASKA
998 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	24	30	-.8	-1.9	13	1.8
1000	12	112	.1	-2.5	15	6.5
950	24	422	-2.6	-4.2	13	3.7
900	24	850	-5.0	-6.9	14	3.3
850	24	1,297	-7.3	-11.6	14	5.4
800	24	1,768	-9.3	-14.2	14	5.0
750	24	2,265	-11.5	-18.4	16	4.0
700	24	2,791	-14.2	-21.3	16	4.1
650	24	3,350	-17.2	-24.5	16	5.1
600	24	3,947	-20.6	-27.6	16	5.6
550	24	4,585	-24.8	-32.0	17	5.4
500	24	5,272	-29.4	-37.4	16	5.3
450	24	6,017	-34.3	-42.6	16	5.4
400	24	6,831	-40.4	-46.0	16	5.1
350	24	7,731	-47.0		16	4.2
300	24	8,736	-52.2		16	6.1
250	24	9,911	-53.3		19	5.4
200	24	11,363	-48.4		20	5.9
175	24	12,243	-48.1		21	5.9
150	24	13,259	-48.1		21	5.7
125	24	14,463	-48.1		21	6.4
100	23	15,927	-49.9		21	6.4
80	23	17,387	-49.9		20	5.7
70	23	18,260	-50.4		20	5.3
60	22	19,269	-51.4		19	4.8
50	22	20,451	-52.3		19	4.0
40	22	21,891	-53.3		15	4.1
30	21	23,741	-54.5		12	3.4
25	21	24,908	-55.1		10	3.4
20	20	26,339	-55.8		08	6.3
15	16	28,162	-56.2		08	6.6
10	12	30,722	-55.8		08	9.0
7	8	32,998	-54.6			

DAYTON, OHIO
985 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	299	-3.4	-6.4	25	.1
1000						
950	28	583	-2.5	-6.1	22	2.7
900	28	1,012	-3.1	-9.5	26	3.9
850	28	1,464	-4.1	-13.0	27	5.3
800	28	1,941	-5.7	-15.3	27	6.2
750	28	2,445	-8.0	-16.8	27	6.8
700	28	2,979	-10.5	-18.4	28	8.9
650	28	3,547	-13.2	-22.3	28	10.2
600	28	4,153	-16.9	-26.6	28	11.5
550	28	4,800	-21.1	-31.5	28	12.6
500	28	5,498	-25.8	-36.1	28	14.6
450	28	6,254	-30.7	-41.1	28	16.6
400	28	7,060	-36.7	-45.9	28	18.2
350	28	7,994	-43.4		28	19.7
300	28	9,013	-50.3		28	22.3
250	28	10,188	-55.3		27	23.8
200	28	11,614	-53.8		28	25.2
175	28	12,475	-52.7		28	24.4
150	27	13,471	-53.2		28	25.4
125	27	14,640	-55.2		27	23.4
100	27	16,056	-57.7		28	21.8
80	25	17,460	-59.3		27	18.7
70	25	18,295	-60.0		27	17.2
60	25	19,256	-60.8		27	14.2
50	24	20,388	-62.0		27	12.0
40	24	21,766	-62.8		27	10.1
30	21	23,533	-62.7		27	9.1
25	20	24,664	-61.8		27	9.5
20	18	26,051	-59.9		26	10.3
15	14	27,883	-54.9		26	12.9
10	[illegible]	30,548	-44.6			

DEL RIO, TEXAS
984 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	314	7.2	4.0	08	1.6
950	28	605	8.0	3.1	13	3.1
900	28	1,050	6.9	1.4	18	3.4
850	28	1,520	6.6	-.2	21	2.9
800	28	2,017	5.2	-5.4	24	4.3
750	28	2,542	2.9	-8.3	26	6.9
700	28	3,099	.4	-12.4	27	9.9
650	28	3,690	-2.7	-16.2	27	12.0
600	28	4,320	-6.4	-19.1	26	15.0
550	28	4,996	-10.6	-24.0	26	18.4
500	28	5,722	-15.2	-28.5	26	22.3
450	28	6,510	-20.7	-32.9	26	24.9
400	28	7,371	-26.4	-36.0	26	30.8
350	28	8,326	-33.0	-39.9	27	37.5
300	28	9,392	-39.5	-44.2	27	44.6
250	28	10,623	-46.0		27	48.8
200	28	12,082	-53.6		27	48.8
175	28	12,933	-57.2		27	47.9
150	28	13,901	-60.4		27	42.3
125	28	15,027	-64.4		27	36.9
100	28	16,375	-69.4		27	28.2
80	28	17,701	-70.9		27	20.2
70	27	18,496	-70.3		27	15.9
60	25	19,409	-69.2		27	10.7
50	25	20,500	-68.0		29	7.6
40	23	21,849	-65.7		28	5.2
30	21	23,602	-63.6		28	5.1
25	19	24,732	-60.8		28	6.1
20	17	26,133	-58.2		26	8.5
15	15	27,961	-53.8		27	12.9

DENVER, COLO.
838 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	1,611	-2.8	-9.1	20	1.5
800	28	1,978	-1.0	-13.1	29	2.2
750	28	2,491	-3.0	-17.3	31	3.8
700	28	3,034	-6.3	-20.0	31	5.6
650	28	3,610	-9.7	-22.9	30	6.4
600	28	4,224	-13.6	-27.5	31	6.9
550	28	4,879	-18.1	-32.7	30	7.3
500	28	5,584	-23.6	-37.1	30	8.3
450	28	6,345	-29.2	-41.1	29	9.7
400	28	7,176	-35.3	-47.2	29	11.5
350	28	8,096	-42.5	-48.3	29	13.2
300	27	9,117	-50.0		28	17.9
250	27	10,292	-55.0		27	24.1
200	27	11,712	-56.1		27	27.6
175	27	12,563	-55.1		27	28.6
150	27	13,549	-55.0		27	25.6
125	27	14,712	-56.5		27	24.1
100	27	16,117	-59.7		28	19.6
80	27	17,509	-60.5		28	14.4
70	27	18,340	-61.4		28	12.6
60	27	19,295	-62.1		28	9.5
50	27	20,421	-62.8		29	7.4
40	27	21,796	-63.0		30	6.1
30	25	23,567	-63.5		32	5.2
25	22	24,697	-63.9		33	5.3
20	17	26,082	-63.7		34	6.5
15	10	27,870	-61.6			

DODGE CITY, KANS.
927 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	791	-2.8	-6.4	31	1.2
900	28	1,025	.3	-4.9	31	2.3
850	28	1,485	1.1	-9.3	30	3.7
800	28	1,972	-.2	-12.3	31	4.6
750	28	2,486	-2.7	-15.2	31	5.2
700	28	3,030	-5.8	-17.8	30	6.5
650	28	3,608	-8.7	-22.9	29	7.4
600	28	4,224	-12.4	-26.9	29	8.0
550	28	4,882	-17.1	-31.0	29	9.0
500	28	5,590	-22.4	-35.7	29	11.0
450	28	6,355	-27.9	-39.8	29	12.8
400	28	7,191	-34.1	-46.1	28	14.6
350	28	8,115	-40.9	-48.6	28	18.6
300	28	9,145	-48.0		28	24.3
250	28	10,333	-52.7		27	31.3
200	27	11,770	-54.5		27	37.3
175	27	12,626	-54.4		28	35.5
150	26	13,604	-55.5		28	31.2
125	26	14,763	-57.3		27	29.4
100	26	16,165	-60.1		28	24.0
80	26	17,552	-61.9		28	18.1
70	26	18,379	-61.8		28	15.0
60	24	19,334	-62.5		28	12.3
50	24	20,457	-63.1		28	9.5
40	23	21,830	-62.9		29	6.0
30	20	23,608	-62.3		29	5.0
25	18	24,731	-61.9		29	5.6
20	15	26,108	-60.3		27	8.9
15	13	27,906	-56.4		27	12.9
10	8	30,563	-45.0			

EL PASO, TEXAS
884 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	1,193	3.1	-1.9	33	.2
850	28	1,511	5.2	-3.2	25	1.2
800	28	2,004	2.8	-5.2	26	3.2
750	28	2,525	.6	-8.2	26	6.8
700	28	3,076	-2.2	-13.3	26	8.3
650	28	3,661	-6.0	-17.3	26	9.9
600	28	4,283	-9.6	-24.0	27	12.4
550	28	4,950	-13.7	-28.2	27	15.7
500	28	5,667	-18.9	-31.7	27	17.8
450	28	6,443	-24.5	-38.2	27	20.5
400	28	7,291	-30.6	-42.8	26	25.0
350	28	8,231	-36.5	-47.2	26	30.5
300	28	9,284	-42.4	-50.6	26	40.4
250	28	10,503	-47.2		26	48.3
200	28	11,960	-53.2		26	51.4
175	28	12,815	-55.7		26	49.1
150	28	13,790	-58.9		26	43.7
125	27	14,928	-62.3		27	38.6
100	24	16,293	-66.4		27	27.1
80	22	17,636	-68.1		26	20.6
70	21	18,444	-66.9		27	15.6
60	19	19,376	-67.0		28	12.4
50	17	20,484	-66.6		29	4.4
40	14	21,836	-65.7		34	1.3
30	12	23,598	-63.9		01	2.1
25	11	24,716	-62.9			
20	7	26,113	-58.9			
15	5	27,931	-54.8			

ELY, NEV.
808 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	1,908	-7.0	-9.7	20	3.3
1000						
950						
900						
850						
800	26	1,993	-3.3	-5.8	20	2.9
750	28	2,496	-3.3	-8.5	18	2.3
700	28	3,040	-6.0	-12.6	21	2.4
650	28	3,617	-9.2	-16.5	23	4.0
600	28	4,233	-12.7	-21.7	24	5.2
550	28	4,891	-17.2	-26.8	26	5.7
500	28	5,599	-22.2	-32.1	26	6.7
450	28	6,365	-27.9	-37.6	26	7.6
400	28	[illegible]	[illegible]	-43.8	25	8.9
350	27	8,117	-42.3	-46.8	26	9.6
300	27	9,137	-51.0		27	11.9
250	27	10,307	-56.5		27	17.1
200	27	11,724	-55.6		26	21.1
175	27	12,578	-54.5		26	21.9
150	28	13,563	-54.6		27	22.3
125	26	14,727	-56.0		27	18.9
100	25	16,138	-58.8		27	15.1
80	23	17,534	-60.6		27	11.6
70	23	18,366	-60.5		27	10.0
60	21	19,319	-61.0		28	7.4
50	[illegible]	20,448	-62.4		29	5.8
40	19	21,822	-62.6		31	4.9
30	17	23,591	-63.1		35	4.2
25	16	24,713	-63.1		35	4.5
20	16	26,090	-62.0		34	4.5
15	14	27,858	-60.2		31	5.6
10	8	30,370	-52.6			

EMPALME, MEXICO
1015 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	27	12	13.9	8.4	31	1.1
1000	27	135	17.1	7.0	33	1.5
950	27	572	16.5	2.1	33	2.1
900	27	1,030	14.0	-.6	28	1.5
850	27	1,509	10.8	-3.8	23	2.6
800	27	2,012	8.2	-10.1	24	3.7
750	27	2,543	5.9	-13.6	25	6.7
700	27	3,104	2.8	-15.5	26	9.4
650	27	3,700	-.8	-20.2	26	11.0
600	27	4,334	-4.9	-23.1	26	13.0
550	27	5,012	-9.6	-26.5	26	16.6
500	27	5,741	-14.2	-30.2	26	19.4
450	27	6,532	-19.7	-33.3	26	22.7
400	27	7,396	-26.0	-37.5	26	25.4
350	27	8,353	-32.0	-44.0	26	33.1
300	27	9,426	-38.0	-48.9	26	39.6
250	27	10,663	-44.8		26	47.1
200	26	12,127	-52.5		26	44.4
175	26	12,984	-56.1		26	41.8
150	26	13,953	-60.7		26	38.5
125	26	15,077	-64.8		26	33.0
100	25	16,429	-68.4		27	24.0
80	23	17,762	-70.2		26	17.4
70	22	18,563	-68.8		26	12.8
60	21	19,489	-67.9		27	9.3
50	20	20,588	-66.8		29	5.2
40	19	21,936	-65.7		28	3.3
30	17	23,701	-62.5		29	2.9
25	17	24,831	-60.6		29	3.1
20	17	26,229	-57.8		27	4.6
15	13	28,070	-53.1		26	8.5
10	5	30,816	-41.4			

* FAIRBANKS, ALASKA
1001 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	135	-22.3	-28.8	02	1.4
1000	16	214	-13.8	-18.1	04	2.1
950	28	529	-11.3	-18.0	09	4.4
900	28	944	-11.1	-18.7	11	5.0
850	28	1,383	-11.1	-19.2	12	3.8
800	28	1,848	-12.3	-21.3	11	2.9
750	28	2,339	-14.6	-23.5	11	1.7
700	28	2,859	-17.6	-26.8	09	.7
650	28	3,410	-21.0	-29.2	15	.6
600	28	3,997	-24.8	-32.6	20	.6
550	28	4,624	-29.1	-36.7	22	1.8
500	28	5,300	-33.3	-41.6	22	2.3
450	28	6,033	-38.2	-43.4	24	3.0
400	28	6,834	-43.6		27	2.6
350	28	7,724	-49.1		28	2.9
300	28	8,722	-53.5		28	5.0
250	28	9,890	-54.6		28	5.5
200	28	11,327	-52.2		27	6.8
175	28	12,193	-50.7		27	6.8
150	28	13,201	-49.5		27	8.3
125	28	14,398	-48.4		27	8.2
100	27	15,863	-48.4		27	7.9
80	27	17,334	-47.8		26	8.1
70	27	18,216	-48.0		26	7.3
60	26	19,236	-48.5		26	7.2
50	26	20,432	-49.9		27	5.9
40	25	21,887	-51.1		26	4.8
30	22	23,764	-52.2		26	2.3
25	20	24,948	-52.1		32	2.5
20	20	26,389	-52.9		04	2.4
15	16	28,295	-52.6		05	4.6
10	7	30,755	-55.4			

FLINT, MICH.
992 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	236	-6.2	-10.3	17	.4
1000	7	249	-12.3	-15.8		
950	28	575	-6.9	-10.1	27	.9
900	28	997	-7.2	-12.5	30	2.6
850	28	1,442	-8.2	-14.5	29	4.4
800	28	1,913	-8.7	-16.0	28	6.3
750	28	2,412	-10.4	-17.4	28	8.0
700	28	2,941	-13.0	-19.4	28	9.4
650	28	3,503	-15.9	-22.9	28	11.1
600	28	4,102	-19.5	-26.1	28	12.5
550	28	4,743	-23.7	-30.4	28	13.7
500	28	5,434	-28.3	-35.3	29	15.7
450	28	6,181	-33.7	-40.1	28	17.4
400	28	6,997	-39.6	-44.7	28	18.6
350	28	7,901	-45.9		28	20.4
300	28	8,910	-52.1		28	22.7
250	28	10,078	-56.2		28	24.1
200	28	11,500	-54.3		28	24.0
175	28	12,359	-52.9		28	23.7
150	27	13,354	-52.8		28	23.0
125	27	14,527	-54.4		28	22.4
100	27	15,951	-56.4		28	19.4
80	26	17,364	-57.7		28	17.1
70	25	18,207	-58.2		27	14.5
60	25	19,175	-59.5		27	13.4
50	25	20,312	-60.8		27	11.1
40	25	21,698	-61.5		27	11.2
30	24	23,478	-62.1		27	9.2
25	24	24,606	-62.0		27	9.3
20	22	26,005	-61.1		27	8.3
15	20	27,821	-58.0		25	10.7
10	11	30,418	-50.7			

FORT WORTH, TEXAS
1000 MB

Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	180	4.7	.7	32	.9
1000	16	214	3.2	-1.1	36	2.3
950	28	599	5.6	-.9	27	2.9
900	28	1,041	4.6	-5.1	29	4.7
850	28	1,506	3.7	-8.4	28	4.9
800	28	1,997	1.9	-10.6	28	5.2
750	28	2,515	-.5	-13.4	28	7.4
700	28	3,064	-3.1	-15.2	28	9.0
650	28	3,647	-6.4	-18.6	28	11.2
600	28	4,269	-9.5	-22.4	28	13.1
550	28	4,936	-13.7	-26.5	28	16.0
500	28	5,654	-18.7	-30.6	27	19.4
450	28	6,431	-24.2	-35.3	27	21.6
400	28	7,280	-29.8	-40.8	27	26.3
350	27	8,215	-36.6	-45.9	27	32.6
300	27	9,265	-43.1		27	40.5
250	27	10,479	-48.4		27	47.8
200	27	11,931	-53.1		27	51.1
175	27	12,787	-55.1		28	47.8
150	27	13,768	-57.5		28	42.6
125	27	14,909	-61.3		27	36.6
100	27	16,279	-65.3		27	29.0
80	26	17,633	-66.7		27	20.8
70	25	18,442	-66.7		27	16.9
60	24	19,372	-67.2		28	13.1
50	24	20,475	-66.2		29	8.3
40	23	21,839	-64.8		29	5.3
30	19	23,609	-62.9		29	4.8
25	16	24,728	-61.6		29	5.3
20	13	26,122	-59.5		28	6.6
15	9	27,943	-55.3			

*See reference note at end of table

RAWINSONDE DATA

Average monthly values

GLASGOW, MONT.
936 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	696	-7.5	-10.7	09	.5
1000						
950						
900	28	1,004	-3.8	-9.0	30	3.2
850	28	1,456	-3.6	-10.7	30	5.7
800	28	1,934	-5.0	-13.3	30	7.5
750	28	2,440	-7.4	-15.7	29	8.9
700	28	2,974	-10.4	-18.4	29	10.3
650	28	3,541	-13.6	-21.4	29	11.1
600	28	4,146	-17.5	-24.7	29	12.2
550	28	4,792	-21.6	-29.4	30	13.4
500	28	5,488	-26.6	-34.6	30	14.8
450	28	6,240	-32.3	-39.7	30	16.4
400	28	7,060	-38.5	-43.6	30	18.6
350	28	7,968	-45.4		30	19.1
300	28	8,976	-52.8		30	19.7
250	28	10,136	-59.0		30	19.7
200	28	11,534	-58.4		30	17.9
175	26	12,383	-56.2		29	18.3
150	25	13,371	-54.3		29	17.1
125	23	14,536	-54.9		29	16.6
100	22	15,958	-55.3		29	15.9
80	22	17,379	-56.5		30	13.8
70	22	18,225	-56.9		30	12.1
60	22	19,200	-57.7		31	11.4
50	21	20,350	-58.7		31	9.7
40	16	21,773	-59.5		32	8.6
30	15	23,570	-60.7		34	6.5
25	13	24,697	-61.6		34	8.8
20	13	26,078	-62.1		36	9.6
15	13	27,860	-61.3		02	12.2
10	6	30,401	-61.6			
7						
5						

GRAND JUNCTION, COLO.
855 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	1,472	-5.2	-8.5	12	1.4
1000						
950						
900						
850	24	1,532	-4.3	-9.2	12	1.9
800	28	1,997	-3.1	-8.8	13	2.7
750	28	2,507	-4.5	-11.3	17	2.3
700	28	3,048	-7.1	-15.1	24	3.3
650	28	3,623	-10.0	-18.9	26	4.6
600	28	4,237	-13.5	-24.2	27	4.9
550	28	4,894	-17.6	-29.2	27	6.1
500	28	5,600	-22.9	-33.8	28	7.3
450	28	6,364	-28.5	-39.1	28	8.5
400	28	7,197	-34.9	-45.1	28	10.7
350	28	8,117	-42.3	-46.1	28	12.5
300	28	9,139	-50.1		27	16.1
250	27	10,322	-55.5		27	22.8
200	27	11,744	-55.0		27	28.3
175	27	12,597	-54.6		27	28.6
150	27	13,584	-54.8		27	26.5
125	26	14,742	-56.8		27	21.9
100	26	16,146	-59.5		27	17.7
80	26	17,535	-61.4		27	13.2
70	26	18,363	-61.6		27	12.2
60	26	19,317	-62.3		28	10.2
50	26	20,443	-62.6		29	7.0
40	23	21,818	-63.0		30	5.1
30	21	23,583	-64.0		32	4.2
25	21	24,700	-63.7		33	4.5
20	17	26,082	-62.9		33	6.2
15	15	27,864	-59.5		31	7.4
10	11	30,438	-52.3			
7						
5						

* GREAT FALLS, MONT.
889 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	1,118	-5.3	-13.2	23	3.7
1000						
950						
900						
850	28	1,473	-2.9	-12.4	25	6.7
800	28	1,953	-4.4	-12.9	27	5.8
750	28	2,459	-6.6	-14.7	28	6.1
700	28	2,995	-9.6	-17.3	29	7.1
650	28	3,565	-12.3	-21.1	29	9.2
600	28	4,172	-16.1	-25.4	29	8.9
550	28	4,821	-20.7	-29.9	29	10.8
500	28	5,519	-25.8	-35.0	29	12.1
450	28	6,274	-31.4	-40.5	29	13.3
400	28	7,097	-37.9	-44.0	29	13.7
350	28	8,006	-44.8		29	13.6
300	28	9,016	-52.7		29	15.0
250	28	10,175	-59.2		29	15.5
200	27	11,573	-58.9		28	16.1
175	26	12,418	-55.5		29	15.5
150	26	13,403	-54.6		29	15.3
125	26	14,570	-54.6		29	14.9
100	25	15,992	-55.4		29	12.9
80	24	17,405	-56.2		29	11.8
70	24	18,253	-56.8		30	9.9
60	24	19,228	-57.7		30	8.3
50	24	20,375	-58.7		31	7.4
40	24	21,774	-59.6		33	7.0
30	24	23,568	-61.0		36	6.9
25	24	24,700	-61.6		36	7.5
20	22	26,086	-62.5		01	7.8
15	21	27,867	-61.9		02	7.5
10	16	30,376	-59.9		01	9.7
7	11	32,673	-55.0			
5	6	34,866	-51.2			

GREEN BAY, WIS.
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	210	-7.0	-9.8	36	1.6
1000	8	239	-11.8	-14.0		
950	28	572	-8.1	-10.3	01	1.8
900	28	992	-9.1	-13.2	32	2.0
850	28	1,435	-8.5	-16.6	30	3.2
800	28	1,905	-9.7	-17.3	29	4.7
750	28	2,401	-11.4	-19.9	29	6.7
700	28	2,928	-13.5	-21.9	29	8.6
650	28	3,490	-16.3	-24.7	29	10.2
600	28	4,088	-20.0	-27.9	29	12.1
550	28	4,728	-24.1	-33.0	29	13.0
500	28	5,417	-28.6	-37.1	29	15.1
450	28	6,164	-33.6	-40.9	29	17.1
400	28	6,981	-39.2	-45.6	29	18.8
350	28	7,885	-45.7		29	19.7
300	28	8,894	-52.4		29	21.2
250	28	10,061	-56.6		29	23.2
200	27	11,479	-54.7		29	23.4
175	27	12,338	-52.9		29	22.9
150	27	13,333	-53.1		28	21.6
125	27	14,508	-53.6		28	21.5
100	27	15,937	-55.4		28	19.4
80	27	17,353	-57.1		28	15.9
70	27	18,196	-58.2		28	15.3
60	27	19,165	-59.2		28	14.2
50	27	20,306	-60.3		29	12.0
40	26	21,694	-61.8		29	10.7
30	26	23,471	-62.7		28	9.9
25	21	24,597	-62.8		30	8.4
20	17	26,000	-60.8		29	6.5
15	12	27,811	-58.5		28	7.8
10	8	30,395	-53.5			
7						
5						

GREENSBORO, N.C.
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	275	-1.6	-5.7	35	1.5
1000						
950	28	589	1.5	-8.1	33	3.6
900	28	1,024	-.1	-8.6	32	4.1
850	28	1,480	-1.3	-12.2	31	4.5
800	28	1,962	-3.0	-15.2	31	6.2
750	28	2,472	-4.5	-18.5	29	7.8
700	28	3,013	-7.0	-20.2	28	9.6
650	28	3,588	-10.2	-21.8	28	11.4
600	28	4,200	-13.8	-24.9	28	13.6
550	28	4,857	-18.0	-28.6	28	[illegible]
500	28	5,562	-22.8	-32.5	28	18.9
450	28	6,327	-28.0	-38.2	28	20.5
400	28	7,163	-33.8	-44.8	28	22.9
350	27	8,080	-40.7	-49.2	28	27.0
300	27	9,110	-47.8		28	31.5
250	27	10,297	-53.4		27	34.1
200	27	11,733	-52.8		27	[illegible]
175	27	12,595	-52.9		28	34.9
150	27	13,586	-54.6		27	32.2
125	27	14,745	-57.6		27	32.0
100	27	16,143	-60.8		27	26.0
80	27	17,526	-62.1		27	20.8
70	27	18,350	-62.4		27	18.3
60	27	19,301	-62.8		27	13.8
50	27	20,425	-62.6		27	9.5
40	27	21,803	-62.3		27	9.1
30	26	23,583	-61.8		26	6.2
25	25	24,717	-60.3		26	7.2
20	24	26,116	-57.6		25	8.2
15	22	27,943	-54.0		26	12.6
10	15	30,576	-43.1		26	21.2
7						
5						

GUADALUPE IS., MEXICO
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	23	14.7	11.8	34	2.2
1000	28	149	13.5	10.2	33	2.9
950	28	579	10.6	5.6	32	2.4
900	28	1,028	8.3	.5	30	2.3
850	28	1,499	6.3	-5.2	28	3.1
800	28	1,994	5.0	-10.7	28	3.8
750	28	2,519	2.8	-15.2	27	4.7
700	28	3,074	.6	-18.7	27	7.0
650	27	3,667	-2.6	-21.9	27	8.4
600	27	4,297	-6.6	-24.7	26	10.8
550	27	4,970	-11.3	-28.5	27	12.5
500	27	5,694	-16.8	-32.2	27	13.2
450	27	6,477	-22.3	-36.8	27	13.9
400	27	7,331	-28.9	-42.1	27	10.3
350	27	8,277	-35.3	-47.9		
300	27	9,334	-41.1	-49.3		
250	27	10,557	-46.8			
200	26	12,019	-52.2			
175	26	12,878	-55.0			
150	26	13,854	-59.1			
125	25	14,986	-63.1			
100	25	16,345	-66.6			
80	24	17,695	-68.0			
70	23	18,500	-67.2			
60	22	19,430	-66.7			
50	22	20,534	-66.3			
40	21	21,884	-65.5			
30	20	23,643	-62.9			
25	19	24,768	-60.8			
20	17	26,175	-57.9			
15	12	27,984	-54.5			
10						
7						
5						

* GUAM, MARIANA IS.
1002 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	111	24.1	20.9	07	3.7
1000	26	127	23.9	20.3	07	4.8
950	28	574	21.0	18.6	07	11.7
900	28	1,041	18.0	15.2	07	10.3
850	28	1,530	15.5	11.9	07	8.6
800	28	2,043	13.4	5.1	08	7.5
750	28	2,586	13.3	-4.6	08	7.1
700	28	3,165	12.0	-12.3	08	6.0
650	28	3,782	9.2	-16.9	07	5.8
600	28	4,440	5.9	-20.2	07	6.3
550	28	5,147	1.8	-23.8	07	6.8
500	28	5,907	-3.4	-27.4	07	6.6
450	28	6,731	-9.1	-32.3	07	6.5
400	28	7,631	-15.4	-36.9	06	6.1
350	28	8,628	-22.3	-41.5	05	4.9
300	28	9,740	-30.4	-48.3	03	2.1
250	28	11,009	-40.6	-56.3	23	1.1
200	28	12,490	-52.5		20	5.2
175	28	13,340	-59.3		19	5.8
150	28	14,288	-67.0		19	6.5
125	28	15,367	-75.2		18	5.8
100	25	16,633	-82.0		12	3.2
80	22	17,878	-82.7		08	6.5
70	22	18,628	-80.0		08	8.7
60	22	19,511	-75.1		09	9.6
50	22	20,583	-70.3		10	9.3
40	22	21,917	-67.1		10	7.0
30	21	23,688	-59.7		26	1.3
25	20	24,840	-56.4		26	5.2
20	20	26,273	-51.5		27	10.0
15	18	28,171	-46.7		29	12.0
10	12	30,886	-42.9		28	8.4
7						
5						

HILO, HAWAII
1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	10	18.9	15.4	26	1.4
1000	28	165	19.4	14.4	30	1.1
950	28	605	16.0	13.2	05	2.1
900	28	1,062	12.4	10.8	06	3.5
850	28	1,540	9.0	7.6	06	3.6
800	28	2,041	7.6	-2.5	06	3.2
750	28	2,573	7.3	-11.7	08	1.8
700	28	3,139	6.3	-17.7	04	.7
650	28	3,744	3.9	-20.9	30	1.3
600	28	4,390	1.0	-23.5	28	3.8
550	28	5,064	-3.0	-26.6	28	7.2
500	28	5,831	-7.8	-29.9	28	10.5
450	28	6,642	-13.2	-33.5	28	13.3
400	28	7,529	-18.9	-38.3	28	17.1
350	28	8,515	-25.0	-42.1	28	20.8
300	28	9,617	-32.4	-48.8	27	24.2
250	28	10,878	-41.6	-55.3	27	27.5
200	28	12,357	-52.4		27	29.4
175	28	13,208	-58.8		27	28.3
150	28	14,159	-65.9		28	27.2
125	27	15,242	-72.6		28	23.8
100	27	16,533	-78.4		28	16.1
80	27	17,797	-80.1		27	8.7
70	27	18,557	-77.0		27	4.8
60	27	19,455	-71.6		27	3.6
50	27	20,543	-67.9		27	2.6
40	27	21,890	-66.7		29	1.8
30	27	23,645	-62.3		01	.8
25	27	24,781	-59.0		28	1.7
20	26	26,196	-55.0		28	5.0
15	22	28,055	-50.8		27	7.7
10	19	30,749	-41.1		26	14.4
7						
5						

HUNTINGTON W. VA.
991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	246	-1.8	-5.9	26	.6
1000						
950	28	581	-.3	-6.2	25	2.0
900	28	1,013	-1.9	-7.2	27	3.9
850	28	1,466	-3.0	-11.3	28	5.5
800	28	1,946	-4.6	-14.1	28	6.5
750	28	2,452	-6.9	-16.2	28	8.0
700	28	2,988	-9.2	-19.2	28	10.2
650	28	3,559	-11.9	-21.8	28	12.4
600	28	4,167	-15.4	-24.7	28	13.4
550	28	4,820	-19.3	-29.3	28	15.2
500	28	5,522	-23.9	-33.8	28	17.6
450	28	6,284	-28.8	-38.7	28	20.4
400	28	7,116	-35.1	-44.8	28	22.1
350	28	8,037	-41.9	-47.2	28	24.2
300	28	9,062	-48.9		28	28.3
250	28	10,245	-54.3		27	32.2
200	27	11,675	-53.4		28	32.7
175	27	12,537	-52.5		27	33.0
150	27	13,531	-53.5		27	31.6
125	27	14,697	-56.0		27	29.0
100	26	16,103	-58.3		27	25.2
80	25	17,499	-59.6		27	19.4
70	24	18,332	-60.6		27	15.0
60	23	19,290	-61.5		27	14.1
50	22	20,420	-61.9		27	11.5
40	20	21,803	-60.9		27	9.2
30	19	23,594	-60.7		27	8.1
25	17	24,744	-59.1		26	7.4
20	15	26,159	-56.4		25	9.0
15	11	27,987	-53.1		27	11.0
10						
7						
5						

* INTERNATIONAL FALLS, MINN.
978 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	359	-15.0	-18.7	25	.6
1000						
950	28	574	-12.7	-14.9	24	1.4
900	28	988	-11.9	-16.1	27	3.6
850	28	1,427	-10.3	-16.2	30	5.8
800	28	1,893	-11.3	-18.2	30	7.9
750	28	2,387	-13.4	-20.0	30	9.5
700	28	2,910	-15.7	-22.3	30	10.8
650	28	3,466	-18.5	-25.9	30	12.2
600	28	4,059	-21.8	-29.2	30	13.4
550	28	4,695	-25.9	-33.9	30	15.9
500	28	5,379	-30.2	-37.6	30	18.8
450	28	6,121	-35.1	-40.9	30	21.1
400	28	6,933	-40.9	-44.9	30	23.8
350	28	7,832	-47.1		30	26.1
300	28	8,835	-53.7		30	27.2
250	28	9,995	-57.5		30	25.1
200	28	11,412	-54.2		29	21.9
175	28	12,271	-53.0		29	20.5
150	27	13,265	-52.5		29	18.9
125	27	14,442	-53.3		29	17.4
100	27	15,875	-54.4		29	17.3
80	27	17,300	-56.0		30	15.4
70	27	18,147	-57.0		30	13.6
60	27	19,122	-58.0		30	13.1
50	25	20,265	-59.2		30	12.0
40	22	21,654	-60.7		31	10.8
30	19	23,464	-62.3		32	9.4
25	19	24,587	-63.4		32	9.0
20	18	25,960	-63.7		32	8.9
15	17	27,741	-62.1		31	8.4
10	11	30,300	-58.8			
7	5	32,650	-53.1			
5	5	34,831	-50.0			

JACKSON, MISS.
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	100	3.8	1.2	01	.7
1000	27	179	5.0	.0	36	1.2
950	28	595	4.9	-.8	31	2.8
900	28	1,037	4.8	-5.1	29	4.5
850	28	1,502	3.4	-7.9	29	5.9
800	28	1,992	1.6	-10.0	28	7.2
750	28	2,511	-.4	-13.5	28	8.6
700	28	3,060	-3.0	-17.7	28	11.1
650	28	3,644	-5.8	-20.3	28	13.5
600	28	4,266	-9.4	-24.0	27	15.7
550	28	4,934	-13.6	-27.8	27	19.1
500	28	5,652	-18.1	-31.5	27	22.0
450	28	6,432	-23.3	-35.3	27	26.3
400	28	7,284	-29.0	-40.6	27	31.8
350	28	8,228	-36.1	-45.1	27	36.1
300	28	9,279	-43.2	-43.2	27	42.4
250	28	10,491	-49.3		27	50.3
200	28	11,938	-53.9		27	54.2
175	27	12,796	-55.1		28	50.7
150	27	13,774	-58.5		27	44.4
125	27	14,911	-62.0		27	39.4
100	27	16,277	-65.9		27	30.6
80	24	17,628	-66.6		28	21.8
70	24	18,434	-67.6		28	17.1
60	22	19,363	-66.7		28	13.6
50	21	20,474	-65.2		28	7.3
40	20	21,838	-63.8		28	5.4
30	17	23,625	-60.4		28	5.1
25	17	24,767	-58.4		26	5.5
20	15	26,171	-56.9		26	7.7
15	13	28,001	-52.9		26	10.7
10	10	30,654	-44.1			
7						

JOHN F. KENNEDY INT. AP NY
1020 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	27	5	-1.9	-9.2	35	4.7
1000	26	170	-3.3	-10.0	35	4.9
950	27	569	-3.9	-10.2	34	3.9
900	27	995	-5.0	-11.6	33	3.6
850	27	1,444	-5.7	-13.9	31	6.0
800	27	1,919	-6.9	-16.4	30	7.9
750	27	2,420	-9.0	-17.9	29	9.8
700	27	2,952	-11.4	-21.6	29	11.1
650	27	3,518	-13.9	-24.1	28	13.1
600	27	4,123	-17.2	-26.9	28	14.9
550	27	4,771	-21.2	-30.0	28	17.0
500	27	5,467	-26.0	-34.4	27	17.3
450	26	6,229	-31.0	-38.5	27	19.3
400	26	7,054	-37.2	-43.0	26	20.8
350	26	7,967	-43.5		26	22.5
300	26	8,986	-49.7		26	25.6
250	26	10,168	-53.7		26	28.2
200	26	11,600	-53.1		26	32.1
175	25	12,464	-51.9		26	28.8
150	25	13,461	-52.7		26	27.6
125	23	14,634	-53.9		26	24.8
100	23	16,059	-56.2		26	23.8
80	23	17,470	-58.0		26	19.9
70	23	18,310	-58.9		26	17.4
60	23	19,276	-59.7		25	15.5
50	23	20,415	-59.9		25	13.5
40	20	21,796	-61.2		25	10.8
30	18	23,591	-60.4		25	10.0
25	17	24,726	-60.6		25	9.9
20	16	26,117	-59.4		25	10.7
15	12	27,924	-57.7			
10	6	30,545	-51.3			
7						

JOHNSTON IS., PACIFIC AREA
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	3	23.9	19.5	08	8.3
1000	28	141	22.3	18.1	08	9.4
950	28	585	18.5	16.1	08	10.7
900	28	1,048	15.4	12.0	08	10.2
850	28	1,530	12.4	8.6	08	7.9
800	28	2,037	10.0	2.4	08	5.8
750	28	2,574	10.0	-7.8	08	4.7
700	28	3,146	8.3	-15.3	08	2.3
650	28	3,754	5.6	-17.2	33	.9
600	28	4,404	2.3	-20.8	31	2.6
550	28	5,102	-1.2	-24.6	30	4.0
500	28	5,856	-5.5	-27.4	29	5.4
450	28	6,674	-10.6	-31.2	28	6.7
400	28	7,569	-16.9	-36.7	28	8.8
350	28	8,562	-23.0	-41.4	28	11.9
300	28	9,672	-30.7	-47.3	28	15.1
250	28	10,942	-39.9	-53.9	27	17.7
200	28	12,428	-51.8		27	18.7
175	28	13,280	-58.7		27	18.9
150	28	14,231	-66.4		26	19.4
125	27	15,317	-74.0		27	16.9
100	25	16,591	-81.0		28	11.0
80	25	17,838	-82.2		28	4.4
70	25	18,590	-79.3		31	1.5
60	25	19,479	-73.3		08	.7
50	25	20,560	-69.0		11	1.6
40	24	21,901	-67.2		10	2.0
30	24	23,661	-61.4		35	1.2
25	24	24,800	-57.7		29	3.8
20	23	26,225	-53.6		30	6.1
15	23	28,095	-48.7		27	8.7
10	20	30,789	-43.5		26	12.6
7	9	33,133	-41.7			

KEY WEST, FLA.
1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	3	17.2	13.8	04	3.2
1000	28	154	17.1	12.8	04	3.0
950	28	590	14.5	10.1	07	1.8
900	28	1,046	12.2	5.6	18	.6
850	28	1,524	10.2	-.5	25	2.7
800	28	2,027	8.5	-3.3	26	4.7
750	28	2,559	6.7	-7.9	27	7.0
700	28	3,124	4.4	-11.6	27	9.0
650	28	3,724	1.7	-15.3	28	11.5
600	28	4,365	-1.9	-19.0	27	14.0
550	28	5,051	-6.3	-24.6	27	17.2
500	28	5,790	-10.9	-27.9	27	21.3
450	28	6,593	-15.5	-31.6	28	26.6
400	28	7,471	-22.0	-34.1	28	30.1
350	28	8,444	-28.0	-40.8	28	34.6
300	28	9,531	-35.5	-49.7	28	39.0
250	28	10,777	-44.3		28	41.1
200	28	12,240	-54.2		28	43.4
175	28	13,087	-58.9		28	42.8
150	28	14,043	-64.2		28	36.5
125	28	15,145	-69.3		27	34.1
100	28	16,463	-73.1		28	27.1
80	27	17,765	-74.8		28	18.1
70	26	18,540	-73.9		27	11.8
60	26	19,447	-71.0		27	9.5
50	26	20,534	-68.3		27	9.1
40	26	21,882	-65.2		29	4.4
30	24	23,652	-61.2		34	4.6
25	23	24,790	-58.4		36	3.0
20	23	26,209	-53.8		29	3.9
15	20	28,086	-48.7		28	6.4
10	12	30,794	-39.5			
7						

* KOROR, CAROLINE IS.
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	28	30	27.1	23.3	06	4.8
1000	28	113	26.1	22.8	06	5.9
950	28	564	22.5	20.7	07	9.0
900	28	1,034	19.3	16.9	07	9.8
850	28	1,525	16.2	12.3	07	8.6
800	28	2,040	14.0	7.1	07	6.6
750	28	2,584	13.3	-5.1	08	4.8
700	28	3,162	10.9	-9.5	09	4.3
650	28	3,777	8.2	-12.7	09	6.4
600	28	4,433	4.9	-17.5	09	9.2
550	28	5,137	.7	-21.6	09	10.7
500	28	5,895	-4.2	-24.2	09	13.5
450	28	6,718	-9.0	-29.6	09	15.4
400	28	7,620	-14.6	[illegible]	09	13.4
350	28	8,622	-21.4	-39.6	09	12.4
300	28	9,736	-29.9	-45.8	09	10.7
250	28	11,008	-40.0	-53.6	11	10.2
200	28	12,492	-52.3		12	11.3
175	28	13,343	-59.1		12	11.4
150	28	14,292	-66.7		12	11.6
125	28	15,375	-74.2		11	13.9
100	28	16,655	-79.5		09	8.5
80	26	17,912	-82.3		08	6.8
70	26	18,661	-80.1		08	[illegible]
60	26	19,544	-74.9		09	13.2
50	26	20,622	-68.4		09	14.8
40	26	21,981	-62.2		10	5.1
30	25	23,782	-56.1		27	5.5
25	24	24,949	-53.2		27	10.3
20	24	26,394	-51.5		27	13.7
15	22	28,262	-48.9		27	15.3
10	19	30,948	-45.2		26	15.4
7	[illegible]	33,365	-40.8			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

KWAJALEIN, MARSHALL IS. 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	4	[illegible]	[illegible]	06	7.5
1000	28	103	25.5	22.1	07	9.1
950	28	553	[illegible]	19.0	07	11.5
900	28	[illegible]	[illegible]	16.2	08	11.3
850	28	1,512	[illegible]	12.5	08	[illegible]
800	28	[illegible]	[illegible]	6.9	08	7.5
750	28	[illegible]	[illegible]	.1	08	4.8
700	28	3,149	[illegible]	-5.8	09	3.0
650	28	3,764	8.0	-8.8	10	3.2
600	28	[illegible]	[illegible]	[illegible]	[illegible]	4.3
550	28	5,125	[illegible]	-21.1	08	5.5
500	28	5,865	[illegible]	-23.9	08	5.7
450	28	[illegible]	-9.0	-29.5	08	7.3
400	28	7,611	-14.5	-34.9	08	6.2
350	28	8,611	-20.8	-39.7	07	5.2
300	28	9,731	[illegible]	-45.8	09	3.0
250	28	11,006	-37.8	-53.3	[illegible]	5.8
200	28	12,489	[illegible]	-63.8	15	8.3
175	28	13,339	-59.5	-68.9	15	7.7
150	[illegible]	14,285	[illegible]		14	7.1
125	27	[illegible]	-75.7		11	6.7
100	23	16,625	-83.8		10	7.5
80	17	17,854	-83.8		10	7.2
70	17	[illegible]	-80.4		09	7.5
60	17	19,484	-74.4		08	8.9
50	16	20,554	[illegible]		09	13.3
40	16	21,896	[illegible]		08	5.6
30	16	23,682	-58.3		27	7.7
25	12	24,845	-55.7		27	9.5
20	[illegible]	26,282	-51.5		27	13.8
15	9	28,186	-46.4			
10	9	30,906	-43.6			
7						

LAKE CHARLES, LA. 1021 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	5	[illegible]	5.4	33	1.3
1000	28	177	9.2	3.6	32	1.3
950	28	[illegible]	7.6	.4	32	1.8
900	28	1,047	7.1	-4.3	29	3.8
850	28	1,516	[illegible]	-6.9	29	5.6
800	28	2,011	[illegible]	-8.8	29	7.1
750	28	2,532	1.2	-12.9	28	8.9
700	28	3,085	-.8	-16.4	28	11.7
650	28	3,674	-3.7	-19.9	28	13.4
600	28	4,302	-7.2	-22.8	27	17.9
550	28	4,975	-11.4	-26.1	27	21.4
500	28	5,700	-15.9	-31.7	27	23.4
450	28	6,486	-21.3	-35.3	27	25.4
400	28	7,344	-27.4	-39.1	27	30.2
350	28	8,295	-34.0	-44.0	27	36.1
300	28	9,358	-40.1	-45.6	27	42.8
250	28	10,566	-46.6		27	50.0
200	28	12,040	-54.5		27	49.6
175	28	12,890	-56.7		27	48.8
150	28	13,861	-59.7		28	46.5
125	28	14,990	-64.0		27	37.4
100	26	16,348	-68.3		27	30.8
80	23	17,677	-69.5		27	25.0
70	23	18,473	-69.7		27	19.4
60	19	19,367	-68.4		23	13.2
50	18	20,489	-66.5		28	8.1
40	17	21,849	-64.4		28	8.4
30	14	23,619	-62.0		29	6.1
25	15	24,755	-60.4		29	7.0
20	15	26,155	-57.6		28	6.1
15	14	27,999	-51.6		27	13.0
10	9	30,679	-43.9			
7						

LANDER, WYO. 830 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	1,697	-12.7	-16.1	20	.4
1000						
950						
900						
850						
800	28	1,978	-5.2	-13.1	11	.3
750	28	2,487	-4.6	-15.7	30	2.3
700	28	3,027	-7.5	-18.9	29	4.3
650	28	3,601	-10.8	-21.2	29	6.6
600	28	4,212	-14.2	-25.5	28	8.4
550	28	4,867	-18.8	-30.0	28	8.8
500	28	5,569	-24.3	-34.8	28	9.3
450	28	6,328	-30.2	-39.7	29	9.7
400	28	7,155	-36.9	-45.6	29	10.8
350	28	8,067	-44.2		30	11.2
300	28	9,080	-52.1		30	12.7
250	26	10,241	-58.6		29	15.5
200	28	11,642	-57.7		28	19.0
175	28	12,489	-55.4		28	20.6
150	28	13,474	-54.9		27	20.8
125	28	14,636	-56.4		28	19.5
100	28	16,048	-58.0		28	17.1
80	28	17,450	-59.5		28	13.3
70	28	18,285	-60.2		28	11.9
60	26	19,245	-60.6		29	9.6
50	26	20,378	-60.9		30	6.5
40	24	21,761	-62.3		32	6.0
30	19	23,543	-63.1		34	5.5
25	19	24,664	-63.3		36	5.6
20	14	26,036	-63.0		35	5.5
15	11	27,822	-61.0		33	5.9
10	6	30,409	-56.6			
7						

* **LIHUE KAUAI, HAWAII** 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	36	20.7	15.4	04	3.3
1000	28	176	20.2	14.0	05	5.1
950	28	617	16.4	12.8	06	7.0
900	28	1,075	12.7	10.0	05	6.4
850	28	1,553	9.4	6.5	05	6.0
800	28	2,054	8.1	-4.6	06	4.8
750	28	2,587	7.6	-12.8	06	3.4
700	28	3,153	6.1	-18.9	04	2.3
650	28	3,756	3.3	-21.3	34	1.8
600	28	4,401	.2	-24.0	29	3.6
550	28	5,093	-3.6	-27.1	28	7.2
500	28	5,839	-8.3	-30.5	29	10.5
450	28	6,649	-13.4	-34.7	29	13.6
400	28	7,534	-19.7	-39.4	28	17.9
350	28	8,515	-26.2	-43.9	28	22.5
300	28	9,612	-33.3	-49.6	28	25.8
250	28	10,870	-41.8	-55.8	27	29.9
200	28	12,348	-52.2		27	33.3
175	28	13,200	-58.4		27	33.4
150	28	14,155	-65.0		27	31.3
125	28	15,248	-71.7		28	27.0
100	28	16,545	-77.3		28	17.8
80	28	17,819	-78.5		27	9.3
70	27	18,582	-75.8		27	7.3
60	25	19,477	-71.9		28	4.6
50	25	20,563	-67.7		27	2.9
40	25	21,912	-66.1		28	1.4
30	25	23,675	-62.0		06	1.3
25	23	24,813	-58.6		03	1.2
20	22	26,224	-55.7		30	2.5
15	20	28,076	-51.0		28	5.6
10	13	30,763	-41.6			
7	6	33,255	-33.7			

LITTLE ROCK, ARK. 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	79	2.2	-1.7	35	1.0
1000	27	182	3.3	-2.1	34	1.9
950	28	592	2.9	-3.6	31	2.7
900	28	1,030	2.4	-6.4	32	4.6
850	28	1,491	1.3	-9.0	30	5.3
800	28	1,978	-.2	-12.6	29	6.7
750	28	2,493	-2.2	-16.8	28	7.7
700	28	3,038	-4.8	-20.1	28	9.5
650	28	3,617	-8.1	-23.1	28	11.6
600	28	4,235	-11.4	-25.9	28	12.7
550	28	4,896	-15.7	-29.5	28	15.6
500	28	5,609	-20.4	-33.7	28	18.4
450	27	6,379	-25.9	-37.3	28	21.1
400	27	7,221	-32.1	-43.1	28	24.6
350	27	8,153	-38.9	-46.7	28	29.3
300	26	9,196	-45.2		27	39.0
250	26	10,400	-50.1		27	48.2
200	26	11,846	-53.8		28	51.5
175	26	12,702	-54.6		28	47.5
150	26	13,684	-56.8		28	42.4
125	25	14,826	-59.4		27	36.7
100	25	16,211	-62.7		28	28.4
80	24	17,561	-64.4		28	21.2
70	24	18,397	-65.1		28	17.2
60	24	19,335	-65.5		28	13.3
50	23	20,446	-64.4		28	9.7
40	21	21,815	-64.3		28	6.8
30	20	23,579	-62.3		29	4.9
25	18	24,710	-61.0		27	4.9
20	13	26,118	-58.9		26	6.9
15	10	27,962	-52.6		26	14.3
10	8	30,623	-43.6			
7						

MCGRATH, ALASKA 1001 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	27	103	-20.8	[illegible]	02	.5
1000	15	187	-13.5	[illegible]	09	.7
950	27	499	-11.8	-16.9	09	3.6
900	27	916	-8.8	-16.5	11	5.9
850	27	1,359	-8.7	-18.5	12	5.7
800	27	1,828	-10.0	[illegible]	13	5.4
750	27	2,323	-12.7	-23.5	15	4.9
700	27	2,846	-16.0	-26.7	14	4.5
650	27	3,401	-19.2	-29.0	15	3.7
600	27	3,992	-22.8	-32.6	17	3.6
550	27	4,625	-26.9	-36.8	19	3.3
500	27	5,306	-31.4	-41.3	19	4.0
450	27	6,044	-36.6	-45.0	19	3.8
400	27	6,850	-42.2	-46.5	19	3.3
350	27	7,746	-47.7		19	1.8
300	27	8,750	-52.4		14	1.3
250	27	9,922	-54.4		19	1.5
200	27	11,361	-51.6		23	5.7
175	27	12,229	-50.3		23	6.4
150	27	13,240	-48.7		24	6.9
125	27	14,440	-48.4		24	7.2
100	27	15,910	-48.5		24	6.8
80	27	17,379	-48.2		24	7.1
70	26	18,259	-48.3		24	6.5
60	26	19,274	-48.8		23	6.2
50	26	20,470	-49.4		23	6.2
40	26	21,929	-50.5		23	4.3
30	25	23,806	-51.9		19	1.4
25	21	24,987	-52.2		09	2.4
20	18	26,450	-52.2		08	3.2
15	12	28,274	-54.3		03	3.1
10						
7						

+ **MAJURO, MARSHALL IS.** 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	3	28.5	23.3	06	6.5
1000	28	100	26.8	21.9	06	7.9
950	28	552	23.0	20.6	06	10.1
900	28	1,023	20.0	[illegible]	07	9.2
850	28	1,515	17.3	[illegible]	08	7.0
800	28	2,032	15.4	[illegible]	07	3.7
750	28	2,578	13.6	2.4	09	2.0
700	28	3,158	11.6	-1.9	15	.7
650	28	3,774	8.3	-6.5	14	1.8
600	28	4,431	5.1	-9.7	13	2.7
550	28	5,137	1.3	-15.3	10	3.5
500	28	5,897	-3.3	-18.1	09	5.2
450	28	6,723	-8.6	-22.9	10	5.9
400	28	7,628	-13.5	[illegible]	09	6.4
350	28	8,635	-19.6	-36.5	08	5.0
300	28	9,758	-28.3	-43.4	10	4.1
250	28	11,038	-38.5	-51.8	13	6.1
200	28	[illegible]	-51.2		14	8.5
175	28	13,386	-58.0		14	9.7
150	27	14,338	-65.7		13	9.0
125	27	15,424	-73.9		11	7.2
100	27	16,699	-81.8		08	7.4
80	27	17,944	-82.4		09	7.1
70	27	18,702	-77.1		09	7.3
60	26	19,594	-73.2		09	10.4
50	26	20,673	-68.7		10	12.8
40	26	22,036	-61.7		11	4.1
30	25	23,843	-56.0		28	8.5
25	25	25,010	-53.3		27	12.7
20	25	26,456	-50.2		27	17.1
15	22	28,340	-47.8		27	18.2
10	17	31,042	-42.8		26	16.2
7						

* **MEDFORD, OREG.** 969 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	401	3.9	.5	20	.3
1000						
950	28	558	5.8	.9	17	.7
900	28	1,000	4.8	-1.5	15	3.5
850	28	1,465	2.7	-4.9	16	4.5
800	28	1,953	-.2	-7.7	19	5.2
750	28	2,467	-3.5	-10.9	20	6.7
700	28	3,009	-6.9	-15.3	21	7.8
650	28	3,583	-10.5	-19.1	22	7.4
600	28	4,195	-14.2	-23.3	22	7.3
550	28	4,850	-18.7	-27.5	22	6.1
500	28	5,553	-23.5	-32.6	23	7.2
450	28	6,315	-29.4	-37.7	23	7.8
400	28	7,144	-36.2	-43.7	23	7.7
350	28	8,059	-43.8		23	7.8
300	28	9,073	-51.9		25	7.2
250	28	10,237	-58.0		26	10.7
200	28	11,643	-55.9		25	13.1
175	28	12,497	-53.9		26	13.5
150	28	13,487	-53.8		26	13.9
125	28	14,657	-54.8		26	13.1
100	28	16,077	-56.8		27	11.1
80	28	17,486	-58.3		27	8.7
70	28	18,325	-58.6		28	6.7
60	28	19,293	-59.1		28	4.7
50	28	20,434	-60.0		30	3.3
40	27	21,825	-60.8		35	2.6
30	26	23,613	-61.5		04	4.5
25	21	24,739	-61.8		04	5.3
20	17	26,111	-61.9		04	7.5
15	14	27,887	-61.7		04	7.2
10	9	30,457	-56.0			
7	6	32,739	-53.0			

MERIDA, MEXICO 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	11	17.6	15.7	07	1.0
1000	28	146	20.2	16.2	09	3.5
950	28	568	18.0	14.2	11	5.1
900	28	1,050	15.8	11.0	12	3.2
850	28	1,534	14.0	5.4	18	.5
800	28	2,045	12.3	.4	27	2.2
750	28	2,584	10.0	-3.4	28	3.6
700	28	3,155	7.2	-8.1	29	5.1
650	28	3,762	5.4	-14.9	28	6.7
600	28	4,411	1.9	-17.7	29	8.8
550	28	5,108	-1.8	-22.3	28	11.3
500	28	5,859	-6.7	-26.1	27	13.5
450	28	6,674	-12.0	-30.2	27	17.4
400	28	7,564	-18.4	-34.4	27	19.4
350	28	8,551	-25.1	-40.3	27	23.3
300	28	9,649	-33.2	-47.5	27	23.4
250	28	10,906	-42.7		27	24.3
200	28	12,376	-53.6		27	22.2
175	28	13,225	-58.5		28	25.8
150	28	14,180	-64.3		28	17.3
125	27	15,285	-69.7			
100	27	16,597	-75.0			
80	26	17,886	-77.3			
70	26	18,656	-75.8			
60	26	19,553	-72.9			
50	23	20,636	-67.5			
40	23	21,987	-65.5		04	4.3
30	23	23,753	-61.4		32	1.9
25	23	24,893	-58.2		34	3.6
20	22	26,318	-52.7		36	2.3
15	21	28,200	-47.5		27	4.5
10	12	30,937	-40.5			
7						

MIAMI, FLA. 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	4	14.8	11.2	33	1.3
1000	28	159	15.5	10.2	01	1.8
950	28	595	13.9	8.0	03	1.6
900	28	1,049	11.5	6.4	27	.3
850	28	1,526	9.2	1.9	27	2.6
800	28	2,028	7.8	-3.3	27	4.7
750	28	2,558	6.2	-6.0	27	7.6
700	28	3,122	3.7	-6.7	27	10.8
650	28	3,720	.6	-11.9	27	12.3
600	28	4,360	-2.8	-14.9	28	15.2
550	28	5,044	-7.2	-20.1	28	18.5
500	28	5,780	-12.0	-25.4	27	20.7
450	28	6,579	-17.0	-28.7	27	24.4
400	28	7,452	-23.0	-34.8	28	28.8
350	28	8,421	-29.1	-38.2	28	34.1
300	28	9,505	-35.9	-45.8	28	39.0
250	28	10,748	-44.6		28	42.9
200	28	12,210	-53.8		28	42.8
175	28	13,060	-58.4		28	42.6
150	28	14,019	-62.8		28	36.3
125	27	15,127	-67.5		28	33.8
100	27	[illegible]	-71.6		28	26.8
80	27	17,764	-73.6		28	19.8
70	27	18,547	-71.9		27	14.7
60	27	19,463	-69.4		28	9.9
50	27	20,556	-67.6		28	8.1
40	27	21,910	-64.4		28	5.0
30	25	23,684	-60.8		32	4.0
25	25	24,822	-58.6		33	4.0
20	22	26,240	-54.4		31	2.9
15	21	28,106	-48.9		27	6.5
10	14	30,829	-40.4			
7						

MIDLAND, TEXAS 919 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	874	2.2	.4	22	.6
1000						
950						
900	28	1,045	4.7	-1.2	[illegible]	1.3
850	25	1,512	4.4	-5.6	26	3.1
800	[illegible]	2,005	3.0	-8.3	27	5.3
750	28	2,526	.7	-8.8	27	6.7
700	28	3,077	-2.5	-12.8	27	8.6
650	28	3,662	-5.1	-19.0	27	10.8
600	28	4,287	-8.8	-22.3	27	13.0
550	28	4,955	-13.1	[illegible]	27	15.7
500	28	5,675	-17.8	[illegible]	27	19.1
450	28	6,455	-23.3	-36.8	27	22.1
400	28	7,306	-29.6	[illegible]	27	27.1
350	28	8,249	-35.7	-45.4	26	33.8
300	28	9,304	-42.2	-46.9	27	40.4
250	28	10,522	-47.9		27	49.8
200	28	11,975	-53.5		27	51.1
175	[illegible]	12,833	-55.9		27	48.5
150	[illegible]	[illegible]	-58.6		27	41.6
125	25	14,936	-62.3		27	35.8
100	21	16,296	-65.8		27	27.9
80	[illegible]	17,645	-67.4		27	20.4
70	[illegible]	18,448	-66.9		28	15.3
60	18	19,379	[illegible]		28	10.8
50	[illegible]	20,481	-66.4		28	6.8
40	18	21,837	-65.2		31	4.0
30	18	23,597	-63.3		30	3.6
25	18	24,725	-60.9		30	3.3
20	17	26,122	[illegible]		28	6.5
15	16	27,955	-53.6		24	11.6
10	11	30,634	-42.6		26	21.3

MONTERREY, MEXICO 967 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	423	9.0	7.0	35	1.4
1000						
950	28	600	10.0	6.4	36	2.2
900	28	1,050	9.7	4.7	03	1.5
850	28	1,524	9.1	1.2	14	2.5
800	28	2,027	8.2	-2.2	17	2.5
750	28	2,559	6.9	-7.7	25	4.7
700	28	3,123	4.4	-10.8	26	9.1
650	28	3,722	.8	-16.4	26	12.1
600	28	4,360	-3.0	-20.5	26	15.5
550	28	5,044	-7.5	-24.1	26	18.2
500	28	5,779	-12.2	-28.7	26	22.2
450	28	6,577	-17.3	-31.4	26	25.8
400	28	7,450	-23.2	-36.0	26	30.5
350	28	8,419	-29.0	-40.9	27	35.5
300	28	9,504	-35.9	-47.3	27	39.7
250	28	10,747	-45.2		27	42.9
200	28	12,205	-54.9		27	43.3
175	27	13,050	-59.4		28	41.4
150	27	14,006	-63.5		27	36.9
125	27	15,116	-67.6		27	31.9
100	27	16,442	-72.4		27	26.4
80	25	17,748	-74.8		27	19.9
70	23	18,523	-73.4		28	13.9
60	21	19,427	-71.9		28	7.6
50	21	20,507	-69.4		28	6.1
40	21	21,851	-66.0		27	3.8
30	19	23,614	-63.6		27	6.2
25	18	24,738	-61.0		27	5.8
20	18	26,139	-56.6		26	8.4
15	14	27,988	-52.3		26	11.9
10	[illegible]	30,682	-42.0			

MONETT, MO. 966 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	438	-1.4	-4.0	23	.2
1000						
950	27	597	-1.2	-4.7	29	1.8
900	28	1,023	-.2	-8.8	28	4.4
850	28	1,480	-.9	-11.4	29	6.6
800	28	1,964	-1.8	-15.0	29	7.3
750	28	2,475	-4.0	-18.2	29	8.2
700	29	3,017	-6.9	-21.4	29	9.0
650	28	3,592	-9.8	-24.4	29	10.1
600	28	4,205	-13.5	-28.4	29	11.2
550	28	4,861	-18.0	-32.7	29	12.5
500	28	5,567	-22.8	-37.3	29	13.6
450	28	6,331	-28.1	-40.5	28	16.2
400	28	7,166	-34.3	-46.2	28	19.8
350	28	8,089	-41.3	-49.6	28	24.2
300	28	9,118	-47.9		27	29.9
250	27	10,303	-52.2		27	36.9
200	26	11,748	-54.0		28	40.2
175	26	12,605	-54.4		28	39.7
150	26	13,589	-55.7		28	37.0
125	26	14,746	-57.8		28	33.0
100	26	16,143	-61.1		28	25.7
80	26	17,523	-62.9		28	19.1
70	26	18,344	-63.6		28	15.9
60	24	19,283	-64.0		28	12.7
50	22	20,404	-64.2		29	9.8
40	22	21,769	-64.2		29	6.7
30	21	23,526	-64.4		30	6.1
25	20	24,644	-63.5		30	5.2
20	20	26,017	-62.5		28	5.5
15	15	27,839	-57.1		27	10.6
10	8	30,507	-46.9			

MONTGOMERY, ALA. 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	57	4.0	-.9	32	1.0
1000	28	174	5.3	-1.6	33	.9
950	28	593	4.9	-2.6	29	1.8
900	28	1,034	3.9	-6.9	28	3.8
850	28	1,498	3.5	-9.1	28	5.7
800	28	1,989	1.7	-12.0	28	7.7
750	28	2,507	-.8	-14.8	28	9.2
700	28	3,055	-3.4	-16.0	27	11.4
650	28	3,638	-6.4	-18.6	27	13.3
600	28	4,260	-10.1	-23.1	27	15.5
550	28	4,925	-14.3	-27.0	27	19.2
500	28	5,641	-18.8	-30.5	27	22.4
450	28	6,419	-23.7	-34.7	27	26.2
400	28	7,270	-29.4	-39.5	28	30.9
350	28	8,214	-35.8	-45.3	28	35.1
300	28	9,266	-43.1	-45.0	28	42.5
250	28	10,479	-49.0		28	50.5
200	27	11,928	-53.6		28	55.0
175	26	12,784	-55.4		28	49.9
150	26	13,761	-58.3		28	46.1
125	26	14,900	-61.4		28	40.6
100	26	16,271	-65.5		28	29.6
80	26	17,622	-67.1		28	22.8
70	24	18,437	-66.4		28	17.8
60	24	19,372	-66.1		29	11.8
50	24	20,480	-65.3		28	7.8
40	24	21,843	-64.1		27	5.9
30	21	23,618	-61.5		28	4.6
25	21	24,752	-60.0		27	5.6
20	21	26,154	-57.1		26	8.1
15	19	27,986	-51.5		26	16.2
10	9	30,652	-41.4			

NASHVILLE, TENN. 1000 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	180	.5	-3.1	28	.3
1000	18	206	-1.5	-6.5	03	.6
950	28	589	.5	-6.3	26	1.8
900	28	1,022	-.7	-9.4	28	3.5
850	28	1,478	-1.3	-11.5	28	5.2
800	28	1,961	-2.6	-13.8	28	6.4
750	28	2,471	-4.6	-15.4	28	8.0
700	28	3,011	-7.2	-18.6	28	9.8
650	28	3,587	-9.8	-19.9	28	11.9
600	28	4,201	-13.2	-23.7	28	13.9
550	28	4,858	-17.5	-27.8	28	15.3
500	28	5,565	-22.5	-33.3	28	18.3
450	28	6,330	-27.9	-38.5	28	20.6
400	28	7,165	-34.2	-43.8	27	22.5
350	28	8,090	-40.8	-46.3	27	26.4
300	28	9,121	-47.4		27	32.2
250	28	10,312	-52.4		27	39.3
200	27	11,745	-54.1		28	41.9
175	27	12,603	-54.0		28	41.3
150	26	13,591	-54.9		28	36.9
125	25	14,752	-57.9		28	33.0
100	25	16,147	-61.8		28	26.8
80	25	17,524	-63.2		28	20.6
70	24	18,344	-63.1		28	16.8
60	24	19,292	-63.6		27	13.8
50	24	20,410	-64.0		28	9.7
40	23	21,778	-63.2		28	9.1
30	23	23,550	-62.6		27	6.0
25	21	24,677	-61.4		26	8.1
20	21	26,065	-60.0		25	10.0
15	19	27,884	-54.9		26	16.4
10	13	30,479	-45.8		25	30.8

See reference note at end of table

RAWINSONDE DATA

Average monthly values

• NOME, ALASKA
1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	5	-11.1	-15.9	08	4.3
1000	23	124	-9.4	-16.8	10	5.4
950	28	488	-9.5	-16.3	11	6.2
900	28	905	-10.1	-17.7	11	6.1
850	28	1,346	-10.6	-19.8	12	5.9
800	28	1,811	-12.5	-22.7	12	5.3
750	28	2,301	-15.1	-26.0	13	5.3
700	28	2,820	-17.5	-27.6	14	4.8
650	28	3,372	-20.6	-30.1	15	5.1
600	28	3,960	-23.8	-33.2	14	4.5
550	28	4,591	-27.7	-36.0	15	4.5
500	28	5,270	-32.0	-40.1	18	5.3
450	28	6,007	-36.8	-42.3	18	6.5
400	28	6,812	-42.7	-44.9	20	6.9
350	28	7,705	-48.8		21	7.2
300	28	8,702	-54.3		21	6.5
250	28	9,862	-56.7		22	8.2
200	27	11,280	-53.3		22	8.4
175	27	12,145	-50.8		22	8.4
150	27	13,152	-49.7		22	10.3
125	24	14,347	-49.2		22	9.4
100	24	15,813	-48.7		23	9.7
80	24	17,281	-48.6		22	9.9
70	24	18,161	-48.2		23	8.9
60	24	19,176	-48.6		22	8.8
50	24	20,375	-48.7		22	6.4
40	24	21,839	-49.8		21	5.8
30	24	23,718	-50.8		21	2.4
25	24	24,903	-51.6		19	1.8
20	22	26,362	-51.6		16	.3
15	22	28,225	-52.7		11	1.7
10	17	30,796	-54.3		02	3.5
7	6	32,993	-57.8			

NORTH PLATTE, NEBR.
921 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	847	-6.0	-6.5	34	1.3
1000						
950						
900	28	1,025	-2.6	[illegible]	32	3.3
850	28	1,480	-1.1	-11.2	32	5.0
800	28	1,963	-2.0	-15.2	32	6.1
750	28	2,474	-4.3	-17.6	31	6.7
700	28	3,015	-7.4	-20.0	31	8.1
650	28	3,588	-10.5	-23.1	31	8.9
600	28	4,200	-14.2	-27.5	31	8.8
550	28	4,854	-18.7	-31.2	30	9.3
500	28	5,558	-23.9	-35.3	30	10.4
450	28	6,318	-29.5	-39.7	29	11.4
400	28	7,148	-36.1	-45.0	29	12.6
350	28	8,063	-43.4		29	13.5
300	28	9,080	-51.0		29	15.5
250	28	10,250	-56.3		28	21.0
200	28	11,666	-56.2		28	26.3
175	28	12,518	-54.4		28	25.2
150	28	13,506	-54.7		28	23.8
125	27	14,666	-55.9		28	22.4
100	27	16,079	-57.9		28	19.2
80	27	17,481	-59.3		28	15.2
70	27	18,316	-60.4		29	13.5
60	27	19,275	-60.9		29	11.1
50	26	20,401	-61.8		30	9.5
40	24	21,777	-62.9		30	7.6
30	23	23,544	-63.5		31	6.3
25	20	24,657	-63.6		31	5.2
20	20	26,030	-62.8		32	5.6
15	17	27,832	-60.4		31	6.0

OAKLAND, CALIF.
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	6	9.6	7.8	13	1.4
1000	27	136	11.0	5.9	14	1.7
950	28	557	9.0	2.9	16	3.4
900	28	1,003	6.5	-.9	18	4.4
850	28	1,470	3.4	-4.3	19	5.4
800	28	1,960	.9	-9.4	20	5.7
750	28	2,476	-1.8	-13.8	21	5.5
700	28	3,021	-5.0	-18.1	21	5.2
650	28	3,600	-8.3	-23.2	22	5.4
600	28	4,217	-12.1	-26.5	23	7.1
550	28	4,877	-16.8	-29.8	23	7.5
500	28	5,585	-22.2	-34.4	23	8.5
450	28	6,351	-28.0	-38.4	24	9.8
400	28	7,185	-34.8	-44.7	25	11.2
350	28	8,106	-42.0	-47.4	25	12.3
300	28	9,129	-49.5		25	15.8
250	28	10,307	-55.2		26	19.5
200	28	11,731	-54.0		26	23.5
175	28	12,590	-53.3		26	22.8
150	26	13,583	-53.6		26	22.7
125	26	14,747	-56.6		26	18.9
100	26	16,154	-59.5		26	15.7
80	25	17,550	-60.9		27	11.9
70	22	18,376	-61.5		27	8.1
60	21	19,331	-61.9		27	6.0
50	21	20,460	-62.0		27	3.8
40	21	21,838	-62.6		32	2.4
30	20	23,608	-63.0		02	3.4
25	19	24,737	-62.6		04	4.7
20	17	26,115	-61.6		05	6.3
15	6	27,913	-59.9			

OMAHA, NEBR.
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	403	-4.3	-6.5	32	1.2
1000						
950	28	561	-3.4	-6.8	32	2.4
900	28	1,009	-3.2	[illegible]	31	4.9
850	28	1,462	-2.5	[illegible]	31	6.7
800	28	1,942	-3.8	-13.5	32	7.2
750	28	2,450	-5.4	-16.5	31	7.4
700	28	2,989	-8.4	[illegible]	31	8.2
650	28	3,561	-11.1	[illegible]	31	9.9
600	28	4,171	-14.8	-26.8	31	11.5
550	28	4,824	-19.1	-31.5	30	12.7
500	28	5,527	-23.9	-36.4	30	14.8
450	28	6,288	-29.7	[illegible]	30	16.8
400	28	7,117	-36.1	-45.8	29	18.0
350	28	8,033	-43.2		30	20.7
300	28	9,051	-50.9		29	21.6
250	28	10,223	-56.1		29	24.9
200	28	11,641	-55.1		28	30.0
175	28	12,496	-53.7		28	30.2
150	28	13,487	-53.8		28	29.1
125	28	14,656	-55.2		28	27.0
100	28	16,074	-57.4		28	23.6
80	28	17,480	-58.9		28	18.8
70	28	18,316	-59.9		28	16.8
60	28	19,277	-60.8		28	13.8
50	27	20,407	-61.5		29	11.1
40	22	21,763	-62.7		30	8.7
30	20	23,572	-63.6		32	6.0
25	17	24,713	-63.3		32	5.1
20	14	26,075	-62.6		30	7.3
15	6	27,857	-60.0			

• PAGO PAGO, AMERICAN SAMOA
1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	5	29.9	25.3	02	[illegible]
1000	28	78	28.5	24.6	01	1.2
950	28	534	[illegible]	[illegible]	35	[illegible]
900	28	1,008	[illegible]	[illegible]	34	[illegible]
850	28	1,504	[illegible]	14.8	34	[illegible]
800	28	2,024	16.9	[illegible]	33	[illegible]
750	28	2,573	14.3	7.8	35	[illegible]
700	28	3,154	[illegible]	3.5	34	2.5
650	28	3,771	[illegible]	1.5	02	2.1
600	28	4,428	4.3	-2.9	05	2.4
550	28	5,132	.2	-6.3	05	[illegible]
500	28	5,891	-3.7	-11.8	[illegible]	[illegible]
450	28	6,717	-8.2	-17.8	04	[illegible]
400	28	7,623	-13.3	-24.7	05	[illegible]
350	28	8,631	-19.8	-31.5	05	[illegible]
300	28	9,754	-27.8	-40.4	05	[illegible]
250	28	11,037	-38.1	-50.5	07	[illegible]
200	28	12,532	-50.9		07	.6
175	28	13,387	-58.0		13	[illegible]
150	27	14,341	-65.9		12	[illegible]
125	27	15,426	-74.1		09	[illegible]
100	27	16,699	[illegible]		08	7.3
80	26	17,936	[illegible]		09	10.2
70	26	18,694	-76.9		09	13.5
60	26	19,588	-73.0		09	17.9
50	26	20,671	-68.2		09	22.4
40	24	22,019	-63.2		08	25.4
30	23	23,817	-57.5		09	25.1
25	23	24,976	-54.4		09	25.2
20	23	26,420	-50.2		09	[illegible]
15	22	28,312	-47.2		09	25.3
10	19	31,016	-42.4		09	25.4
7	9	33,411	-39.2			

• PEORIA, ILL.
997 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	200	-4.0	-6.4	29	.6
1000	10	230	-8.4	-10.8	35	1.3
950	28	578	-3.2	-6.4	27	2.4
900	28	1,005	-3.8	-9.8	28	4.5
850	28	1,457	-4.0	-11.7	29	6.3
800	28	1,934	-5.3	-15.2	29	7.4
750	28	2,439	-7.4	-18.2	29	8.6
700	28	2,974	-9.8	-20.5	29	9.4
650	28	3,543	-12.8	-24.3	29	10.5
600	28	4,149	-16.4	-27.8	29	12.2
550	28	4,798	-20.8	-31.4	30	13.7
500	28	5,496	-25.9	-35.9	29	15.4
450	28	6,250	-31.5	-41.2	29	16.1
400	28	7,073	-37.6	-46.9	29	17.3
350	28	7,984	-44.4		29	18.5
300	28	8,999	-50.9		29	20.5
250	28	10,174	-54.9		28	25.3
200	26	11,605	-54.1		28	28.9
175	26	12,465	-52.8		28	28.7
150	26	13,459	-53.7		28	27.9
125	26	14,627	-55.3		28	26.2
100	26	16,043	-57.7		28	22.3
80	26	17,446	-59.5		28	18.8
70	25	18,280	-60.2		28	16.7
60	25	19,240	-60.9		28	14.5
50	23	20,378	-62.1		29	10.8
40	20	21,754	-62.6		28	9.2
30	18	23,523	-63.0		28	7.1
25	17	24,656	-61.9		28	6.8
20	16	26,053	-59.8		28	5.7
15	12	27,867	-56.7		26	8.8
10	12	30,485	-48.2		26	20.3
7	9	32,898	-41.9			
5						

• PITTSBURGH, PA.
977 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	359	-3.9	-8.4	24	.8
1000						
950	28	579	-3.6	-8.9	26	2.0
900	28	1,006	-4.5	-11.7	27	4.0
850	28	1,455	-6.0	-12.2	28	5.4
800	28	1,929	-7.4	-14.4	28	7.1
750	28	2,430	-9.1	-16.4	28	8.9
700	28	2,961	-11.7	-19.2	29	9.8
650	28	3,527	-14.4	-21.6	29	11.5
600	28	4,130	-17.8	-25.6	28	13.7
550	28	4,776	-21.8	-29.1	29	15.2
500	28	5,471	-26.5	-34.2	28	16.1
450	28	6,224	-31.8	-38.7	28	18.1
400	28	7,047	-37.6	-42.9	28	20.6
350	28	7,959	-43.9		28	24.1
300	28	8,976	-50.3		28	27.5
250	28	10,153	-54.7		27	28.3
200	28	11,580	-53.9		27	27.5
175	26	12,440	-52.9		27	27.7
150	25	13,437	-53.1		27	27.1
125	25	14,608	-55.0		27	25.3
100	24	16,030	-56.8		27	22.1
80	24	17,437	-58.7		27	17.4
70	23	18,281	-60.0		27	15.2
60	21	19,243	-60.7		26	15.1
50	18	20,374	-61.8		27	13.6
40	12	21,738	-61.6		26	10.6
30	9	23,523	-63.5			
25	7	24,651	-63.5			
20	7	26,034	-59.6			

+ PONAPE, CAROLINE IS.
1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	39	28.3	23.4	06	4.9
1000	28	92	26.5	21.8	06	5.7
950	28	544	22.7	20.1	07	9.0
900	28	1,013	19.2	16.5	07	10.2
850	28	1,504	16.7	11.3	07	9.3
800	28	2,020	15.2	6.5	06	6.3
750	28	2,566	13.3	1.2	06	3.3
700	28	3,144	10.7	-5.5	08	2.3
650	28	3,759	8.0	-10.4	08	4.3
600	28	4,415	4.7	-16.5	08	6.1
550	28	5,119	1.0	-22.2	08	8.8
500	28	5,878	-3.5	-24.5	08	9.2
450	28	6,703	-8.5	-30.1	08	9.5
400	28	7,607	-13.6	-34.7	08	9.2
350	28	8,612	-20.4	-39.5	08	8.4
300	28	9,732	-28.7	-46.3	09	8.1
250	28	11,010	-39.1	-52.6	11	9.0
200	28	12,498	-51.6		12	11.6
175	28	13,352	-58.5		12	11.8
150	28	14,303	-66.1		12	12.0
125	28	15,388	-74.2		10	11.7
100	28	16,661	-81.8		09	11.2
80	28	17,905	-81.7		09	7.9
70	27	18,663	-78.7		09	6.9
60	27	19,550	-74.8		10	11.1
50	26	20,622	-69.5		10	15.4
40	24	21,978	-62.3		09	3.1
30	24	23,782	-56.6		28	7.7
25	24	24,944	-54.5		27	11.4
20	22	26,385	-51.1		27	15.8
15	21	28,267	-48.8		27	17.2
10	16	30,946	-43.7		26	14.6

PORTLAND, MAINE
1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	20	-7.2	-13.8	35	2.7
1000	26	163	-7.5	-14.5	35	3.5
950	28	548	-8.0	-14.1	34	4.8
900	28	968	-8.2	-14.7	33	4.6
850	28	1,411	-8.9	-15.4	30	5.0
800	28	1,881	-9.6	-16.7	29	6.5
750	28	2,378	-10.9	-18.7	27	9.1
700	28	2,906	-13.2	-21.3	28	11.5
650	28	3,468	-15.9	-25.4	27	12.9
600	28	4,068	-19.0	-29.2	26	14.2
550	28	4,710	-23.0	-31.9	26	16.1
500	28	5,403	-27.4	-36.3	26	18.0
450	28	6,153	-32.5	-40.6	26	20.5
400	28	6,973	-38.4	-45.4	25	22.6
350	28	7,882	-44.9		25	23.1
300	28	8,895	-51.0		25	22.5
250	28	10,072	-53.8		26	25.3
200	26	11,489	-51.5		25	21.1
175	26	12,357	-51.1		25	22.0
150	26	13,361	-50.9		25	20.7
125	26	14,544	-52.7		25	19.9
100	25	15,978	-54.4		25	19.1
80	25	17,403	-55.9		25	16.5
70	24	18,254	-56.8		25	15.3
60	24	19,230	-57.5		25	12.9
50	24	20,379	-58.7		25	12.3
40	24	21,779	-59.4		24	11.4
30	21	23,586	-59.1		24	9.5
25	21	24,730	-58.9		23	10.7
20	20	26,135	-58.8		23	10.1
15	18	27,946	-57.0		23	12.4
10	14	30,567	-50.2			
7	5	32,893	-45.9			

• QUILLAYUTE, WASH.
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	58	3.6	1.3	09	1.4
1000	23	150	5.0	1.4	12	2.1
950	28	548	4.6	-.4	16	4.7
900	28	987	2.3	-3.0	18	5.8
850	28	1,447	-.7	-6.4	19	6.1
800	28	1,930	-2.5	-9.4	20	6.1
750	28	2,440	-5.2	-14.7	21	6.7
700	28	2,979	-8.1	-17.4	22	7.4
650	28	3,551	-11.8	-22.1	22	8.3
600	28	4,159	-16.0	-26.4	24	7.2
550	28	4,808	-20.5	-28.8	25	7.8
500	28	5,508	-25.1	-33.6	25	9.4
450	28	6,265	-30.8	-38.4	25	10.6
400	28	7,089	-37.4	-43.0	25	12.4
350	28	8,000	-44.4		25	12.9
300	28	9,012	-52.2		25	13.5
250	28	10,174	-58.5		25	13.3
200	27	11,583	-56.7		26	10.6
175	26	12,443	-54.1		26	10.9
150	26	13,434	-53.1		26	10.0
125	26	14,610	-53.3		27	9.1
100	25	16,043	-54.7		27	7.8
80	25	17,468	-55.5		29	5.6
70	24	18,315	-55.8		30	4.4
60	24	19,295	-56.3		31	3.8
50	23	20,456	-57.4		35	3.3
40	22	21,862	-58.0		02	4.7
30	19	23,661	-58.9		04	6.0
25	18	24,831	-59.3		04	7.0
20	17	26,223	-60.1		05	8.3
15	14	28,052	-59.2		05	9.1
10	13	30,597	-58.7		04	11.5
7	12	32,863	-56.0		04	13.2
5	7	35,053	-52.1			

RAPID CITY, S. DAK.
906 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	966	-5.8	-10.6	34	1.6
1000						
950						
900	24	1,035	-4.9	-11.0	33	2.4
850	28	1,474	-1.5	-10.9	32	4.4
800	28	1,956	-2.9	-13.9	31	5.9
750	28	2,465	-5.0	-15.8	31	6.9
700	28	3,004	-7.9	-19.0	31	7.8
650	28	3,577	-11.3	-22.6	30	8.5
600	28	4,187	-15.4	-25.5	30	9.9
550	28	4,838	-20.0	-29.1	30	10.9
500	28	5,538	-25.1	-33.6	30	12.8
450	28	6,295	-30.6	-38.8	30	13.6
400	28	7,120	-37.1	-44.5	30	13.2
350	28	8,032	-44.4		30	13.5
300	28	9,044	-52.4		30	14.9
250	28	10,207	-58.2		29	15.9
200	28	11,609	-57.5		29	18.8
175	27	12,453	-55.0		28	20.6
150	26	13,441	-54.1		28	20.9
125	25	14,613	-55.6		28	20.0
100	24	16,029	-56.9		29	17.2
80	24	17,440	-57.6		29	14.7
70	24	18,282	-58.5		29	13.5
60	24	19,249	-59.5		30	11.2
50	24	20,386	-61.1		30	9.1
40	22	21,772	-62.2		32	7.6
30	21	23,542	-63.1		32	6.9
25	16	24,693	-63.1		35	6.2
20	11	26,126	-62.3		01	4.8
15	6	27,928	-61.8			
10						

ST CLOUD, MINN.
984 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	316	-10.9	-13.5	01	.7
1000						
950	28	588	-8.4	-10.6	35	1.0
900	28	1,009	-7.7	-12.5	32	1.8
850	28	1,454	-7.3	-14.6	32	3.3
800	28	1,926	-8.5	-16.6	32	4.8
750	28	2,425	-10.0	-19.3	31	6.8
700	28	2,955	-12.4	-22.4	31	8.9
650	28	3,518	-15.2	-24.0	31	10.7
600	28	4,119	-18.7	-26.9	30	12.7
550	28	4,762	-22.8	-31.0	30	14.5
500	28	5,455	-27.7	-34.7	30	16.3
450	28	6,204	-32.9	-40.1	30	16.5
400	28	7,022	-39.0	-43.5	29	18.3
350	28	7,928	-45.8		29	20.3
300	28	8,935	-53.1		30	21.9
250	28	10,093	-58.5		29	21.3
200	28	11,500	-55.8		29	21.3
175	28	12,355	-54.0		29	20.5
150	28	13,346	-53.8		29	19.8
125	27	14,524	-54.1		29	19.0
100	26	15,953	-56.0		29	17.3
80	24	17,381	-56.9		29	15.7
70	24	18,225	-57.8		29	13.8
60	24	19,195	-58.9		29	12.3
50	24	20,337	-60.0		30	10.9
40	24	21,724	-61.6		30	9.1
30	24	23,500	-63.0		31	7.4
25	23	24,629	-63.2		31	7.3
20	22	25,997	-63.6		31	6.1
15	15	27,857	-59.5		31	5.4
10	8	30,429	-56.8			

• ST PAUL IS., ALASKA
1001 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	10	-3.2	-4.6	07	3.7
1000	18	63	-1.3	-3.2	14	4.3
950	28	422	-5.8	-6.2	10	4.9
900	28	845	-7.3	-9.1	12	4.4
850	28	1,289	-8.8	-12.9	13	3.9
800	28	1,757	-10.7	-16.8	14	3.7
750	28	2,251	-13.4	-20.7	14	4.7
700	28	2,773	-16.5	-23.3	15	5.3
650	28	3,327	-19.8	-27.1	16	6.2
600	28	3,917	-23.2	-31.3	16	7.7
550	28	4,550	-26.8	-35.9	16	9.1
500	28	5,232	-31.1	-41.0	16	11.1
450	28	5,971	-36.0	-43.7	16	11.7
400	28	6,780	-41.7	-46.9	16	13.7
350	28	7,676	-47.5		16	12.1
300	28	8,680	-52.4		17	11.4
250	28	9,852	-53.8		19	9.4
200	28	11,298	-49.7		20	9.4
175	28	12,173	-49.0		19	9.9
150	27	13,186	-48.2		19	10.4
125	27	14,388	-47.8		19	10.1
100	26	15,858	-48.3		20	9.4
80	26	17,329	-48.1		19	8.9
70	26	18,209	-48.6		19	8.7
60	26	19,223	-48.9		19	7.4
50	26	20,418	-49.7		17	6.3
40	24	21,872	-50.6		17	5.9
30	23	23,742	-51.6		15	5.8
25	23	24,923	-52.4		14	4.7
20	22	26,359	-53.0		11	5.5
15	17	28,216	-53.8		09	7.7
10	9	30,870	-52.2			

SALEM, ILL.
1000 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	174	-2.1	-4.6	28	.9
1000	16	210	-4.5	-7.3	32	1.4
950	28	581	-1.7	-6.4	28	3.5
900	28	1,011	-2.5	-9.3	29	4.8
850	28	1,465	-2.4	-13.2	28	6.0
800	28	1,945	-3.8	-16.0	29	7.5
750	28	2,453	-5.9	-17.2	29	8.9
700	28	2,991	-8.5	-20.0	29	10.2
650	28	3,562	-11.7	-23.2	29	11.0
600	28	4,171	-15.3	-28.2	29	12.4
550	28	4,823	-19.6	-32.5	28	14.5
500	28	5,525	-24.3	-37.1	28	16.3
450	28	6,284	-29.9	-41.8	28	18.6
400	28	7,112	-36.3	-48.0	28	20.8
350	28	8,029	-42.7		28	22.7
300	28	9,052	-49.1		28	24.6
250	28	10,236	-53.3		28	27.3
200	28	11,669	-53.9		28	29.0
175	29	12,528	-53.1		28	30.6
150	28	13,519	-54.4		27	28.8
125	28	14,683	-56.1		28	27.6
100	28	16,093	-59.0		28	21.9
80	28	17,486	-60.7		28	17.0
70	28	18,316	-61.4		28	14.8
60	28	19,271	-62.2		28	12.3
50	27	20,394	-62.3		28	9.5
40	27	21,770	-63.1		28	7.9
30	24	23,538	-62.5		27	7.6
25	24	24,663	-62.5		27	8.8
20	24	26,046	-60.8		26	9.1
15	21	27,871	-55.7		26	12.5
10	20	30,517	-44.9		26	23.4

SALEM, OREG.
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	61	3.6	.4	26	.2
1000	24	147	5.6	2.0	08	.2
950	28	550	5.1	.4	14	1.3
900	28	992	4.4	[illegible]	18	3.5
850	28	1,456	2.0	-4.4	20	5.2
800	28	1,943	-.7	-7.7	21	6.6
750	28	2,456	-3.6	[illegible]	[illegible]	7.2
700	28	2,998	-7.0	-16.6	22	7.1
650	28	3,573	-10.5	-19.1	22	6.7
600	28	4,184	-14.4	-22.7	23	6.7
550	28	4,838	[illegible]	-27.6	23	7.8
500	28	5,541	-23.9	-32.8	23	5.5
450	28	6,301	-29.7	-38.4	24	8.6
400	28	7,129	-36.4	-43.6	24	8.8
350	28	8,044	-43.7		24	9.6
300	28	9,059	-51.7		25	10.1
250	28	10,221	-58.7		25	11.0
200	28	11,624	-56.6		25	10.8
175	28	12,475	-54.6		26	[illegible]
150	28	13,465	-53.7		26	[illegible]
125	28	14,637	-54.0		27	[illegible]
100	26	16,071	-55.6		27	9.4
80	26	17,489	-56.8		28	7.5
70	25	18,341	-57.3		28	5.7
60	22	19,316	-57.5		29	4.7
50	21	20,460	-58.3		31	3.1
40	19	21,854	-59.2		35	1.9
30	[illegible]	23,655	[illegible]		[illegible]	[illegible]
25	13	24,797	[illegible]		[illegible]	7.8
20	10	26,178	-61.2			
15	5	27,908	-62.7			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SALT LAKE CITY, UTAH 874 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	1,288	-2.3	-5.9	15	.7
850	[illegible]	1,507	-.9	-5.9	17	2.2
800	[illegible]	1,991	-1.6	-8.3	19	3.2
750	28	2,503	-4.1	-11.1	23	3.0
700	28	3,044	-7.3	-15.0	25	3.7
650	28	3,617	-10.6	-18.5	26	4.3
600	28	4,229	-14.1	-23.0	26	4.7
550	28	4,884	-18.4	-27.8	26	5.9
500	28	5,589	-23.6	-32.3	26	6.6
450	28	6,350	-29.2	-37.7	27	7.3
400	28	7,181	-35.7	-44.0	27	7.8
350	28	8,098	-42.9	-43.9	28	9.2
300	28	9,116	-51.2		28	11.3
250	28	10,283	-57.2		27	15.5
200	28	11,693	-56.3		27	20.5
175	28	12,545	-54.8		27	20.9
150	28	13,531	-54.6		27	21.4
125	28	14,695	-56.0		27	18.9
100	27	16,104	-58.2		27	15.4
80	26	17,501	-60.0		28	12.7
70	26	18,334	-60.4		28	10.4
60	25	19,294	[illegible]		28	8.7
50	25	20,426	-61.5		29	6.7
40	24	21,806	-62.7		31	6.0
30	19	23,586	-63.2		34	4.6
25	[illegible]	24,725	-62.8		34	4.4
20	[illegible]	26,111	-62.6		34	6.4
15	7	27,892	-60.5			

SAN DIEGO, CALIF. 1002 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	124	10.3	8.0	09	.7
1000	28	150	10.9	7.7	06	.8
950	28	571	11.1	5.0	19	1.3
900	28	1,020	8.6	.6	20	2.8
850	28	1,491	5.6	-3.6	21	3.6
800	28	1,984	2.9	-7.2	22	4.5
750	28	2,505	.5	-13.7	23	5.4
700	28	3,055	-2.2	-19.4	24	6.6
650	28	3,640	-5.3	-23.1	25	8.2
600	28	4,264	-9.1	-27.1	25	9.5
550	28	4,931	-13.8	-30.2	26	11.4
500	28	5,648	-19.1	-34.1	26	13.3
450	28	6,423	-25.3	-38.1	26	16.9
400	28	7,266	-32.0	-44.5	26	20.2
350	28	8,198	-38.6	-48.7	26	24.3
300	28	9,240	-45.1		26	29.2
250	28	10,443	-49.8		26	37.2
200	28	11,893	-52.9		26	39.5
175	28	12,752	-54.3		26	41.3
150	28	13,735	-56.6		26	37.4
125	28	14,883	-59.8		26	31.5
100	26	16,264	-63.7		26	23.1
80	25	17,631	-65.1		25	15.9
70	25	18,445	-65.0		26	12.8
60	25	19,385	-65.1		26	10.1
50	25	20,496	-65.2		26	6.5
40	24	21,858	-64.9		31	2.1
30	23	23,617	-63.8		04	3.0
25	23	24,738	-62.7		01	2.6
20	22	26,120	-60.8		34	2.3
15	20	27,917	-57.7		29	5.1
10	[illegible]	30,499	-50.6			

SAN JUAN, P. R. 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	6	23.1	18.5	16	1.7
1000	28	144	22.8	18.9	11	2.5
950	28	590	19.6	16.6	09	4.4
900	28	1,054	16.4	13.4	09	4.7
850	28	1,539	13.4	10.3	08	3.8
800	28	2,048	11.2	4.2	07	3.3
750	28	2,586	9.9	-5.1	07	2.1
700	28	3,158	8.1	-12.4	05	.2
650	28	3,766	5.5	-17.1	29	1.2
600	28	4,416	2.4	-21.4	29	3.4
550	28	5,113	-2.1	-24.9	29	5.6
500	28	5,863	-7.2	-28.9	30	8.6
450	28	6,675	-12.8	-32.7	29	11.4
400	28	7,563	-18.6	-37.8	29	14.2
350	28	8,549	-25.4	-43.8	29	16.4
300	28	9,647	-33.4	-50.4	29	19.8
250	28	10,902	-42.8		29	24.2
200	28	12,372	-53.7		29	26.2
175	28	13,219	-59.4		28	26.4
150	28	14,170	-65.6		28	25.4
125	28	15,265	-71.0		29	20.7
100	28	16,569	-75.8		28	14.7
80	28	17,849	-77.8		29	9.0
70	28	18,617	-75.7		30	4.4
60	27	19,523	-70.8		31	2.3
50	27	20,611	-68.6		01	2.0
40	27	21,958	-65.4		02	3.3
30	26	23,732	-60.4		01	2.4
25	26	24,877	-57.1		30	3.0
20	26	26,306	-52.1		29	4.7
15	22	28,191	-47.0		27	8.0
10	17	30,903	-41.1		26	13.0

* SAULT STE MARIE, MICH. 995 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	221	-11.4	-14.7	07	1.3
1000	19	246	-16.7	-21.9	09	2.5
950	28	571	-11.5	-14.1	14	.7
900	28	986	-11.5	-15.1	28	2.6
850	28	1,424	-11.6	-17.7	28	5.5
800	28	1,888	-12.4	-18.4	29	7.0
750	28	2,380	-13.7	-20.2	29	8.5
700	28	2,903	-15.8	-21.6	29	9.7
650	28	3,458	-18.6	-24.4	29	11.2
600	28	4,052	-21.7	-27.3	28	12.7
550	28	4,688	-25.7	-31.7	28	14.0
500	28	5,372	-30.5	-35.7	28	16.3
450	28	6,113	-35.5	-39.5	28	18.6
400	28	6,923	-41.2	-44.6	28	19.9
350	28	7,821	-47.0		28	20.9
300	28	8,826	-53.0		29	22.5
250	28	9,991	-56.4		29	22.9
200	27	11,410	-53.5		28	21.6
175	27	12,273	-51.9		28	20.7
150	27	13,273	-51.8		28	20.2
125	27	14,453	-52.8		28	18.8
100	27	15,889	-54.1		28	18.3
80	27	17,316	-55.4		28	16.4
70	27	18,167	-56.3		28	14.9
60	27	19,143	-57.6		28	13.8
50	27	20,291	-58.5		28	12.8
40	27	21,690	-59.7		28	11.3
30	25	23,484	-60.4		27	10.1
25	25	24,618	-61.2		27	9.9
20	25	26,005	-60.7		27	8.8
15	24	27,812	-58.9		27	11.1
10	23	30,390	-51.8		26	16.0
7	23	32,728	-46.3		26	25.2
5	12	34,961	-43.2		27	36.1
4	5	36,323	-39.1			

* SHEMYA, ALASKA 978 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.

* SHREVEPORT, LA. 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	79	5.8	.4	34	.6
1000	27	182	6.2	.8	32	.7
950	28	597	5.8	-1.0	27	3.9
900	28	1,039	4.5	-5.5	28	5.2
850	28	1,504	3.5	-10.1	28	5.7
800	28	1,995	1.7	-13.2	29	7.2
750	28	2,513	-.3	-16.6	29	8.2
700	28	3,062	-3.0	-20.5	28	10.3
650	28	3,646	-6.1	-23.7	28	12.7
600	28	4,268	-9.7	-25.6	28	15.1
550	28	4,935	-13.5	-28.0	28	18.2
500	28	5,653	-18.5	-33.4	28	21.0
450	28	6,431	-23.5	-37.7	27	26.1
400	28	7,283	-29.1	-43.0	27	30.8
350	28	8,227	-36.0	-46.5	27	35.0
300	28	9,278	-42.8	-48.0	27	42.1
250	28	10,493	-48.7		27	50.7
200	28	11,943	-53.6		28	51.6
175	27	12,798	-55.5		28	46.8
150	27	13,775	-58.1		28	41.9
125	27	14,914	-61.7		28	37.4
100	27	16,282	-65.8		28	31.4
80	26	17,629	-66.9		28	23.2
70	26	18,435	-67.2		28	20.1
60	26	19,365	-67.1		28	14.8
50	23	20,466	-65.8		28	11.0
40	22	21,829	-65.2		29	8.4
30	22	23,590	-63.2		29	5.3
25	22	24,714	-62.1		27	6.4
20	19	26,104	-59.7		27	10.2
15	17	27,915	-55.0		27	17.7
10	13	30,569	-44.9			
7	8	32,939	-36.7			

SPOKANE, WASH. 933 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	720	-.8	-4.1	09	1.1
900	28	1,011	.9	-3.8	14	2.9
850	28	1,470	-.7	-7.3	19	3.0
800	28	1,953	-2.8	-8.6	22	4.2
750	28	2,463	-5.2	-12.2	23	5.3
700	28	3,002	-8.3	-15.3	24	6.3
650	28	3,574	-11.4	-21.9	25	7.3
600	28	4,183	-15.4	-25.6	25	7.6
550	28	4,834	-19.9	-29.6	25	9.1
500	28	5,535	-24.6	-35.6	26	9.6
450	28	6,293	-30.3	-40.6	26	10.3
400	28	7,120	-36.8	-45.3	27	11.9
350	28	8,033	-44.0		26	13.3
300	28	9,047	-52.3		27	14.4
250	28	10,205	-59.2		27	13.7
200	28	11,604	-57.5		27	13.1
175	28	12,453	-54.7		27	12.7
150	28	13,442	-53.7		28	12.2
125	28	14,613	-54.1		28	12.2
100	27	16,040	-55.2		28	10.1
80	27	17,463	-55.8		29	8.9
70	27	18,313	-56.0		30	7.8
60	27	19,292	-56.7		30	5.7
50	27	20,445	-57.6		32	5.1
40	27	21,851	-58.7		35	5.5
30	24	23,660	-59.5		02	7.4
25	23	24,793	-60.1		02	8.3
20	20	26,206	-60.2		03	9.0
15	11	27,986	-61.2		03	11.4

* SWAN ISLAND, W. I. 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	10	24.1	19.6	06	2.9
1000	28	135	23.4	18.6	06	4.2
950	28	582	19.8	16.4	07	5.2
900	28	1,046	16.4	12.8	09	4.6
850	28	1,530	13.2	8.2	09	3.9
800	28	2,039	12.0	.4	10	2.4
750	28	2,578	10.4	-5.0	11	.9
700	28	3,150	9.1	-12.4	26	.7
650	28	3,762	7.3	-15.0	29	1.8
600	28	4,415	3.4	-17.6	28	3.4
550	28	5,115	-.7	-21.3	28	5.3
500	28	5,869	-5.8	-25.6	28	7.1
450	28	6,685	-11.5	-29.9	28	8.6
400	28	7,576	-18.3	-34.9	29	12.1
350	27	8,566	-25.1	-40.6	29	15.1
300	27	9,665	-33.1	-47.8	28	17.2
250	27	10,921	-42.9		28	19.2
200	27	12,389	-54.2		27	20.2
175	27	13,234	-59.9		27	19.8
150	27	14,182	-66.4		27	19.6
125	27	15,270	-72.3		28	17.2
100	27	16,565	-77.5		28	12.1
80	27	17,832	-80.2		29	5.5
70	26	18,591	-78.0		32	1.6
60	26	19,482	-73.5		32	.3
50	26	20,563	-68.8		36	.8
40	26	21,907	-66.0		04	2.2
30	25	23,678	-59.2		34	3.1
25	25	24,831	-55.4		31	4.7
20	24	26,273	-51.0		28	6.1
15	24	28,164	-46.6		27	9.6
10	16	30,866	-41.4		28	9.2
7	8	33,367	-36.7			

TAMPA, FLA. 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	8	10.3	7.6	04	1.2
1000	28	168	11.9	7.1	03	1.9
950	28	598	10.8	4.1	33	.6
900	28	1,047	8.9	-1.4	28	2.4
850	28	1,520	7.7	-6.2	28	5.0
800	28	2,018	6.2	-9.0	27	7.1
750	28	2,545	4.0	-11.6	27	9.3
700	28	3,104	1.4	-12.8	27	12.1
650	28	3,698	-1.5	-17.4	27	14.6
600	28	4,331	-5.0	-22.2	27	17.4
550	28	5,009	-9.3	-24.0	27	21.0
500	28	5,740	-13.8	-29.4	27	24.3
450	28	6,533	-19.0	-32.4	27	26.6
400	28	7,399	-25.3	-35.6	27	29.8
350	28	8,358	-31.7	-40.6	28	35.6
300	28	9,430	-38.3	-46.8	28	41.2
250	28	10,664	-46.1		28	46.0
200	28	12,121	-54.1		28	46.2
175	28	12,971	-57.3		28	44.8
150	28	13,937	-61.1		27	38.2
125	28	15,057	-65.7			
100	28	16,397	-70.3			
80	28	17,718	-71.3		27	14.2
70	28	18,508	-70.9		27	18.1
60	28	19,427	-68.6		28	12.7
50	28	20,525	-66.9		27	7.8
40	28	21,882	-64.3		27	5.8
30	28	23,657	-61.3		30	4.1
25	28	24,793	-59.2		29	4.5
20	28	26,206	-55.0		29	3.8
15	27	28,064	-50.0		26	8.8
10	22	30,775	-39.4		26	15.8
7	8	33,256	-33.5			

TOPEKA, KANS. 989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	268	-1.6	-4.8	30	.7
950	28	590	-1.0	-5.2	28	2.4
900	28	1,021	-1.0	-8.7	28	4.3
850	28	1,477	-1.0	-10.1	30	5.7
800	28	1,960	-2.6	-13.2	30	6.1
750	28	2,470	-4.8	-16.7	29	8.1
700	28	3,010	-7.6	-20.2	29	9.1
650	28	3,584	-10.2	-23.9	30	10.2
600	28	4,197	-14.0	-27.8	30	11.2
550	28	4,851	-18.5	-32.9	30	12.3
500	28	5,556	-23.4	-37.8	29	13.2
450	28	6,318	-29.1	-42.2	29	14.4
400	28	7,148	-35.7	-45.9	29	15.8
350	28	8,066	-42.4		29	18.8
300	28	9,089	-50.0		28	22.9
250	28	10,267	-53.9		28	30.8
200	28	11,697	-54.7		28	32.3
175	28	12,554	-53.6		28	30.6
150	28	13,544	-54.6		28	30.0
125	27	14,709	-56.7		28	28.3
100	27	16,116	-59.1		28	22.9
80	27	17,508	-60.8		28	18.0
70	27	18,337	-61.6		28	15.1
60	26	19,294	-62.0		29	12.0
50	26	20,420	-62.6		29	9.1
40	25	21,795	-63.3		29	7.4
30	25	23,562	-63.7		30	7.2
25	24	24,680	-63.3		30	5.8
20	19	26,055	-62.4		29	6.9
15	13	27,840	-57.7		27	10.9
10	9	30,482	-47.0			

* TRUK, CAROLINE IS. 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	2	28.0	23.5	05	6.1
1000	28	110	26.8	22.8	05	7.7
950	28	562	23.0	20.4	06	10.1
900	28	1,032	19.8	16.6	07	10.0
850	28	1,524	16.9	12.3	07	8.4
800	28	2,040	15.2	6.5	07	5.9
750	28	2,587	13.9	.4	08	4.5
700	28	3,166	11.7	-7.5	08	4.3
650	28	3,783	8.8	-11.7	09	4.6
600	28	4,441	5.5	-15.8	09	7.0
550	28	5,146	1.4	-19.8	08	10.1
500	28	5,907	-3.1	-24.9	08	12.2
450	28	6,733	-8.2	-28.6	08	12.1
400	28	7,637	-14.0	-33.1	08	11.4
350	28	8,641	-21.6	-37.9	08	10.7
300	28	9,760	-29.0	-42.9	09	9.1
250	28	11,036	-39.4	-51.6	11	8.6
200	28	12,524	-51.8		12	9.6
175	28	13,376	-58.7		12	11.3
150	28	14,327	-66.1		12	12.5
125	28	15,411	-74.4		11	11.6
100	28	16,682	-81.7		09	11.4
80	28	17,928	-81.8		09	6.9
70	27	18,683	-78.3		09	7.5
60	27	19,571	-74.5		09	12.1
50	27	20,648	-68.8		09	14.9
40	24	22,004	-61.1		08	3.4
30	21	23,811	-56.3		27	5.9
25	19	24,972	-54.2		27	10.2
20	19	26,413	-51.2		27	13.5
15	18	28,299	-47.8		26	15.8
10	14	30,971	-45.1		28	18.6
7	5	[illegible]	[illegible]			

* TUCSON, ARIZ. 926 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	789	7.3	1.8	14	3.0
900	28	1,023	9.7	1.2	14	3.0
850	28	1,497	7.8	-1.5	18	2.5
800	28	1,994	4.5	-4.9	21	4.0
750	28	2,516	1.1	-8.7	23	4.8
700	28	3,068	-2.0	-16.3	24	5.9
650	28	3,654	-5.1	-20.6	26	7.7
600	28	4,278	-8.9	-26.2	26	9.9
550	28	4,946	-13.6	-29.7	26	11.4
500	28	5,663	-19.1	-34.0	26	14.6
450	28	6,439	-24.4	-37.4	27	18.1
400	28	7,286	-30.7	-44.0	27	23.1
350	28	8,224	-37.3	-48.3	26	29.3
300	28	9,271	-44.0		26	35.0
250	28	10,483	-48.4		26	43.3
200	26	11,946	-52.7		26	45.8
175	26	12,803	-55.2		26	46.0
150	26	13,782	-58.1		26	41.0
125	26	14,920	-61.7		26	34.5
100	25	16,290	-66.0		26	25.2
80	24	17,638	-67.0		26	20.5
70	23	18,443	-66.5		26	15.9
60	23	19,377	-66.4		27	9.3
50	22	20,480	-66.4		28	5.0
40	21	21,837	-65.5		31	3.5
30	20	23,590	-64.4		01	1.7
25	16	24,715	-62.9		34	2.4
20	15	26,099	-60.4		30	4.4
15	[illegible]	27,929	-54.7		27	9.7
10	[illegible]	30,581	-47.0		26	23.7
7	5	32,883	-47.8			

* VANDENBERG AFB, CALIF. 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	100	9.9	7.9	15	2.4
1000	25	147	10.4	7.4	13	2.0
950	28	566	10.3	4.2	17	3.7
900	28	1,015	7.8	.8	18	4.5
850	28	1,484	4.7	-2.3	19	5.1
800	28	1,976	2.0	-6.1	21	5.3
750	28	2,494	-.7	-11.1	22	5.3
700	28	3,042	-3.9	-16.2	23	6.0
650	28	3,624	-6.9	-21.0	24	7.0
600	28	4,244	-10.5	-25.3	24	8.7
550	28	4,908	-15.2	-29.4	25	10.2
500	28	5,621	-20.9	-33.1	25	11.9
450	28	6,390	-26.7	-37.9	25	13.7
400	28	7,229	-33.3	-44.2	26	15.8
350	28	8,156	-40.3	-48.2	26	18.7
300	28	9,188	-47.6		26	23.3
250	28	10,376	-53.0		26	28.8
200	28	11,810	-54.0		26	28.0
175	28	12,669	-53.6		26	28.1
150	28	13,657	-55.0		26	27.7
125	28	14,815	-58.0		26	24.2
100	28	16,208	-62.2		26	20.5
80	28	17,581	-63.1		26	12.5
70	28	18,402	-63.5		26	10.4
60	28	19,349	-63.5		27	8.7
50	28	20,468	-63.9		27	4.2
40	28	21,836	-63.8		30	2.2
30	27	23,599	-63.8		01	2.9
25	27	24,717	-63.5		04	4.0
20	26	26,092	-62.0		04	3.5
15	23	27,888	-58.4		29	5.0
10	18	30,478	-50.5		27	14.6
7	10	32,888	-41.7			

VICTORIA, TEXAS 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	33	7.1	5.4	02	1.6
1000	28	174	9.9	5.1	05	1.8
950	28	600	8.7	3.0	09	1.0
900	28	1,047	8.1	-1.4	25	1.0
850	28	1,518	6.8	-3.9	26	2.5
800	28	2,015	4.7	-6.3	27	4.4
750	28	2,539	2.7	-10.3	27	7.1
700	28	3,095	.3	-14.8	27	9.6
650	28	3,686	-2.4	-17.8	27	13.3
600	28	4,318	-5.7	-20.5	27	17.5
550	28	4,995	-10.2	-24.7	27	19.7
500	28	5,722	-14.8	-30.2	27	23.5
450	28	6,512	-20.1	-34.3	27	28.1
400	28	7,375	-25.8	-37.3	27	32.9
350	28	8,332	-32.4	-43.2	27	38.5
300	28	9,403	-38.3	-47.2	27	46.4
250	28	10,637	-45.9		27	51.6
200	28	12,095	-53.7		27	52.3
175	28	12,947	-57.3		27	50.5
150	28	13,913	-60.9		27	44.8
125	28	15,036	-65.1		27	37.9
100	28	16,380	-69.3		27	29.3
80	27	17,707	-71.2		28	21.0
70	26	18,489	-70.5		27	16.4
60	25	19,406	-70.0		28	11.6
50	25	20,496	-68.1		28	8.0
40	24	21,847	-65.5		29	5.5
30	24	23,607	-63.3		28	5.1
25	23	24,732	-60.9		28	5.4
20	22	26,131	-57.2		27	6.7
15	17	27,993	-51.6		26	13.0
10	12	30,740	-41.4		26	17.2

* WAKE IS., PACIFIC AREA 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	5	24.3	20.0	07	6.1
1000	28	153	22.8	18.0	07	6.9
950	28	599	19.1	16.4	08	7.0
900	28	1,062	16.3	11.6	08	5.6
850	28	1,547	13.2	7.4	09	4.7
800	28	2,055	11.1	-.3	10	4.2
750	28	2,593	10.1	-8.3	09	3.3
700	28	3,165	9.0	-13.6	09	1.4
650	28	3,776	6.5	-16.8	29	.8
600	28	4,428	3.1	-20.1	29	2.6
550	28	5,127	-.6	-23.4	29	5.2
500	28	5,883	-4.9	-26.7	29	7.8
450	28	6,703	-10.2	-30.9	29	10.5
400	28	7,600	-16.3	-35.7	29	12.3
350	28	8,594	-23.4	-41.7	29	13.6
300	28	9,701	-31.3	-47.9	28	16.7
250	28	10,968	-40.5	-54.1	27	20.0
200	28	12,451	-51.9		27	21.6
175	28	13,304	-58.4		27	22.0
150	28	14,257	-65.9		27	20.6
125	27	15,347	-73.3		27	18.0
100	25	16,630	-80.5		27	12.1
80	24	17,878	-82.2		27	4.6
70	24	18,630	-79.0		25	1.2
60	23	19,520	-74.4		13	.8
50	23	20,596	-69.5		15	2.0
40	21	21,940	-66.3		14	1.5
30	20	23,703	-60.4		02	1.2
25	20	24,848	-57.3		36	2.5
20	20	26,272	-53.1		30	3.5
15	19	28,137	-50.7		29	6.7
10	18	30,825	-43.3		27	9.1
7	14	33,274	-35.3		23	8.2
5	9	35,641	-32.3			

* See reference note at end of table.

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	* WALLOPS IS., VA. NASA 1020 MB No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed	WASHINGTON DULLES INT. AP 1011 MB No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed	WAYCROSS, GA. 1015 MB No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	27	4	-.2	-4.6	33	3.4	27	85	-3.3	-7.3	34	1.7	28	44	5.7	2.7	34	1.1
1000	27	161	.1	-8.4	34	4.3	25	182	-1.0	-8.4	33	2.0	28	163	7.6	[illegible]	34	2.2
950	27	571	-1.3	-9.5	34	5.8	27	581	-1.2	[illegible]	30	[illegible]	28	586	6.8	[illegible]	32	4.0
900	27	1,001	-2.6	-11.8	33	6.2	27	1,011	-3.0	-10.4	30	4.6	28	1,029	5.9	-5.2	31	5.0
850	27	1,453	-3.8	-14.2	32	6.2	27	1,463	-4.0	-12.5	30	5.6	28	1,496	4.2	-8.1	29	6.1
800	27	1,931	-5.4	-15.5	31	6.9	27	1,940	-5.5	-14.6	30	6.8	28	1,988	2.8	[illegible]	27	6.8
750	27	2,436	-7.4	-18.7	29	8.7	27	2,445	-7.2	-17.0	29	8.4	28	2,509	.6	-15.0	27	8.6
700	27	2,971	-9.6	-20.9	28	10.2	27	2,961	-9.5	-19.9	28	10.1	28	3,060	-2.2	-18.0	27	11.0
650	27	3,540	-12.2	-24.1	27	11.8	27	3,551	-12.0	-23.6	28	11.9	27	3,644	-5.2	-20.8	27	14.1
600	27	4,148	-15.8	-27.1	27	13.7	27	4,159	-15.5	-26.3	27	13.2	27	4,268	-8.8	-24.1	27	17.7
550	27	4,799	-20.3	-31.0	27	15.8	27	4,811	-19.8	-30.2	27	14.7	27	4,936	-13.1	-28.1	27	20.7
500	27	5,498	-25.0	-34.8	27	18.0	27	5,511	-24.7	-34.4	28	17.1	27	5,656	-17.9	-31.8	27	24.0
450	27	6,257	-30.0	-39.7	27	21.0	27	6,271	-29.6	-40.2	28	19.6	26	6,435	-23.0	-34.7	27	28.7
400	27	7,085	-35.9	-45.4	27	20.7	27	7,100	-35.6	-44.7	27	21.9	26	7,288	-28.7	-39.5	27	33.1
350	27	8,003	-42.2		27	24.2	27	8,019	-42.2	-44.4	27	24.8	26	8,234	-35.2	-43.8	27	38.3
300	27	9,028	-48.7		27	27.0	27	9,044	-48.9		27	27.2	26	9,291	-42.0	-48.2	28	43.3
250	27	10,212	-53.5		27	31.4	27	10,226	-54.1		27	30.2	26	10,508	-47.8		28	51.0
200	27	11,646	-53.1		27	31.6	27	11,656	-53.9		27	29.1	26	11,964	-52.8		28	51.4
175	27	12,508	-52.8		27	29.3	27	12,517	-52.6		27	29.9	26	12,821	-55.3		28	50.3
150	27	13,502	-53.6		27	28.7	27	13,511	-53.3		27	28.7	26	13,798	-57.9		28	45.2
125	25	14,676	-56.0		27	27.4	27	14,680	-55.1		27	26.8	26	14,939	-61.5		27	38.3
100	25	16,085	-59.0		26	23.4	27	16,097	-57.8		27	22.6	26	16,308	-65.6		27	29.9
80	25	17,480	-60.7		26	18.9	27	17,498	-59.6		27	18.7	26	17,660	-66.9		27	23.5
70	24	18,308	-61.1		26	17.0	27	18,333	-60.0		27	16.2	25	18,465	-66.1		27	18.3
60	24	19,265	-61.7		26	14.2	26	19,298	-60.8		27	13.4	25	19,401	-65.7		28	13.3
50	23	20,396	-61.2		26	12.4	26	20,431	-60.7		27	10.6	25	20,512	-64.5		27	8.5
40	22	21,774	-61.7		26	10.2	26	21,817	-61.5		26	9.4	25	21,881	-63.1		27	8.1
30	21	23,558	-60.4		24	7.0	26	23,601	-60.9		26	7.9	24	23,657	-61.1		27	4.3
25	20	24,695	-59.4		23	6.9	24	24,729	-60.9		26	8.9	24	24,794	-59.3		27	5.1
20	20	26,098	-57.7		24	7.3	23	26,118	-59.8		26	11.6	22	26,204	-56.5		27	8.3
15	18	27,928	-54.1		25	11.3	17	27,918	-57.6		25	16.5	19	28,041	-51.1		26	12.2
10	14	30,563	-44.2		26	21.7	12	30,593	-48.0				10	30,748	-40.2			
7	7	33,009	-37.4				5	32,864	-42.6									

Standard pressure surface (mb)	WINNEMUCCA, NEV. 870 MB No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed	WINSLOW, ARIZ. 852 MB No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	28	1,312	-1.2	[illegible]	08	1.3	28	1,467	.6	[illegible]	[illegible]	.5
1000												
950												
900												
850	28	1,501	1.3	[illegible]	[illegible]	1.2	24	1,519	[illegible]	-3.6	21	.5
800	28	1,968	-.4	[illegible]	[illegible]	2.5	28	1,998	1.3	[illegible]	[illegible]	[illegible]
750	28	2,502	-3.3	-11.3	21	4.2	28	2,515	-1.6	-8.2	23	3.2
700	28	3,045	-6.4	[illegible]	22	5.0	28	3,062	-4.2	-13.5	24	[illegible]
650	28	3,621	-9.4	[illegible]	23	5.5	28	3,643	-7.3	-18.4	25	6.1
600	28	4,236	-13.1	-21.8	24	5.1	28	4,263	-10.9	-23.2	[illegible]	[illegible]
550	28	4,893	-17.6	[illegible]	25	5.4	28	4,926	-15.4	[illegible]	27	8.6
500	28	5,599	-23.0	-31.6	25	6.7	28	5,638	-20.5	-30.7	27	10.8
450	28	6,363	-28.5	-37.3	24	7.7	28	6,409	-26.4	-36.4	27	13.4
400	28	7,195	-35.6	-43.3	25	8.9	28	7,249	-33.0	-42.2	27	15.4
350	28	8,112	-43.2		24	10.0	28	8,177	-40.3	-46.4	27	18.2
300	28	9,128	-51.9		25	12.3	28	9,210	-47.1		27	25.6
250	28	10,290	-58.3		26	15.5	28	10,404	-51.8		26	33.5
200	28	11,698	-56.3		26	17.8	27	11,844	-53.1		27	38.7
175	28	12,552	-54.1		26	18.5	27	12,702	-54.4		27	39.0
150	27	13,546	-54.3		26	17.7	27	13,686	-56.3		27	35.2
125	26	14,713	-55.8		26	15.7	27	14,838	-59.3		27	30.0
100	26	16,127	-57.6		27	13.5	27	16,222	-62.9		27	21.9
80	25	17,532	-59.1		27	10.0	26	17,591	-64.2		27	17.3
70	25	18,369	-59.6		27	7.3	24	18,416	-64.0		27	13.9
60	25	19,331	-60.6		27	5.2	22	19,360	-64.7		27	8.0
50	23	20,465	-61.1		29	4.5	[illegible]	20,475	-64.4		29	5.1
40	21	21,847	-61.5		34	3.1	[illegible]	21,839	-64.4		31	3.2
30	20	23,621	-62.7		03	4.3	21	23,600	-63.8		34	3.0
25	20	24,744	-63.1		03	5.5	21	24,719	-63.2		35	2.6
20	18	26,143	-62.9		02	6.2	19	26,109	-61.7		34	3.4
15	11	27,939	-61.2		01	7.4	14	27,928	-57.7		29	4.8
10							11	30,543	-48.4			
7												

Standard pressure surface (mb)	YAKUTAT, ALASKA 1010 MB No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed	+ YAP, CAROLINE IS. 1011 MB No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed	YUCCA FLAT, NEV. 882 MB No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	28	12	-5.1	-8.8	11	2.6	28	14	27.8	22.8	07	4.8	28	1,198	.9	-2.7	29	.8
1000	21	136	-.2	-8.5	09	2.3	28	115	25.9	22.1	07	6.5						
950	28	501	-1.3	-8.7	10	4.7	28	566	22.2	20.0	07	9.7						
900	28	930	-3.8	-11.2	12	4.4	28	1,035	19.0	15.5	07	10.5						
850	28	1,379	-6.7	-13.8	13	4.3	28	1,525	15.8	11.3	07	10.2	28	1,496	3.4	-3.5	03	.7
800	28	1,850	-9.3	-16.9	14	4.1	28	2,038	13.3	6.8	07	8.4	28	1,986	.6	-6.0	14	2.1
750	28	2,347	-12.2	-20.6	15	3.6	28	2,582	13.3	-4.6	08	6.3	28	2,501	-2.3	-9.5	17	3.4
700	28	2,871	-15.3	-22.7	17	3.8	28	3,160	11.3	-10.8	08	5.7	28	3,047	-4.8	-14.2	20	3.9
650	28	3,428	-18.4	-26.5	18	4.8	28	3,776	8.6	-13.5	09	7.3	28	3,627	-7.9	-18.4	23	4.4
600	28	4,021	-22.1	-30.4	19	5.0	28	4,433	5.1	-17.3	08	9.2	28	4,245	-11.4	-23.0	25	[illegible]
550	28	4,655	-26.5	-35.3	19	5.6	28	5,137	.8	-20.4	09	10.7	28	4,907	-16.0	-26.6	25	7.5
500	28	5,337	-31.6	-39.6	20	6.4	28	5,895	-4.1	-24.3	09	12.6	28	5,617	-21.4	-32.2	25	7.4
450	28	6,074	-36.9	-42.4	21	6.8	28	6,718	-8.9	-29.1	09	13.2	28	6,385	-27.3	-36.6	25	8.8
400	28	6,879	-42.4	-47.8	22	8.6	28	7,620	-15.0	-34.1	09	12.8	28	7,222	-34.1	-42.9	26	10.5
350	28	7,775	-47.6		23	9.9	28	8,620	-21.7	-38.8	08	9.9	28	8,145	-41.6	-45.7	26	12.9
300	28	8,780	-52.0		23	10.4	28	9,733	-30.2	-45.2	08	8.7	28	9,169	-49.6		26	15.3
250	28	9,956	-53.1		25	6.1	28	11,004	-40.2	-52.3	10	7.2	28	10,348	-54.7		26	21.2
200	28	11,401	-50.8		26	7.1	28	12,487	-52.3		13	7.7	28	11,779	-53.4		26	28.2
175	28	12,273	-49.8		27	8.2	28	13,338	-59.1		13	8.1	28	12,638	-53.5		26	27.6
150	28	13,282	-49.3		27	8.3	28	14,287	-66.8		13	8.5	28	13,628	-54.4		26	25.6
125	28	14,481	-48.3		28	7.7	27	15,367	-74.9		12	11.5	28	14,790	-57.2		26	21.5
100	28	15,949	-49.1		29	6.1	27	16,640	-81.0		10	9.0	28	16,189	-60.8		26	16.8
80	28	17,412	-49.0		29	6.3	27	17,891	-82.1		08	7.9	28	17,573	-61.9		26	14.3
70	28	18,289	-49.1		29	5.2	26	18,642	-80.1		08	8.6	28	18,399	-62.0		27	10.3
60	28	19,298	-50.2		30	4.6	26	19,522	-75.3		09	11.4	28	19,351	-62.4		27	7.4
50	27	20,487	-51.0		33	3.1	26	20,599	-68.4		09	14.5	26	20,484	-62.5		28	6.8
40	26	21,936	-52.2		36	4.2	26	21,951	-63.4		10	8.1	25	21,858	-63.2		30	3.0
30	26	23,792	-53.9		03	5.5	26	23,747	-57.1		28	2.8	18	23,614	-63.0		35	2.5
25	24	24,959	-54.4		03	5.6	26	24,910	-53.8		27	6.4	16	24,734	-62.8		02	3.9
20	16	26,439	-53.8		05	6.9	21	26,356	-50.9		27	9.5	15	26,098	-61.8		01	2.7
15	11	28,315	-53.7				20	28,234	-49.5		26	12.4	7	27,888	-59.0			
10							19	30,911	-44.5		26	15.0						
7							8	33,324	-39.7									

[illegible] record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon. The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

[illegible] height (geopotential) in units of .98 dynamic [illegible] temperature and dew [illegible] tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach [illegible]

+ Observations for these stations are scheduled at 0000 G.C.T.

† Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun.

FEBRUARY 1973

ALBUQUERQUE, N.MEX.

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Feb.									
1-----	----	----	----	----	1.30	1.21	1.10	0.97	0.88
2-----	1.04	1.12	1.23	1.39	1.39	1.34	1.20	1.10	.96
3-----	1.06	1.15	----	1.35	1.41	----	----	----	----
4-----	.97	1.08	1.19	1.33	1.38	----	----	----	----
5-----	.95	1.05	1.17	1.32	1.37	----	1.19	1.08	----
10----	----	----	----	1.29	----	----	----	----	----
12----	----	----	----	1.34	----	----	----	----	----
13----	.98	1.08	1.19	1.33	----	----	----	----	----
14----	----	----	----	1.31	SC(1.38)	1.33	----	----	----
15----	1.00	1.09	1.19	1.29	----	----	----	----	----
17----	----	----	----	SC(1.10)	----	----	----	----	.79
18----	1.02	1.10	1.19	1.36	1.40	1.31	1.16	1.06	.97
19----	1.08	1.18	1.26	1.40	1.47	----	----	----	----
24----	.99	1.09	1.17	1.32	1.40	1.28	1.14	1.06	.97
25----	.97	1.07	1.17	1.32	1.43	1.33	1.19	1.08	.98
26----	.98	1.08	1.18	1.33	1.46	----	----	----	CI(.96)
27----	.91	1.02	1.11	1.29	----	----	----	----	----
Aver-ages	1.00	1.09	1.19	1.33	1.40	1.30	1.16	1.06	0.93

OMAHA, NEBR.

	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78

DATA NOT RECEIVED FOR THIS STATION

TUCSON, ARIZ.

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Feb.									
1----	0.86	0.99	1.14	1.33	1.39	1.38	1.21	1.09	1.00
2----	1.06	----	1.31	1.45	1.50	----	----	----	----
3----	----	----	----	1.42	1.46	1.35	----	----	----
4----	1.01	1.10	1.22	1.37	1.44	1.34	1.26	1.11	1.02
5----	----	1.11	1.19	1.35	----	1.33	1.21	1.06	.96
7----	----	----	----	----	----	----	1.20	----	----
8----	.77	----	1.05	1.24	1.35	1.33	1.12	1.00	.88
9----	.85	.95	1.08	1.27	1.41	1.33	1.15	1.02	.90
12---	----	----	----	----	1.43	----	----	----	----
13---	.74	.89	1.08	1.33	----	----	----	----	----
14---	.97	1.07	1.15	1.35	1.45	1.33	1.13	1.02	.88
15---	----	----	----	----	1.47	----	----	----	.85
17---	----	----	----	----	----	----	.95	.79	.71
18---	.80	.92	1.08	1.27	1.42	1.27	1.16	.94	.82
19---	.91	1.00	1.11	1.29	1.44	----	----	----	----
23---	----	----	----	----	1.36	1.28	1.09	.96	.86
24---	.85	.98	1.12	1.31	1.47	1.26	1.15	1.05	.93
25---	.72	.84	1.01	1.14	1.36	1.31	1.09	.95	.82
26---	.83	.95	1.08	1.28	1.41	----	----	----	----
28---	----	1.01	1.09	1.24	1.44	1.33	1.17	1.06	.93
Aver-ages	0.86	0.98	1.12	1.31	1.42	1.32	1.15	1.00	0.89

MADISON, WIS.

	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Feb.									
3-----	----	----	----	----	----	----	S 1.12	S 0.98	S 0.87
8-----	0.97	1.07	1.21	1.38	1.40	1.38	1.23	1.09	1.00
10----	.95	1.05	1.20	1.36	S 1.38	----	----	----	----
11----	.69	----	S .84	----	----	----	1.10	.95	.85
16----	.93	1.05	1.20	1.40	1.46	1.42	1.24	1.11	1.01
Aver-ages	0.89	0.79	1.11	1.38	1.41	1.40	1.17	1.03	0.93

( )	Clouds Present
*	Values corresponding to true solar noon
BD	Blowing Dust
BN	Blowing Sand
D	Dust
DI	Intense Dust
DM	Moderate Dust
DS	Slight Dust
F	Fog
GF	Ground Fog
H	Haze

HI	Intense Haze
HM	Moderate Haze
HS	Slight
I	Intense Haze-indeterminable
K	Smoke
KI	Intense Smoke
KM	Moderate Smoke
KS	Slight Smoke
M	Moderate Haze-indeterminable
N	Sand
S	Slight Haze-indeterminable

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska.

FEBRUARY 1973

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	- 13	- 2	4	- 22	- 81	- 55	- 74	- 59	- 61	- 93	- 97	- 44	- 45	13	8	- 10	- 20	- 3	22	- 20	- 41	- 54	- 39	- 58	- 48	- 35	20	- 19				- 35

The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (< 3900 A) at Ames, Iowa

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	0.85	2.55	7.31	6.58	1.58	4.99	7.67	9.14	9.02	8.41	7.92	3.90	1.58	4.14	10.36	9.63	6.33	3.41	3.53	9.26	9.63	9.26	8.89	7.67	2.80	3.04	2.92	6.46				6.02

These data are from an U - V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder. It is at the same location (Agronomy Building, Iowa State University, Ames) as the published total solar radiation instrumentation. This instrument has not been checked by the NOAA, National Weather Service.

TOTAL OZONE DATA

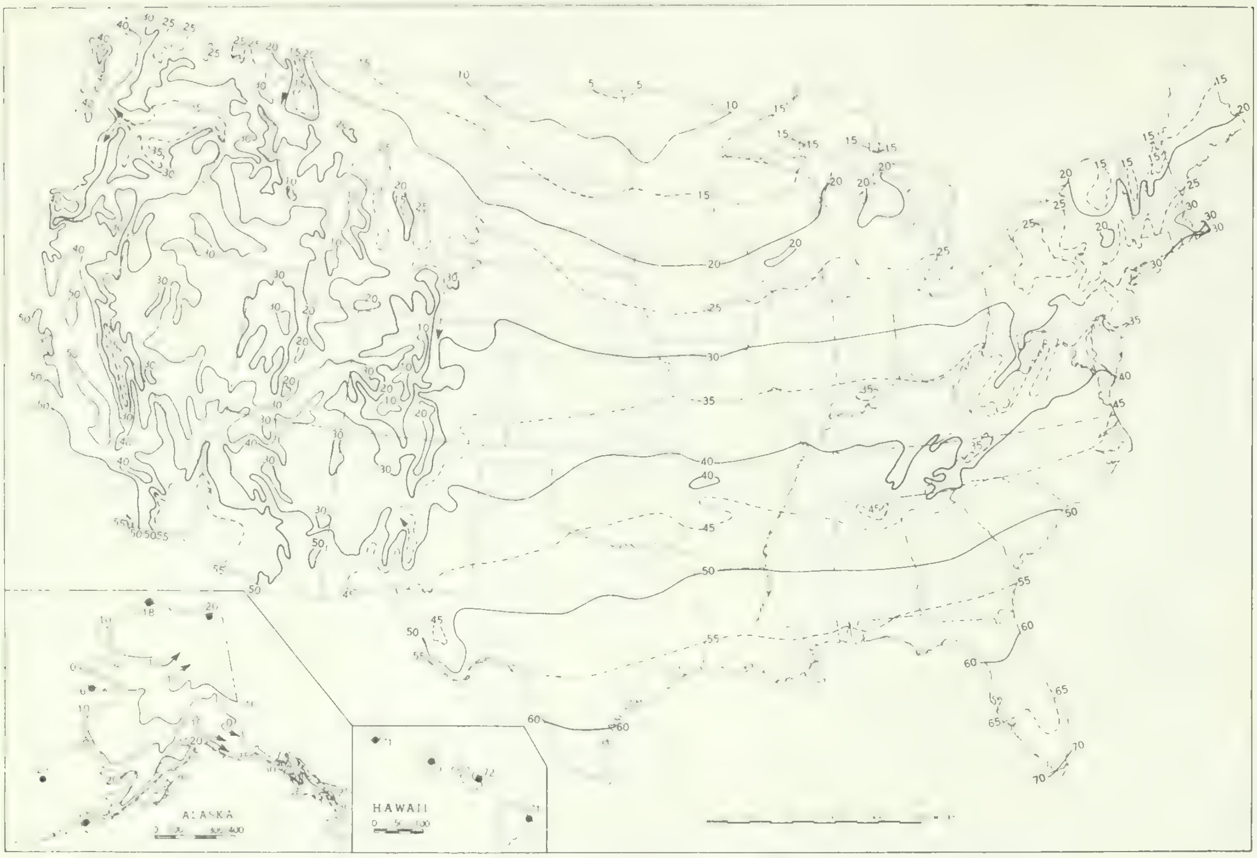
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code $_S\Omega\Omega$ defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units Milli-atmo-cms.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
	DATA NOT RECEIVED IN TIME FOR PUBLICATION																															

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e. the amount contained in a vertical [illegible] extending from ground level to the top of the atmosphere [illegible] the station. The amount of [illegible] is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, [illegible] ozone layer [illegible] millimeter thick. The code [illegible] designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), February


ALASKA
0 100 300 400
HAWAII
0 50 100
10
15
20
25
30
35
40
45
50
55
60
65
70

B. Temperature Departure from 30 - Year Mean (°F 1931-60), February 1973

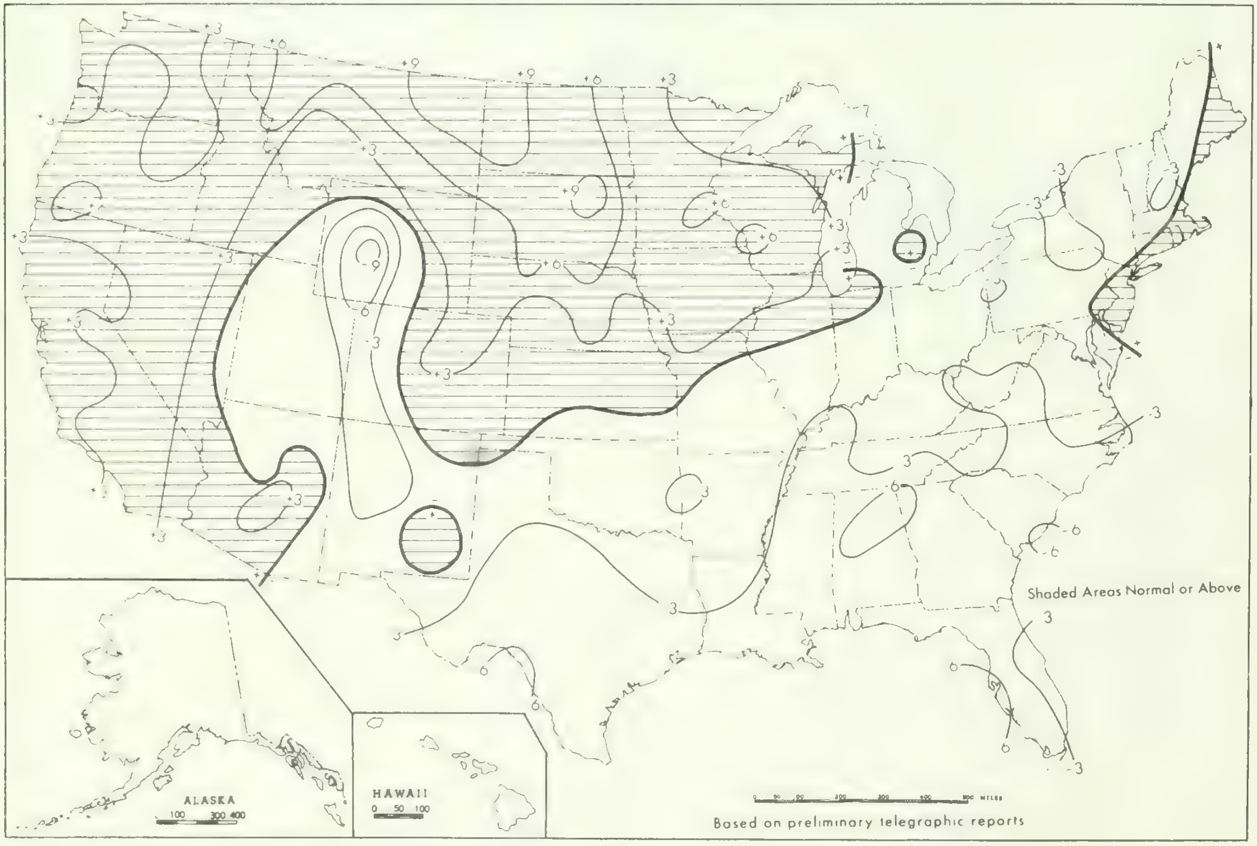
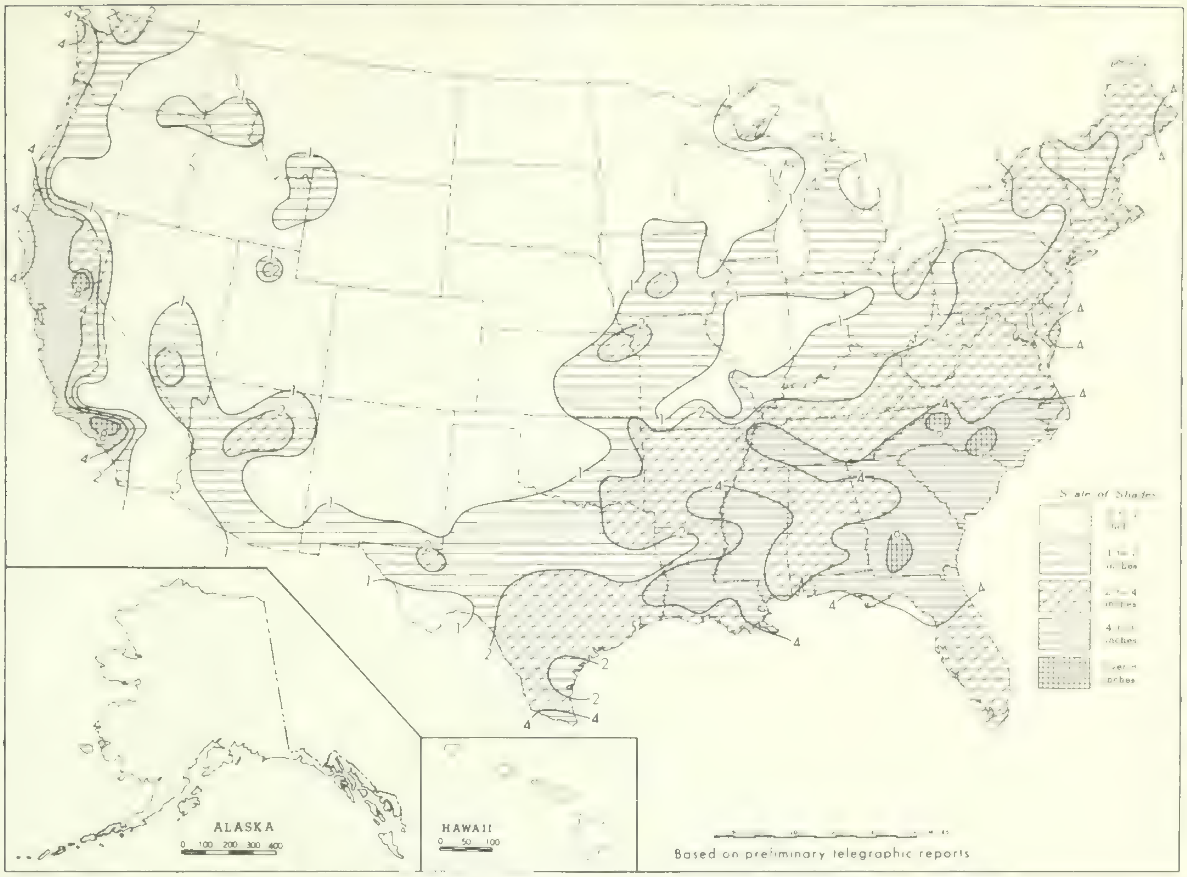

+3
+6
+9
-3
-6
-9
Shaded Areas Normal or Above
ALASKA
100 300 400
HAWAII
0 50 100
Based on preliminary telegraphic reports

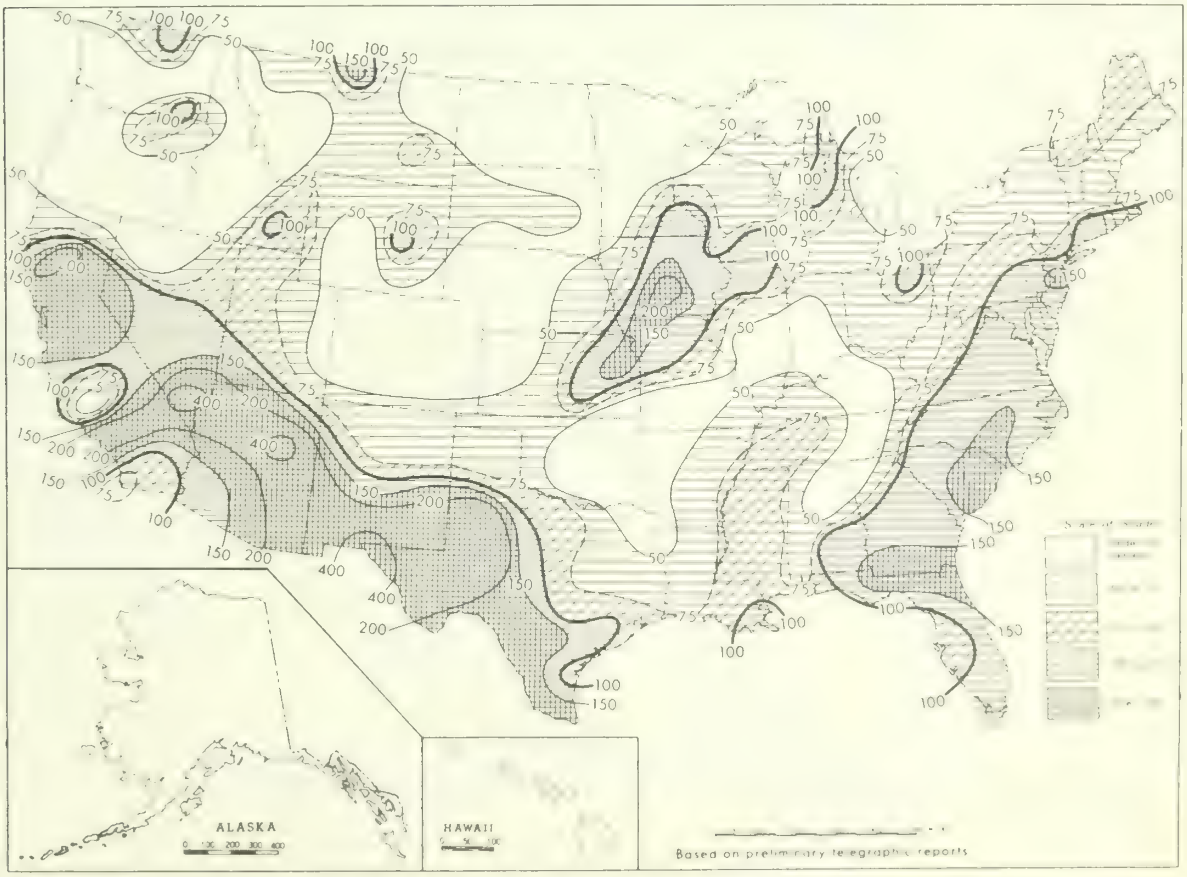
Chart II. A. Total Precipitation (Inches), February 1973



Scale of Shades
Under 1 inch
1 to 2 inches
2 to 4 inches
4 to 8 inches
Over 8 inches
1
2
4
8
ALASKA
0 100 200 300 400
HAWAII
0 50 100

Based on preliminary telegraphic reports

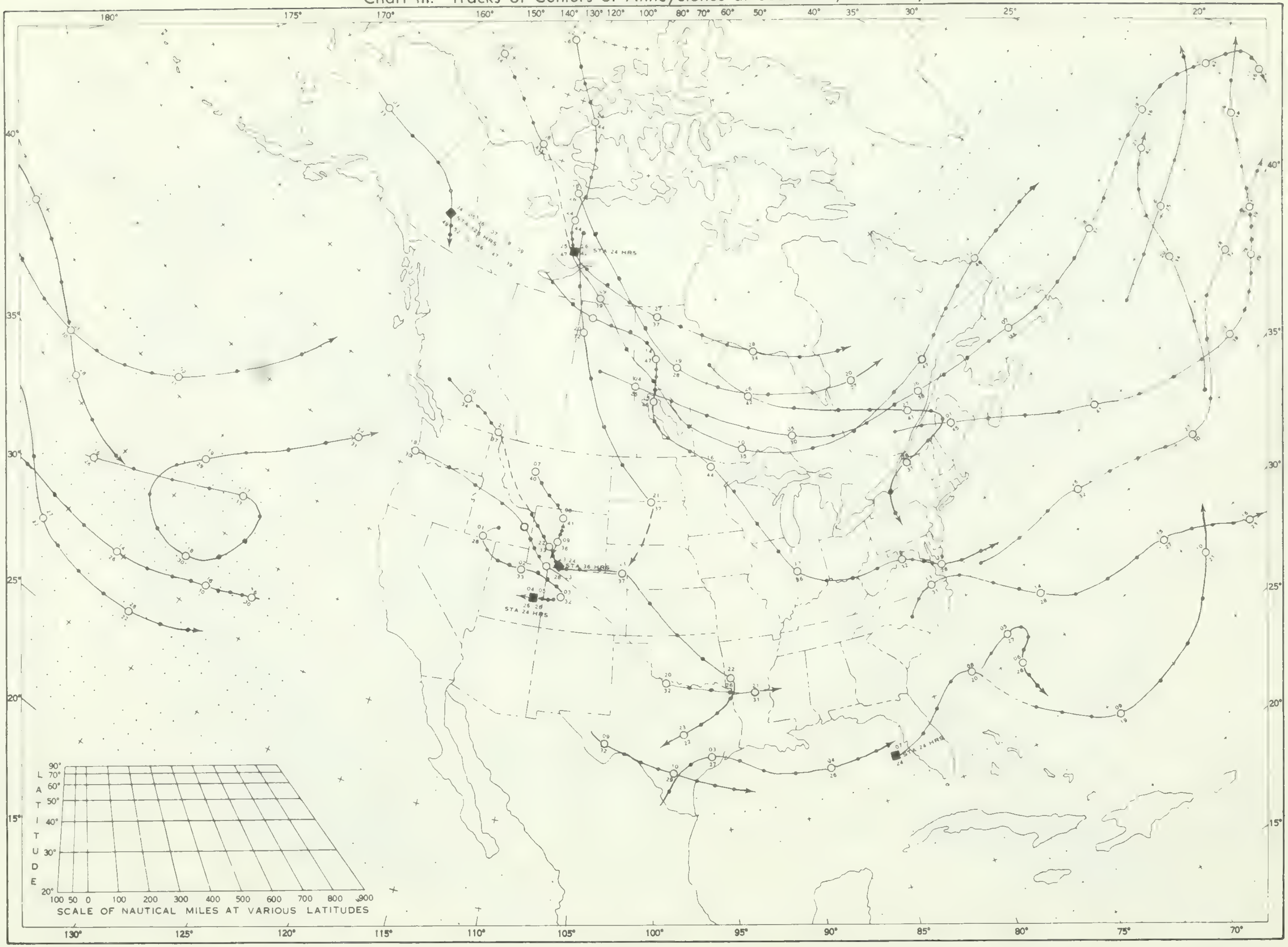
B. Percentage of Normal Precipitation, February 1973



Scale of Shades
50
75
100
150
200
400
ALASKA
0 100 200 300 400
HAWAII
0 50 100

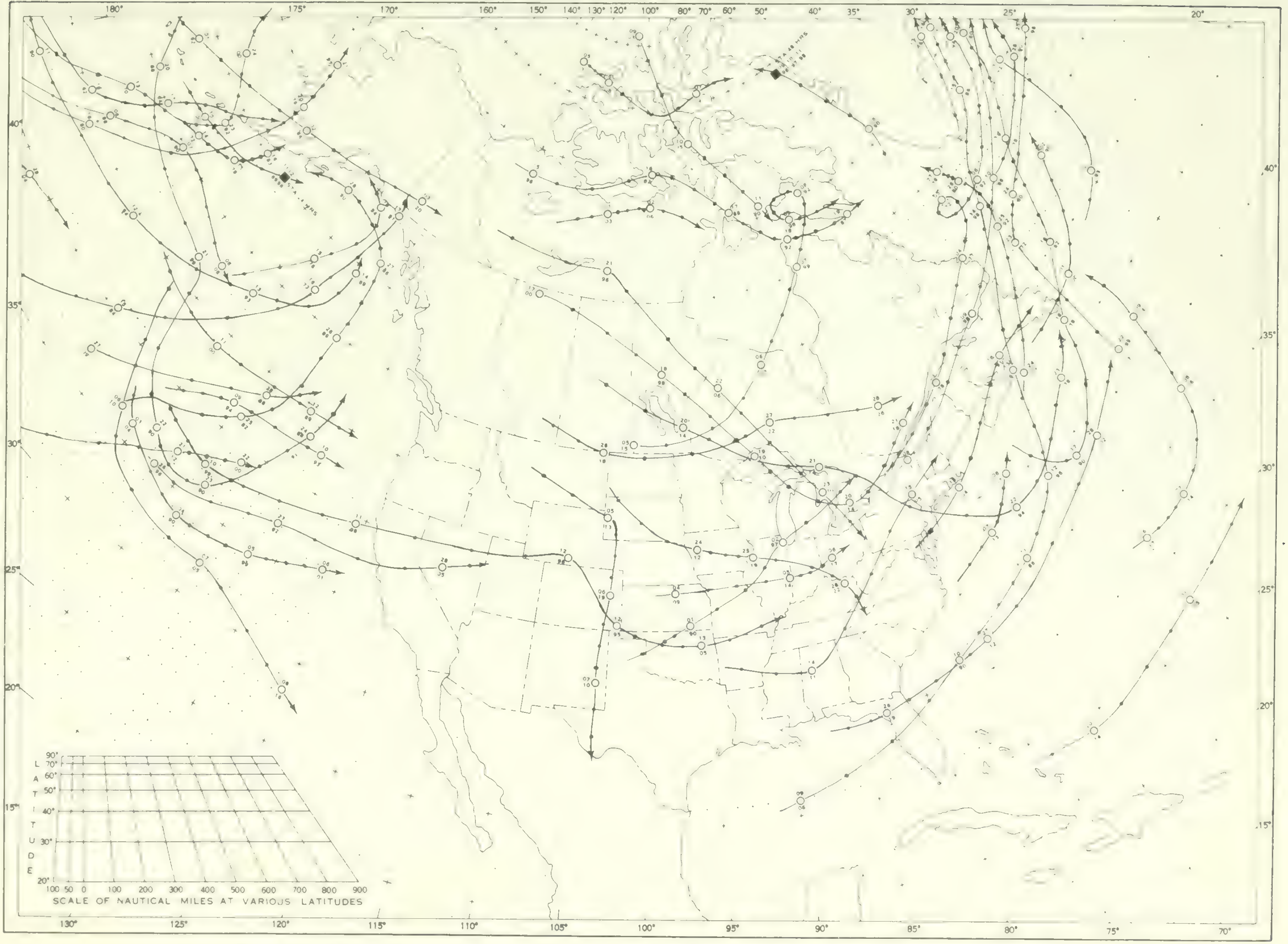
Based on preliminary telegraphic reports

Chart III. Tracks of Centers of Anticyclones at Sea Level, February 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
STA 24 HRS
STA 36 HRS
STA 120 HRS
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, February 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

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1973

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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

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I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina 28801.

William H. Haggard

Director, National Climatic Center

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

MARCH 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

Dr. Richard E. Felch, Climatologist

HIGHLIGHTS:

1. Most of the Nation was excessively wet, especially the southern Great Plains, contributing to extensive flooding along the Mississippi and its tributaries.
2. Except for the Southwest the entire Nation was considerably warmer than normal.

TEMPERATURE--March temperatures were warmer than normal over the entire Nation except for the Southwest. The Great Plains averaged 9° to 12° above normal, while the South and the Atlantic and Gulf Coasts were generally 3° to 6° above normal. This temperature pattern was persistent throughout the month with very few exceptions.

During early March, the entire Nation was much warmer than usual except for the New England States and a few isolated areas in the western States. The northern Great Plains was 12° to 21° above normal. Temperatures were at least 9° to 12° above normal in this area during the entire month of March, bringing an early spring to the area.

Temperatures during the second week of March were again warmer than normal over the entire Nation except for the Southwest. Except for a few areas along the Atlantic Coast, temperatures east of a line from Mobile, Ala., to Havre, Mont., were at least 9° above normal with the greatest departures over Ohio, Indiana, Kentucky, and parts of West Virginia and Pennsylvania. Temperatures were 18° to 24° above normal in this area.

Temperatures continued to average 6° to 12° warmer than usual over the eastern two-thirds of the Nation until late in the month, but the very warm pattern returned again at month's end.

PRECIPITATION--Wet is the word to describe March precipitation. Almost the entire Nation received above normal precipitation during the month. The only areas receiving below normal precipitation were the Pacific Northwest, Montana, North Dakota, northern Minnesota, parts of New England, and the southern tip of Texas. From two to four times the normal precipitation for March fell on the southern portion of the western Great Plains, the Southwest, and portions of the South. Rains were frequent and heavy in many areas, setting new monthly records or tying old ones in several Corn Belt States. Dodge City, Kans., received 8.84 inches of rain, which is over seven times the normal expected rainfall for March. Most of the soils in the areas receiving this heavy rain were already saturated from plentiful moisture last fall, and at the month's end some flooding was occurring along many of the tributaries of the Missouri and Mississippi Rivers. Most of the snowcover in the northern States was melted early in the month by the warm temperatures. The heaviest snowfalls of the month occurred in the southern States. Flagstaff, Ariz., received several snowfalls, setting an all time record for the year.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

MARCH 1973

STATE	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Enterprise	88	15	Florence	24	18	Haleyville	18.12	Atmore 1 SW	7.35
Alaska	Moose Pass	58	24	2 Stations	-51	10+	Mac Leod Harbor	20.63	4 Stations	T
Arizona	Tucson Univ of Arizona	83	17	Fort Valley	- 8	23	Happy Jack Ranger Sta	11.06	Yuma Valley	.26
Arkansas	2 Stations	84	12	2 Stations	25	22+	Jessieville	15.20	Green Forest	6.02
California	Mecca Fire Station	84	24	2 Stations	-12	5+	Cuyahaca	14.31	Thermal FAA AP	.12
Colorado	John Martin Dam	78	13	3 Stations	-19	16+	Wolf Creek Pass 1 E	6.08	Gunnison	.20
Connecticut	Bulls Bridge Dam	75	13	Norfolk 2 SW	0	1	Bridgeport WSO AP	5.00	Stafford Springs 2	2.71
Delaware	5 Stations	74	17+	Georgetown 5 SW	20	1	Wilmgton Porter Resvr	4.34	Bridgeville 1 NW	1.92
Florida	3 Stations	92	17	Fountain 3 SSW	28	18	Tallahassee WSO AP	13.57	Royal Palm Ranger Sta	1.06
Georgia	Jesup 8 S	90	14	Blairsville Exp Sta	21	22	Chickamauga Park	16.08	Doctortown 1 WSW	2.88
Hawaii	Keawakapu Beach 260.2,Maui	88	28+	Mauna Loa Slope Obs, Hawaii	27	11	Hilo Country Club 86.6, Ha.	44.24	5 Stations	.00
Idaho	Payette	70	23	Stanley	-12	18	Wallace Woodland Park	3.12	Atlanta	.12
Illinois	2 Stations	78	13	2 Stations	18	22+	Quincy FAA AP	11.45	Antioch 2 NW	2.57
Indiana	2 Stations	78	31+	Culver Experiment Farm	17	22	North Vernon 2 SW	8.85	LaGrange Sewage Plant	3.16
Iowa	Keokuk Lock and Dam 19	71	14	Elkader 5 SSW	13	21	Corning	7.64	Sanborn	1.88
Kansas	Sedan	79	12	Syracuse 2 W	17	17	Meade	12.32	Johnson 11 ESE	2.27
Kentucky	3 Stations	88	15+	Falmouth 5 WNW	18	19	Burkesville 2 W	9.01	Lloyd Greenup Dam	2.89
Louisiana	Hineston 4 NNE	88	13	Ashland 2 S	32	17	Quarantine	15.12	Shreveport WSO AP	5.01
Maine	Saco	68	19	2 Stations	-20	2+	Rockland	4.96	Bingham Wyman	1.30
Maryland	3 Stations	79	15+	Savage River Dam	8	18	Chestertown	4.78	Hancock Fruit Lab	1.38
Massachusetts	Chester 2	72	16	Borden Brook Reservoir	- 5	1	Sterling	4.73	Northbridge 2	1.85
Michigan	South Haven Exp Farm	75	14	Herman	- 0	21	Eaton Rapids	5.11	Whitefish Point	D .58
Minnesota	North Mankato	68	13	Gunflint Lake 10 NW	- 1	18	Minnesota City Dam 5	3.38	Hibbing FAA AP	.23
Mississippi	Natchez	87	12	Holly Springs 4 N	24	1	Monticello	19.60	Jackson Thomp F WSO AP	6.12
Missouri	5 Stations	78	15+	2 Stations	17	18	Annapolis	11.65	Maryville 2 E	4.59
Montana	Paradise	71	24	Lakeview	-10	25+	Red Lodge	6.08	6 Stations	.00
Nebraska	2 Stations	75	13	Agate 3 E	7	8	Plattsmouth	8.15	Chadron FAA AP	.80
Nevada	2 Stations	75	31+	North Creek 13 N	- 4	2	Lehman Caves Nat Mon	4.96	Kings River Valley	.14
New Hampshire	5 Stations	65	31+	First Conn Lake	-17	1	Mount Washington	9.01	Benton 5 SW	1.42
New Jersey	Belleplain St Forest	75	12	Phillipsburg	7	1	Bernardsville 2 E	4.94	Cape May 1 NW	1.59
New Mexico	Bitter Lakes WL Ref	82	19	Ocate 1 N	- 5	25	Sandia Crest	6.37	Carlsbad Caverns	.04
New York	Brockport 2 NW	76	15	2 Stations	-10	1	Bridgehampton	4.82	Watertown FAA AP	.36
North Carolina	2 Stations	89	15	Grandfather Mountain	15	18+	Lake Toxaway 2 SW	16.83	New Holland	1.87
North Dakota	3 Stations	69	27+	Lostwood 12 N	5	28	Forbes 9 NNW	3.90	Golden Valley 10 S	.00
Ohio	Waverly	88	14	Chardon	6	1	West Manchester 3 SW	6.90	Middlebourne	1.15
Oklahoma	Keystone Dam	82	13	2 Stations	21	17+	Kansas 1 ESE	13.37	Kenton	2.82
Oregon	7 Stations	70	25+	Austin 3 S	3	18	Port Orford 5 E	14.23	Ironside 2 W	.06
Pennsylvania	2 Stations	83	15	Kane 1 NNE	3	1	Bradford FAA AP	6.10	Raymond	1.03
Puerto Rico & VI	Comerio Falls Plant 2,P.R.	94	29	2 Stations	50	4+	Guavate Camp, P.R.	10.18	Central San Francisco,P.R.	.09
Rhode Island	Providence WSO AP	70	12	Kingston	20	1	Kingston	4.15	Woonsocket	2.62
South Carolina	Mc Coll	90	12	Longcreek 1 N	21	22	Caesars Head 1 NE	15.59	Andrews	2.35
South Dakota	2 Stations	70	12	Pactola Dam	9	16	Lead 1 E	7.59	Harding 3 SE	.30
Tennessee	Gatlinburg 2 SW	86	15	Mountain City No 2	16	23	Lawrenceburg Filt Pl	17.09	Newbern	5.29
Texas	Laredo No 2	95	13	2 Stations	20	30+	Linden	10.44	12 Stations	.00
Utah	Hite Marina	68	26	Woodruff	-11	3	Blowhard Mtn Radar	5.53	Antimony	.13
Vermont	3 Stations	66	31	West Burke	-14	1	Mount Mansfield	4.76	South Newbury	1.54
Virginia	Chase City	90	13	2 Stations	11	23+	Peaks of Otter	9.04	Woodstock	1.65
Washington	Kennewick	71	25	Rainier Paradise RS	11	14	Clearwater	11.66	3 Stations	T
West Virginia	Williamson	89	15	Canaan Valley	11	24	Williamson	6.95	Romney 1 SW	1.31
Wisconsin	West Allis	71	14	Drummond 6 W	0	18	Pine River 3 NE	5.67	Foxboro	1.30
Wyoming	7 Stations	64	20+	Bondurant 3 NW	-21	4	Albin	3.90	Greybull	.05

+ And also on an earlier date or dates.

Note: Dates in the above table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

METRIC UNITS

MARCH 1973

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station ○	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
ALABAMA	M	Mb	Mb	C	C.	C.	C.	C		C.				C	%	Mm.	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s.							%
BIRMINGHAM	189	992.2	1014.8	20.1	9.4	14.8	2.3	26.7	14	- 1.7	22	0	1	9.4	73	247	94	65	15	8	0	0	1.9	16	17.0	NW	16	3	5	23	7.9	48
HUNTSVILLE	190	991.5	1014.6	19.8	9.1	14.4	3.4	25.0	14+	0.0	18	0	1	9.4	76	375	234	196	14	8	0	0	1.9	15	13.9	13	25	3	11	17	7.4	
MOBILE	64	1006.4	1014.2	22.6	13.6	18.1	2.9	28.3	15+	4.4	18	0	0	14.4	81	295	112	77	13	7	0	0	2.2	16	13.4	15	24	3	6	22	8.0	
MONTGOMERY	56	1007.8	1015.2	22.0	11.4	16.7	3.4	30.0	15	2.2	22	0	0	11.1	72	250	93	100	15	11	0	0	1.3	16	15.2	SE	7	3	7	21	7.9	34
ALASKA												B															8					
ANCHORAGE	35	996.6	1001.6	- 0.6	- 8.1	- 4.3	- 0.2	5.0	26	-20.0	19+	0	30	- 7.2	76	17	4	5	10	0	409	559	0.4	32	9.8	21	10	3	4	24	8.2	51
ANNETTE	34	1005.1	1009.0	5.9	0.8	3.4	0.2	9.4	25	- 3.3	6	0	10	0.0	80	224	- 18	54	27	0	114	51	2.2	14	12.5	17	13	0	9	22	8.9	
BARROW	9			-25.8	-32.8	-29.3	- 3.4	-15.0	31	-40.6	8	0	31			1	- 2	1	3	0	25	178			13.9	7	29	19	7	5	3.3	
BARTER ISLAND	12	1016.6	1018.6	-28.5	-34.6	-31.6	- 5.5	-14.4	31	-46.1	10	0	31	-36.1	65	T	- 5	T	0	0	T	229	1.6	10	13.9	8	29+	19	7	5	2.9	
BETHEL	38	996.6	1002.6	- 9.4	-19.5	-14.4	- 3.1	5.0	26	-32.2	14+	0	31	-18.9		12	- 14	5	11	0	178	406	1.0	2	13.9	21	9	8	9	14	6.5	
BETTLES	196			-11.6	-23.5	-17.5		6.1	30	-35.6	5	0	31			8		3	6	0	140	1092			11.2	9	18	9	8	14	5.7	
BIG DELTA	386			- 3.4	-18.7	-11.0		8.3	31+	-31.1	18+	0	31			1			1	0	25											
COLD BAY	29	996.3	1000.0	1.1	- 4.4	- 1.7	0.1	7.2	7	-15.6	18	0	26	- 2.8	89	47	3	17	24	0	249	102	1.3	19	19.7	13	5	0	3	28	9.3	
FAIRBANKS	133	987.5	1005.3	- 5.7	-16.7	-11.2	1.7	8.9	28	-27.2	3	0	31	-18.3	57	10	0	4	7	0	221	559	0.7	36	8.9	21	11	6	6	19	7.2	
GULKANA	479			- 0.7	-14.4	- 7.6		7.2	28+	-31.7	19	0	31			1		1	1	0	8	203			13.0	[illegible]	11	7	3	21	7.1	
HOMER	20							6.7	28	-15.0	19	0	30												10.3	23	12					
JUNEAU	4	1006.1	1006.9	3.3	- 2.3	0.5	1.4	6.7	30+	-10.0	17	0	24	- 1.7	85	76	- 7	14	23	0	244	203	3.5	11	16.1	13	22	1	1	29	9.4	17
KING SALMON	15	999.3	1001.4	- 2.8	-11.3	- 7.1	- 0.1	6.1	28	-26.7	18+	0	29	-10.6	75	32	7	9	13	0	206	127	0.6	13	13.9	10	27	6	3	22	7.5	
KODIAK	34	996.3	1000.5	2.2	- 4.5	- 1.1	- 1.2	8.9	23	-15.0	19	0	26	- 6.1	71	82	- 16	24	14	0	320	127	1.7	30	13.0	29	14+	8	8	15	6.4	
KOTZEBUE	3			-15.7	-25.6	-20.7	- 1.7	3.9	29	-36.7	17	0	31			19	12	4	9	0	259	1219			13.4	8	28					
MC GRATH	105	997.5	1003.5	- 6.4	-19.8	-13.1	0.1	6.7	28	-37.2	17	0	31	-16.7	70	29	5	9	15	0	572	762	0.5	1	9.8	9	27	5	6	20	7.1	
NOME	4	1004.4	1005.4	-12.4	-21.4	-16.9	- 3.5	1.1	27	-32.8	5	0	31	-20.6	71	3	- 19	1	6	0	119	203	2.8	4	15.6	3	8+	14	4	13	5.3	79
ST. PAUL ISLAND	7	999.7	1000.6	- 4.0	- 9.2	- 6.6	- 2.3	2.2	27+	-16.7	15	0	31	- 7.8	88	83	56	32	28	0	798	762	4.9	4	28.2	3	10	1	6	24	8.5	
SHEMYA	37	991.2	994.8	1.6	- 1.2	0.2	0.0	3.3	18	- 6.1	31	0	25	- 1.7	88	41	- 24	16	15	0	94	T	2.9	8	27.3	22	2	0	4	27	9.2	
SUMMIT	732			- 5.6	-14.6	-10.1		4.4	29	-24.4	19	0	31			42		12	10	0	1074	1067						4	3	24	8.1	
TALKEETNA	105			- 0.3	-11.9	- 6.1	0.4	7.2	30	-30.6	19	0	31			47	10	9	12	0	836	1092			10.3	18	10					
UNALAKLEET	5			-10.3	-19.7	-15.0		3.3	27	-33.9	17	0	31			23		6	12	0	226	635			15.6	10	27					
YAKUTAT	9	1003.4	1004.5	2.8	- 3.3	- 0.2	0.1	5.6	23	-15.0	17	0	20	- 2.2	86	297	77	52	26	0	1572	1422	2.3	10	15.6	13	22	4	2	25	8.5	
ARIZONA																																
FLAGSTAFF	2135	780.6	1011.9	3.7	- 9.4	- 2.9	- 4.9	9.4	16	-18.3	23	0	31	- 4.4	85	157	120	27	21	1	1966	914	2.1	22	12.5	SW	20	6	4	21	7.1	46
PHOENIX	340	973.2	1012.3	19.7	7.7	13.7	- 1.3	23.9	20	3.3	15	0	0	4.4	58	43	26	15	11	4	0	0	1.2	15	14.8Y	SW	20	12	6	13	5.2	62
TUCSON	788	923.5	1011.9	17.2	4.6	10.9	- 3.6	25.0	17	0.6	15	0	0	2.2	60	56	42	18	12	0	0	0	1.8	22	14.8	NW	29	12	3	16	5.7	70
WINSLOW	1492	846.3	1011.3	12.9	0.6	6.7	- 0.8	21.1	17	- 2.8	6	0	15	- 1.1	63	53	43	14	14	1	279	76	1.9	22	14.3	24	27+	7	6	18	6.5	
YUMA	59	1005.[illegible]	1012.5	22.0	9.1	15.6	- 1.7	25.6	25	6.7	6+	0	0	4.4	52	24	18	16	5	1	0	0	1.5	25	14.8	W	8	14	12	5	3.9	83
ARKANSAS																																
FORT SMITH	136	994.2	1010.7	18.2	6.9	12.6	1.9	26.7	12	0.6	17	0	0	6.1	69	209	121	63	18	14	0	0	0.2	7	14.8	SW	11	5	7	19	7.2	42
LITTLE ROCK	78	1002.0	1011.7	19.5	9.6	14.6	3.6	26.1	8	0.6	1	0	0	9.4	74	200	78	44	13	8	0	0	1.0	18	18.3	SW	29	8	4	19	7.0	66
CALIFORNIA																																
BAKERSFIELD	145	998.3	1015.9	17.6	7.2	12.4	- 1.4	23.9	16	3.3	22+	0	0	6.7	72	63	36	22	11	0	0	0	1.1	2	17.0	36	11	5	14	12	6.5	
BISHOP	1252	867.3		13.3	- 1.3	6.0	- 2.7	18.3	31+	- 5.6	3	0	23			8	- 6	3	8		25	25										
BLUE CANYON	1609			4.7	- 2.7	1.0	- 3.2	11.1	23+	- 6.7	22	0	27			183	- 32	35	17		1135	1295			12.5	23	10	7	5	19	7.0	
EUREKA	13			11.7	5.4	8.6	- 0.7	14.4	18	2.2	23+	0	0			[illegible]	47	48	21		T	0			15.6	N	26	5	8	18	[illegible]	67
FRESNO	100	1001.7	1015.6	15.2	5.2	10.2	- 2.6	21.1	16	1.1	18+	0	0	6.1	80	72	22	26	13	2	T	0	0.4	34	14.8	NW	13	5	8	18	7.0	58
LONG BEACH	8	1013.9	1015.3	17.7	8.1	12.9	- 0.8	22.2	16	5.0	15	0	0	7.2	69	62	27	20	6	1	0	0	1.9	25	11.6	32	29+	12	11	8	5.1	
LOS ANGELES	30	1011.2	1014.7	16.8	9.2	13.1	- 0.8	20.0	16+	6.1	21	0	0	7.8	72	61	16	19	6	0	0	0	2.1	25	17.9Y	W	20	14	8	9	4.8	
LOS ANGELES [illegible]	82			19.0	9.7	14.4	- [illegible]	23.9	16	6.7	21	0	0			69	11	23	7		0	0			14.3	18	20	14	9	8	4.9	56
MT SHASTA R	1080	889.6	1015.4	8.6	- 1.9	3.3	- 1.8	17.2	15	- 6.1	18+	0	28			73	- 40	22	16		465	127										
OAKLAND	2	1016.6	1016.7	13.9	7.4	10.7	- 1.3	17.8	14	3.9	18	0	0	6.7	77	71	9	15	11	[illegible]	0	0	2.3	28	12.5	15	21+	8	8	15	[illegible]	
RED BLUFF	104	1002.7	1015.4	15.4	4.2	9.8	- 2.5	21.7	26	1.1	22+	0	0	2.8	68	88	19	32	13	3	0	0	0.8	33	14.8	[illegible]	10	8	5	18	6.4	71
SACRAMENTO	5	1014.6	1015.4	15.6	5.7	10.6	- 1.3	19.4	24+	1.7	18	0	0	3.9	67	70	10	16	11	3	0	0	1.0	25	11.6	NW	28+	[illegible]	8	[illegible]	5.9	72
SANDBERG R	1377	858.1		6.9	- 0.7	3.1	- 4.1	14.4	24	- 4.4	22+	0	22			53	17	23	8		358	51			19.2	35	13	6	11	14	5.6	
SAN DIEGO	4	1014.6	1015.6	17.8	11.1	14.5	- 0.5	21.7	16	7.8	14	0	0	7.2	63	57	18	18	13	2	0	0	1.4	26	11.2	NW	13	9	7	15	6.0	66
SAN FRANCISCO	2	1016.3	1016.9	14.6	6.9	10.8	- 1.1	18.3	23	2.8	18	0	0	6.1	76	74	6	24	10	0	T	0	3.6	28	14.8	29	27+	8	8	15	6.2	
SAN FRANCISCO [illegible]	16			14.1	8.7	11.4	- 1.2	18.3	23	6.1	18	0	0			67	- 8	18	10		0	0			[illegible]	W	31					53
SANTA MARIA	72			15.1	3.7	9.4	- 2.4	18.3	15+	0.0	15+	0	2			77	24	36	10		0	0						10	13	8	[illegible]	
STOCKTON	7	1014.6	1015.7	16.[illegible]	5.4	10.7	- 1.3	20.0	24	2.2	23+	0	0	4.4	68	81	29	16	13	0	0	0	1.5	19	[illegible]	31	28	8	7	16	6.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation ground	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Ice pellets		Wind		Fastest mile (1.6 kilometers)			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
COLORADO	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm.	Mm.	Mm			Mm.	Mm.	M p.s		M.p.s							%
ALAMOSA	2297	764.3		6.3	- 6.8	- 0.2	- 0.3	12.2	20+	-10.0	28	0	31			36	29	21	10		742	203						8	10	13	6.2	
COLORADO SPRINGS	1873	804.6	1011.7	7.4	- 2.5	2.5	0.2	17.2	17	- 6.7	16	0	30	- 6.7	57	29	14	10	10	1	396	76	2.5	1	17.4	35	24	5	9	17	7.0	
DENVER	1610	830.0	1009.4	10.2	- 1.5	4.4	1.9	19.4	17	- 7.2	4	0	28	- 5.0	56	45	14	16	14	0	384	127	0.6	10	18.3	NW	13	6	10	15	6.8	59
GRAND JUNCTION	1476	846.6	1010.2	10.8	0.3	5.6	0.3	17.2	17	- 3.3	25	0	16	- 3.3	59	17	- 3	4	11	2	33	25	0.7	5	14.3	SW	20	8	5	18	6.8	56
PUEBLO	1428	849.6	1009.6	12.6	- 0.8	5.9	1.4	22.8	12	- 7.2	6	0	19	- 3.3	58	34	21	11	5	1	157	51	1.9	2	24.6	NW	13	8	6	17	6.5	66
CONNECTICUT																																
BRIDGEPORT	2	1018.0	1018.4	9.3	1.9	5.6	2.6	16.1	12	- 5.6	1	0	8	- 0.6	69	127	19	43	13	0	T	T	2.1	4	17.9	26	18	4	7	20	7.9	
HARTFORD	52	1011.5	1018.1	11.3	1.2	6.3	4.1	22.2	16	- 5.0	1	0	12	- 1.1	65	82	- 15	25	14	0	10	25	1.4	34	14.8	SW	17	2	6	23	8.3	45
DELAWARE																																
WILMINGTON	23	1014.6	1017.7	14.6	4.7	9.7	4.5	23.3	17	- 1.7	1	0	4	2.8	67	102	0	50	15	2	T	T	1.3	4	14.3	27	18+	2	4	25	8.5	
DIST. OF COLUMBIA																																
WASHINGTON DULLES	88	1005.8	1017.7	14.9	3.6	9.2		22.8	12	- 5.6	24	0	11	3.9	74	68		13	15	1	5	T	0.1	23	13.9	24	18	1	6	24	8.5	
WASHINGTON NATIONAL	3	1015.2	1017.7	15.3	5.9	10.6	3.5	22.8	12	- 0.6	1	0	1	4.4	68	75	- 6	18	16	2	T	T	0.6	1	17.0	SW	17	1	10	20	8.1	39
FLORIDA																																
APALACHICOLA U	4			20.8	14.7	17.8	1.7	24.4	16+	6.1	18	0	0			151	36	46	13	6	0	0			14.8	W	16	4	4	23	7.9	76
DAYTONA BEACH	9	1015.9	1017.5	25.5	14.7	20.1	2.4	31.7	16	6.7	19	0	0	12.8	67	67	- 24	26	6	4	0	0	1.5	15	12.5	28	17	6	11	14	6.7	
FORT MYERS	5	1016.6	1016.9	28.1	16.2	22.1	2.0	31.1	14	7.2	19	0	0	16.7	75	99	32	89	4	2	0	0	1.2	14	11.2	31	17	5	17	9	5.6	
JACKSONVILLE	8	1016.3	1017.3	25.1	12.7	18.9	2.1	31.1	16+	3.9	23+	0	0	13.3	77	259	170	124	9	5	0	0	1.0	16	17.0	W	17	7	8	16	6.9	51
KEY WEST	1	1015.6	1016.2	26.6	22.0	24.3	1.8	28.3	30+	15.0	19	0	0	18.9	73	56	11	36	3	1	0	0	4.4	11	13.0	SE	25+	7	16	8	5.4	87
LAKELAND U	65			26.0	15.7	20.8	1.7	30.6	15	9.4	22+	0	0			112	4	67	7		0	0						9	15	7	5.5	71
MIAMI	2	1016.6	1016.9	26.7	20.5	23.6	2.2	28.9	26+	11.7	19	0	0	17.8	72	45	- 13	22	5	1	0	0	3.0	11	14.3	32	17	6	12	13	6.2	
ORLANDO	33	1012.9	1017.3	27.4	15.9	21.7	2.9	31.7	14+	9.4	18	0	0	15.0	70	105	18	65	7	4	0	0	1.6	15	12.5	28	17	5	12	14	6.5	
PENSACOLA	34	1010.8	1015.0	21.6	14.6	18.1	2.0	25.6	15+	4.4	18	0	0	14.4	81	300	147	41	15	10	0	0	2.1	15	13.4	12	24	3	7	21	8.1	
TALLAHASSEE	17	1013.9	1016.3	24.1	12.2	18.2	2.3	28.9	13+	0.0	18	0	1	13.9	81	345	213	97	11	10	0	0	1.5	16	10.3	18	16	3	7	21	7.8	
TAMPA	6	1016.6	1017.0	26.6	15.9	21.2	2.3	30.0	15+	7.8	19+	0	0	15.0	71	107	12	81	6	2	0	0	1.3	15	10.3	30	17+	5	13	13	6.5	71
WEST PALM BEACH	5	1016.3	1017.0	27.4	18.8	23.1	2.1	29.4	26+	7.8	19	0	0	15.6	64	58	- 29	35	6	4	0	0	2.7	12	11.6	12	25	8	8	15	6.2	
GEORGIA																																
ATHENS	244	987.5	1016.4	19.2	8.8	14.0	3.1	27.2	15	- 1.7	22	0	1	9.4	80	250	121	70	16	5	0	0	0.2	14	12.1	28	17	5	4	22	7.7	
ATLANTA	308	978.7	1015.6	19.2	8.9	14.1	3.3	27.2	15	- 0.6	22	0	2	8.3	74	242	106	65	12	6	0	0	1.5	15	18.3	SW	16	3	7	21	8.0	40
AUGUSTA	41	1011.2	1016.4	21.4	9.5	15.5	2.8	29.4	14	- 0.6	1	0	2	8.9	72	158	52	41	17	7	0	0	0.4	19	13.0	28	17	4	6	21	7.8	
COLUMBUS	117	1001.7		21.5	11.3	16.4	3.5	27.8	15	2.2	23+	0	0	11.1	76	249	97	82	15	6	0	0	1.0	13	10.3	12	25+	3	5	23	8.0	
MACON	108	1003.4	1016.3	22.3	11.0	16.7	2.8	29.4	15+	0.6	22	0	0	11.1	74	165	39	47	13	4	0	0	1.1	16	18.8	SW	4	4	7	20	7.6	46
ROME	194			19.9	8.0	13.9	3.7	28.3	13	- 1.7	23	0	5			234	85	44	15		0	0										
SAVANNAH	14	1015.6	1017.3	22.8	12.3	17.6	2.9	30.6	14	3.3	22	0	0	11.7	75	136	35	39	11	1	0	0	0.8	18	17.9	W	17	5	6	20	7.4	48
HAWAII																																
HILO	8	1019.3	1020.4	26.3	18.6	22.5	1.1	28.3	13	15.6	26	0	0	18.9	84	479	105	75	31	3	0	0	0.6	5	7.6	E	30	0	11	20	7.8	53
HONOLULU	2	1019.3	1019.7	27.9	21.0	24.5	1.8	28.9	31+	18.9	22	0	0	16.7	65	10	- 63	3	10	1	0	0	7.3	6	14.8	NE	9	3	22	6	5.8	80
KAHULUI	15	1016.9	1019.3	27.6	19.7	23.6	1.3	30.6	13+	16.1	12	0	0	16.7	69	34	- 22	9	16	1	0	0	7.2	5	16.1	NE	9	13	12	6	4.7	81
LIHUE	31	1016.6	1021.7	26.3	21.8	24.1	2.4	27.8	13+	20.6	22+	0	0	18.3	74	32	- 84	8	21	0	0	0	6.8	5	12.1	NE	17+	1	17	13	7.0	49
IDAHO																																
BOISE	865	911.6	1012.5	11.7	0.5	6.1	0.7	17.2	25	- 5.0	18	0	15	- 3.9	53	17	- 17	7	7	1	15	25	0.4	31	18.8	SE	19+	6	10	15	6.8	78
LEWISTON	431			13.2	2.1	7.6	1.7	20.0	19	- 2.8	18	0	9			13	- 17	6	8		T	T			19.7Y		10	3	9	19	7.8	
POCATELLO	1358	858.1	1012.7	6.8	- 2.6	2.2	0.1	11.7	26	- 5.0	19+	0	28	- 5.0	63	37	11	12	8	0	221	76	1.8	23	15.2	S	10	5	11	15	7.0	63
ILLINOIS																																
CAIRO U	96			17.1	8.8	12.9	3.9	24.4	9	2.8	21+	0	0			169	47	48	16		0	0			17.0	SW	11	4	10	17	7.2	46
CHICAGO O HARE	201	989.5	1014.4	11.0	2.3	6.7	5.2	21.1	14	- 4.4	22+	0	9	1.7	75	99	31	22	18	5	86	51	1.2	5	13.4	7	31	6	4	21	7.5	
CHICAGO MIDWAY	185	991.9	1014.8	11.4	3.1	7.3	4.9	22.2	14	- 4.4	18	0	7	2.8	75	117	47	23	17	4	97	76	1.4	7	14.8	S	11	4	5	22	7.6	48
MOLINE	177	991.9	1013.8	12.1	2.8	7.4	5.6	21.1	14	- 4.4	22	0	8	2.2	74	189	128	56	17	2	13	T	1.6	8	17.0	SW	14	6	4	21	7.7	40
PEORIA	199	989.2	1013.6	12.6	3.6	8.1	4.9	22.2	14	- 3.9	18	0	6	3.3	74	177	104	46	19	6	30	T	1.5	8	13.9	NW	7	4	5	22	8.0	37
ROCKFORD	221	987.1	1014.4	10.4	1.8	6.1	5.0	20.0	14	- 6.1	22	0	10	1.7	78	115	53	46	14	5	23	25	1.7	7	15.6	6	31	7	4	20	7.3	
SPRINGFIELD	179	990.9	1013.1	13.4	4.7	9.1	4.5	21.1	31	- 2.2	22+	0	4	4.4	77	200	127	46	18	6	8	T	1.4	9	18.8	SW	31	5	4	22	7.8	47
INDIANA																																
EVANSVILLE	116	999.3	1013.4	17.1	6.9	12.0	4.6	23.9	31+	- 1.7	22	0	3	6.7	71	177	68	30	18	4	T	T	1.2	15	15.2	S	6	4	8	19	7.5	47

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
INDIANA	M	Mb	Mb	C	C	C.	C.	C.		C				C	%	Mm.	Mm.	Mm.			Mm.	Mm	M.p.s.		M.p.s							%
FORT WAYNE	241	984.4	1014.9	12.1	2.5	7.3	4.9	22.2	11	- 5.0	23	0	11	3.3	77	118	47	39	15	3	318	229	0.8	9	17.0	SW	11	5	4	22	7.8	47
INDIANAPOLIS	241	984.8	1014.2	15.0	4.3	9.7	5.8	23.9	6	- 3.9	22+	0	7	3.9	71	143	56	33	15	4	51	51	1.3	10	19.7	SW	11	3	5	23	7.9	39
SOUTH BEND	236	986.1	1014.2	12.7	3.6	8.2	6.6	23.3	14	- 4.4	21+	0	8	3.3	74	98	28	22	16	3	119	127	0.9	13	13.4	25	15	5	4	22	7.8	
IOWA																																
BURLINGTON	211			12.5	3.3	7.9	5.0	20.6	14	- 4.4	18	0	6	3.3	73	149	80	30	17	4	T	0	1.4	7	14.3	23	14	6	3	22	7.8	
DES MOINES	286	978.3	1013.3	11.6	3.5	7.6	6.6	18.3	13	- 5.0	18	0	4	2.2	74	135	52	35	16	1	T	T	1.8	7	19.2	SW	14	4	5	22	7.9	28
DUBUQUE	322	974.6		10.1	1.4	5.7	5.8	17.8	14	- 4.4	18	0	9			120	50	32	14		36	T						4	5	22	7.9	
SIOUX CITY	334	973.6	1013.9	10.3	1.7	6.1	5.4	20.0	13	- 4.4	17	0	10	0.6	71	132	65	33	13	3	T	T	1.7	6	16.5	[illegible]	14	4	3	24	8.3	33
WATERLOO	265	981.7	1014.2	10.4	0.5	5.4	5.4	17.2	30+	- 7.8	18	0	13	- 0.6	69	82	30	33	12	1	T	0	1.7	7	13.4	22	15+	4	4	23	8.0	
KANSAS																																
CONCORDIA	448	957.7	1011.0	11.1	3.1	7.1	2.8	21.7	12	- 3.9	17	0	5	3.9	82	187	149	40	20	3	0	0	1.9	5	20.1	[illegible]	14	3	4	24	8.3	33
DODGE CITY	787	918.7	1010.1	10.1	0.7	5.4	- 0.1	21.1	12	- 3.9	20	0	13	1.1	79	225	195	65	17	4	25	25	1.5	2	23.2	SW	13	4	7	20	7.6	42
GOODLAND	1114	882.2	1010.5	10.0	- 1.2	4.4	1.9	22.2	12	- 6.1	20	0	27	0.0	81	74	47	16	13	1	381	152	0.8	36	16.1	15	21	6	5	20	7.3	
TOPEKA	267	979.3	1011.5	12.9	4.3	8.6	3.2	21.1	12	- 3.3	17	0	6	5.0	80	214	163	34	18	5	0	0	1.6	6	18.8	SW	14	3	6	22	8.3	28
WICHITA	403	961.7	1009.7	13.4	4.8	9.1	2.2	22.8	12	- 3.3	17	0	3	5.6	82	233	191	46	17	8	T	T	0.8	3	17.0	[illegible]	13	3	6	22	7.9	34
KENTUCKY																																
COVINGTON	265	982.7	1014.5	15.6	5.1	10.3	5.6	23.9	14	- 5.6	22	0	9	6.1	78	155	59	27	15	4	99	25	0.8	15	13.4	21	11	4	6	21	7.8	
LEXINGTON	294	979.3	1014.9	17.7	6.6	12.1	5.9	27.2	14	- 3.9	22	0	5	6.1	73	129	8	27	15	3	10	T	1.8	16	12.5	27	11	4	8	19	7.8	
LOUISVILLE	145	996.3	1013.9	17.4	6.7	12.1	5.8	25.0	31	- 2.2	22+	0	6	6.7	73	159	42	45	15	6	13	T	1.1	17	15.6	[illegible]	11	4	7	20	7.7	45
LOUISIANA																																
ALEXANDRIA	28	1008.1	1012.6	22.1	10.8	16.5	1.8	28.9	12	3.9	18+	0	0			276	150	116	14	9	0	0	1.3	19	11.2	13	24+	7	7	17	6.5	
BATON ROUGE	20	1010.5	1013.0	23.6	13.3	18.4	2.5	30.0	15	5.6	18	0	0	13.9	79	323	199	154	15	12	0	0	2.1	16	12.5	19	24	4	8	19	7.4	
LAKE CHARLES	3	1011.2	1012.2	22.3	13.7	18.0	1.8	26.7	12	6.1	17	0	0	14.4	82	188	80	125	16	11	0	0	2.2	14	17.9	18	24	6	6	19	7.1	
NEW ORLEANS	1	1012.5	1013.4	23.3	13.9	18.6	2.3	28.9	15	4.4	18	0	0	15.0	79	309	173	132	14	7	0	0	2.2	16	16.1	14	24	3	5	23	7.9	
SHREVEPORT	77	1002.0	1011.3	21.7	10.4	16.1	2.4	28.9	12	3.3	3	0	0	9.4	67	127	22	58	13	8	0	0	1.2	18	11.6	17	13	5	6	20	7.2	41
MAINE																																
CARIBOU	190	994.6		3.7	- 6.4	- 1.3	3.8	11.1	25	-23.3	1	0	26			63	3	22	11		198	813						8	2	21	7.2	
PORTLAND	13	1016.3	1018.7	6.8	- 0.6	3.2	3.5	17.2	12	-11.7	1	0	18	- 3.3	68	85	- 26	27	12	0	13	76	0.9	1	13.4	NW	19	3	3	25	8.4	32
MARYLAND																																
BALTIMORE	45	1012.2	[illegible]	14.1	4.0	9.1	2.9	22.8	17+	- 5.0	1	0	5	2.8	70	101	4	32	16	1	T	0	0.8	1	20.6	W	17	3	7	21	8.2	46
MASSACHUSETTS																																
BLUE HILL OBS R	192			9.3	1.0	5.2	3.6	18.3	12	- 5.0	21	0	12			66	- 50	19	10		51	51			25.9	SSW	17					36
BOSTON	5	1017.3	1018.2	10.1	2.4	6.3	3.1	19.4	12	- 3.3	1	0	6	- 0.6	67	56	- 51	18	9	1	8	T	1.4	3	16.5	SW	18	3	4	24	8.2	47
WORCESTER	301	980.4	1018.1	9.5	0.3	4.9	4.5	17.8	12	- 6.1	21	0	18	- 1.7	66	89	- 15	37	9	0	10	T	1.3	34	14.3	25	19	2	7	22	8.2	
MICHIGAN																																
ALPENA	210	990.9	1016.8	6.1	- 2.7	1.8	5.3	16.7	11	-11.7	22	0	22	1.7	78	46	- 5	19	13	[illegible]	244	203	0.8	6	14.8	N	17	5	3	23	7.7	36
DETROIT	189			10.6	2.3	6.2	4.6	19.4	15+	- 4.4	21	0	9	0.6	70	104	42	24	13	3	160		0.7	4	15.6	23	15					
DETROIT METRO	191	[illegible]	1015.3	10.3	2.2	6.3	4.9	20.6	11	- 3.3	23+	0	11	1.7	76	114	53	29	14	4	257	229	0.8	[illegible]	18.3	SW	15	5	6	[illegible]	7.5	41
FLINT	[illegible]	987.1	1015.3	9.1	1.2	5.2	4.8	20.0	11	- 7.2	21	0	12	1.1	78	107	52	27	14	1	363	330	0.5	[illegible]	14.3	[illegible]	17	5	6	20	7.7	
GRAND RAPIDS	239	985.8	1015.9	10.1	0.9	5.5	5.1	22.2	14	- 5.6	22+	0	12	0.6	74	85	27	27	15	2	216	203	1.1	6	16.5	W	15	4	5	22	8.0	42
HOUGHTON LAKE	351	973.2	1016.1	7.8	- 1.1	3.4	6.4	17.2	11	- 7.2	22+	0	17	- 1.1	77	[illegible]	7	18	13	1	135	127	0.8	6	11.2	34	17	7	0	24	7.8	
LANSING	256	983.1	1015.4	8.5	0.1	4.3	4.1	18.9	11	- 9.4	21	0	14	0.6		91	30	31	16	6	419	442	0.4	10	14.3	SW	15+	7	4	20	7.4	43
MARQUETTE	206			4.9	- 1.4	1.8	4.7	16.7	28	- 6.7	22	0	24			63	12	32	10		10	483			11.5	NW	17	4	5	22	7.8	47
MUSKEGON	191	991.2	1015.7	9.7	0.7	5.2	4.7	21.7	14	- 5.6	23	0	14	- 0.6	71	65	13	13	15	2	102	102	1.2	8	18.3	34	17	4	5	22	7.8	
SAULT STE. MARIE	220	989.5	1016.8	5.7	- 2.3	1.7	6.2	13.9	29	- 6.7	20+	0	23	- 2.2	78	45	- 1	23	12	3	5	406	1.0	6	14.3	NW	18	5	6	20	7.4	51
MINNESOTA																																
DULUTH	435	964.4	1017.2	3.7	- 3.9	- 0.1	5.8	13.3	27	-11.7	18	0	28	- 3.3	80	39	- 2	21	10	[illegible]	53	440	2.1	8	16.5	NW	11	6	6	19	7.8	41
INTERNATIONAL FALLS	359	972.9	1017.3	5.6	- 4.8	0.4	7.4	15.0	27	-10.6	18+	0	30	- 5.0	68	24	- 3	18	8	[illegible]	41	254	0.7	8	[illegible]	20	16	8	8	15	6.1	
MINNEAPOLIS	254	984.8	1015.6	8.4	0.7	4.6	7.1	17.8	13	- 6.7	18	0	12	- 1.7	68	28	- 10	12	12	1	[illegible]	127	1.8	6	[illegible]	[illegible]	11+	5	[illegible]	23	7.7	43
ROCHESTER	395	960.8	1015.3	8.5	- 0.4	4.1	6.3	16.1	30	- 7.8	18	0	16	0.0	78	72	31	34	12	2	38	51	1.5	4	[illegible]	14	14	3	6	22	7.9	
ST. CLOUD	[illegible]	978.3	1016.5	7.7	- 1.8	2.9	6.5	16.1	13	- 8.3	18+	0	21			36	3	16	12		9	152						4	2	25	[illegible]	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation, ground	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
MISSISSIPPI	M	Mb	Mb	C.	C.	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
JACKSON	94	1001.4	1013.2	22.7	10.7	16.7	3.1	28.9	13	2.2	22	0	0	11.7	73	155	10	69	13	10	0	0	1.9	17	15.2	SE	24	6	6	19	7.0	52
MERIDIAN	88	1002.7	1013.9	23.3	10.5	16.9	3.3	29.4	15	1.1	22+	0	0	11.7	74	363	202	105	10	8	0	0	1.4	15	11.2	18	11	4	11	16	7.3	
MISSOURI																																
COLUMBIA REGIONAL	270	979.7	1012.2	13.1	5.4	9.3	3.9	21.1	14	- 1.7	21+	0	3	4.4	75	256	189	45	17	8	T	T	1.3	9	17.4	SW	14	5	4	22	8.1	39
KANSAS CITY	309	974.3	1011.4	12.3	5.1	8.7	3.4	19.4	12	- 2.8	17	0	4	3.3	73	231	166	45	20	2	0	0	1.8	9	18.8	SW	14	3	6	22	7.9	37
ST JOSEPH	247			14.0	4.8	9.4	4.9	24.4	25	- 2.2	17	0	4	2.8	72	185	126		18				1.5	4	13.0	22	14	4	5	22	8.0	
ST LOUIS	163	992.2	1012.5	15.7	5.3	10.5	4.6	25.0	14	- 2.8	18	0	3	6.1	78	148	69	25	17	6	5	T	1.1	11	15.6	SW	31	6	3	22	7.7	41
SPRINGFIELD	386	965.5	1011.0	16.1	5.7	10.9	4.2	23.3	12	- 2.2	18+	0	3	5.0	71	229	157	39	19	9	T	T	1.7	15	15.2	SW	14	4	6	21	7.6	39
MONTANA																																
BILLINGS	1087	886.6	1012.1	9.1	- 1.8	3.7	2.7	16.1	20+	- 5.6	27	0	27	- 5.6	55	40	14	26	7	0	188	51	2.4	25	13.4	NW	1	6	10	15	6.7	78
GLASGOW	696	928.9	1011.9	11.2	- 3.5	3.9	6.8	17.2	21	- 9.4	28	0	28	- 4.4	59	7	- 7	7	3	0	T	T	1.5	10	14.3	31	15	10	11	10	5.4	
GREAT FALLS	1116	883.2	1012.3	10.6	- 2.3	4.2	4.9	20.0	25	-10.6	29	0	25	- 8.3	42	8	- 16	3	5	1	46	T	4.0	23	20.6	SW	1	2	11	18	7.5	64
HAVRE	788	918.4	1011.5	12.1	- 4.2	3.9	6.8	18.9	25	-12.8	28	0	30	- 6.1	52	1	- 14	1	1	0	0	0	1.7	26	11.6	N	22+	12	5	14	6.1	82
HELENA	1167	876.4	1013.6	9.1	- 4.6	2.2	2.6	16.7	20	- 8.3	30+	0	30	- 7.2	53	1	- 17	1	4	0	T	T	2.0	27	14.8	W	10	4	9	18	7.5	71
KALISPELL	904	907.6	1013.1	10.0	- 1.9	4.1	4.2	15.6	25+	- 5.6	29+	0	27	- 3.3	63	12	- 13	10	7	0	23	25	0.8	18	8.9	17	25+	2	6	23	8.2	
MILES CITY	801	917.4	1011.4	11.6	- 2.1	4.7	5.3	18.3	26	- 7.8	28	0	24	- 3.3	61	4	- 12		5	0	10		0.2	12								
MISSOULA	972	900.8	1014.0	9.9	- 2.2	3.9	2.9	18.9	25	- 7.2	18	0	27	- 3.3	65	6	- 13	2	6	0	13	T	1.0	29	14.8	SW	16	1	6	24	8.2	48
NEBRASKA																																
GRAND ISLAND	561	945.5	1012.3	9.3	0.8	5.1	3.0	20.0	12	- 5.0	17	0	14	1.1	80	141	109	33	17	1	53	25	1.3	5	15.6	18	12	4	4	23	8.0	
LINCOLN	360	969.2	1012.4	10.4	1.4	5.9	3.4	19.4	12	- 5.6	17	0	11	1.7	78	169	131	41	17	2	T	T	2.0	5	18.3	NE	31	3	3	25	8.4	28
NORFOLK	471			9.3	0.8	5.1	4.3	18.9	13	- 5.6	17	0	14			131	90	31	15		5	T						3	5	23	8.2	
NORTH PLATTE	846	913.3	1012.2	10.4	- 1.1	4.7	3.0	21.7	12	- 6.7	17+	0	20	- 1.1	72	62	37	20	11	2	41	T	1.4	5	16.5	NW	14	7	4	20	7.3	48
OMAHA	298	977.0	1012.7	11.1	2.6	6.8	4.1	19.4	12	- 4.4	17	0	7	2.2	76	151	115	34	16	0	T	T	1.6	5	16.5	SW	14	3	4	24	8.4	30
SCOTTSBLUFF	1206	874.4	1012.2	9.4	- 2.7	3.4	1.6	18.3	12	- 6.7	16	0	29	- 3.3	68	50	28	29	11	1	122	25	1.1	34	18.3	34	14	3	9	19	7.7	
VALENTINE	789			10.0	- 1.6	4.2	4.6	17.8	12	- 6.7	17	0	20			58	32	27	11		28	T			16.5	E	13	6	7	18	7.2	43
NEVADA																																
ELKO	1539	839.5	1011.6	7.4	- 2.1	2.7	0.7	12.8	26+	- 6.7	30	0	25	- 5.6	56	14	- 7	9	9	2	107	T	0.7	27	9.4	28	31+	4	8	19	7.4	
ELY	1906	802.2	1011.5	5.4	- 7.3	- 0.9	- 1.8	11.1	25	-17.8	14	0	31	- 6.7	69	55	34	13	15	0	610	152	0.8	20	13.9	SE	11	1	10	20	7.9	50
LAS VEGAS	659	934.6	1011.5	15.9	4.8	10.4	- 2.3	21.7	17	0.6	22	0	0	- 0.6	50	46	38	12	12	2	T	0	1.4	26	16.5	NW	29+	7	11	13	6.0	70
RENO	1342	861.8	1013.0	10.7	- 4.1	3.3	- 2.0	17.2	16	-10.6	12	0	30	- 5.0	59	19	1	6	9	0	165	76	1.0	31	17.0	S	10	6	9	16	6.7	52
WINNEMUCCA	1311	864.5	1013.3	9.6	- 3.8	2.9	- 0.4	16.1	26	- 8.3	12	0	31	- 3.3	68	23	2	9	8	1	188	76	1.0	29	14.3	NW	10	5	8	18	7.1	43
NEW HAMPSHIRE																																
CONCORD	104	1005.8	1018.7	7.1	- 3.2	1.9	2.1	15.6	25	-12.8	1	0	27	- 2.8	77	66	- 17	25	7	0	T	203	0.7	35	9.4	N	27	3	3	25	8.2	41
MT WASHINGTON OBS	1909			- 1.7	- 8.8	- 5.2	6.1	5.0	12	-17.8	20	0	31			229	83	94	12	2	1171	381			40.7Y	SE	17	4	3	24	8.3	40
NEW JERSEY																																
ATLANTIC CITY	20	1015.2	1017.6	13.6	4.1	8.9	3.8	23.3	12	- 3.9	1	0	5	4.4	77	78	- 21	30	12	0	T	0	1.1	1	20.6	24	17	3	6	22	8.1	40
ATLANTIC CITY U	3			12.2	6.1	9.1	4.1	23.3	12	1.1	1	0	0			67	- 35	35	13						19.2	S	17+					
NEWARK	2	1016.6	1017.7	13.3	5.1	9.2	4.5	20.0	24+	- 1.1	1	0	2	1.1	63	92	- 12	36	16	0	15	25	1.6	36	13.9	23	18	5	4	22	7.9	
TRENTON U	17			12.3	3.9	8.1	3.3	21.1	17	- 2.2	1	0	3			100	3	37	14		T	T			17.0	SE	17	5	5	21	7.6	43
NEW MEXICO																																
ALBUQUERQUE	1619	832.0	1008.9	14.4	0.1	7.3	- 0.4	20.6	17	- 3.9	6	0	14	- 2.8	56	55	43	28	11	2	353	203	0.8	27	18.8	NW	21+	5	12	14	6.3	61
CLAYTON	1515			11.6	- 1.6	5.0	0.1	21.7	18+	- 6.1	4	0	25			58	42	21	11		366	254						9	6	16	6.2	
ROSWELL	1112	883.8	1006.8	18.8	3.8	11.3	0.5	26.7	18	0.6	30+	0	0	- 1.7	45	38	26	36	3	0	13	0	1.7	27	23.2	NW	13	11	15	5	4.5	76
NEW YORK																																
ALBANY	84	1007.8	1018.5	11.2	- 0.2	5.5	4.9	20.6	17	- 8.9	1	0	16	- 1.1	69	51	- 19	20	12	0	T	T	0.6	26	14.8	S	17	1	6	24	8.5	44
BINGHAMTON	485	957.3	1017.3	8.7	0.1	4.4	4.8	20.0	17	- 8.3	21	0	15	- 1.1	73	51	- 22	13	19	1	64	51	0.9	19	18.3	S	17	2	5	24	8.5	36
BUFFALO	215	990.5	1016.8	10.2	1.3	5.8	6.1	20.6	15	- 8.3	21	0	12	0.0	69	83	1	26	16	2	216	203	1.0	21	16.1	NW	15	3	5	23	8.3	38
NEW YORK U	40	1014.6	1018.0	12.1	3.9	8.0	3.3	18.9	16	- 1.1	21	0	4	1.1	67	91	- 10	39	15	1	5	0	1.4	4	13.0	S	17					39
NEW YORK KENNEDY	4	1016.9	1017.9	12.4	5.0	8.7	5.0	20.0	12	- 0.6	21+	0	2	1.7	65	94	- 11	42	14	1	T	0	1.6	2	18.3	25	18	5	6	20	7.6	
NEW YORK LA GUARDIA	3	1016.9	1018.1	10.9	3.5	7.2	2.3	18.3	16	- 1.1	21	0	3	0.6	66	88	- 19	36	15	1	T	T	2.3	2	17.0	S	17	4	3	24	7.8	
ROCHESTER	167	996.6	1017.2	10.7	0.9	5.8	5.7	23.9	15	- 7.8	23+	0	14	- 0.6	67	74	- 2	31	13	0	112	152	0.7	23	14.3	S	7	4	5	22	8.0	39
SYRACUSE	125	1001.7	1017.0	10.7	1.1	5.9	5.6	19.4	15	- 6.7	21+	0	12	1.7	76	88	- 4	29	18	2	91	51	0.1	13	17.0	W	17	3	3	25	8.4	34

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: .25 mm or more	Precipitation: No of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	No of days: Partly cloudy, 4-7	No of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
NORTH CAROLINA	M	Mb	Mb.	C	C	C.	C	C.		C.				C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ASHEVILLE	652	940.4	1016.7	16.9	6.0	11.5	4.5	27.8	14	- 2.2	23+	0	5	6.7	78	226	104	73	15	5	25	T	0.6	17	13.0	33	18	4	5	22	7.8	50
CAPE HATTERAS R	2	1016.9	1017.4	16.8	8.9	12.9	2.3	23.3	17+	0.6	25	0	0	9.4	81	156	51	61	15	2	0	0	1.1	34	14.8	25	17	4	7	20	7.6	47
CHARLOTTE	224	989.2	1016.8	17.7	6.9	12.3	2.3	27.8	14	- 3.9	23	0	5	6.7	73	177	65	56	17	1	0	0	0.3	13	15.2	SW	17	4	8	19	7.5	51
GREENSBORO	273	985.4	1017.3	16.3	6.1	11.2	2.7	27.2	14	- 4.4	23	0	6	6.7	79	145	51	23	18	5	38	25	0.1	17	18.3	SW	17	3	6	22	7.9	38
RALEIGH	132	1001.4	1017.3	18.5	6.8	12.7	2.9	30.6	15	- 2.8	23+	0	6	6.7	73	103	18	26	18	3	10	T	0.0	30	14.3	22	17	4	6	21	7.7	35
WILMINGTON	9	1015.9	1017.3	20.7	9.1	14.9	2.6	30.6	15	- 1.7	1	0	1	10.0	77	88	- 14	24	13	1	0	0	0.4	21	15.2	W	17	3	9	19	7.5	51
NORTH DAKOTA																																
BISMARCK	502	953.6	1014.5	9.2	- 1.0	4.1	7.3	17.8	26	- 7.8	30+	0	19	- 1.7	69	14	- 6	8	6	1	36	25	1.1	12	17.4	SE	21	6	8	17	7.1	61
FARGO	273	982.7	1016.2	6.1	- 1.6	2.2	6.5	15.6	26	- 7.8	29	0	23	- 1.1	82	32	13	21	7	0	36	25	1.1	10	13.4	SE	22	6	5	20	7.5	43
WILLISTON	579	943.8	1013.5	8.9	- 3.2	2.9	7.2	19.4	26	-10.0	29	0	25	- 2.8	72	13	- 5	6	7	0	58	51	0.8	14	13.0	NW	27	9	8	14	6.2	66
OHIO																																
AKRON	368	970.5	1015.5	13.9	3.3	8.6	5.9	22.8	15+	- 7.8	20	0	10	1.7	66	111	26	37	17	2	274	254	0.7	14	13.0	22	17+	4	3	24	8.3	
CINCINNATI ABBE OB	232			15.9	6.1	11.0	5.1	24.4	11+	- 2.2	23+	0	7			155	56	34	15		71	25			10.7	SW	12+					45
CLEVELAND	237	986.1	1015.6	12.7	3.4	8.1	6.3	23.3	6	- 6.7	20	0	9	2.8	72	88	9	27	14	2	211	203	0.6	18	17.9	W	17	5	2	24	8.1	40
COLUMBUS	247	985.1	1015.3	15.6	4.8	10.2	6.4	25.0	14+	- 5.0	23	0	10	3.9	69	87	7	23	16	1	53	51	0.6	13	16.1	SW	15	4	4	23	8.1	33
DAYTON	305	978.3	1014.8	14.4	4.0	9.2	5.4	23.9	10	- 5.6	23	0	9	5.6	80	118	39	24	16	3	112	76	0.8	13	15.6	NW	17	3	8	20	7.8	40
MANSFIELD	395			13.6	3.7	8.6	5.0	22.2	10+	- 6.1	20	0	9	3.9	77	107	41	35	14	3	84	76	1.1	17	13.4	28	17	5	3	23	8.0	
TOLEDO	204	989.8	1015.3	11.8	1.6	6.7	4.9	23.3	11	- 7.2	23	0	9	1.1	71	107	49	30	14	3	102	102	0.6	5	17.0	W	15	5	4	22	7.8	43
YOUNGSTOWN	359	972.6	1015.8	11.6	2.2	6.9	5.1	21.1	15	- 7.2	21+	0	11	2.8	78	94	9	37	15	1	216	229	0.8	13	12.5	23	17	3	3	25	8.2	
OKLAHOMA																																
OKLAHOMA CITY	392	963.1	1009.7	16.6	6.2	11.4	2.2	25.0	12	- 0.6	17	0	2	6.7	75	172	122	39	14	9	T	0	0.3	20	20.1	SW	13	4	7	20	7.5	46
TULSA	198	985.8	1010.2	17.5	7.3	12.4	3.4	26.7	12	- 1.1	17	0	2	6.7	74	303	242	53	19	11	0	0	0.8	19	16.5	E	3	5	7	19	7.4	45
OREGON																																
ASTORIA	2	1014.6	1015.5	11.1	2.7	6.9	- 0.1	15.0	24	- 1.7	23	0	5	3.9	81	145	- 82	30	24	0	T	T	0.8	23	11.2	17	16	1	6	24	8.7	
BURNS	1265			8.7	- 3.3	2.7	- 0.3	15.6	25	- 9.4	18	0	28			11	- 14	4	4		20	T						3	13	15	7.1	
EUGENE	109	1002.7	1016.2	11.7	2.6	7.2	- 0.6	18.3	24	- 1.7	23	0	6	3.9	83	132	22	34	20	0	T	0	2.1	19	12.1	17	1	1	5	25	8.7	
MEACHAM	1234	872.7	1014.4	4.8	- 2.6	1.1	0.4	12.2	24	- 7.2	18	0	28			57	- 44	15	14		406	102			7.6	15	19	0	4	27	8.9	
MEDFORD	396	968.5	1016.8	13.3	1.1	7.2	0.4	20.6	24	- 2.8	23+	0	14	0.6	69	40	- 5	10	17	0	T	T	0.6	31	10.3	15	19+	1	6	24	8.3	
PENDLETON	452	959.7	1013.8	13.1	2.2	7.7	0.4	17.8	25	- 1.1	18	0	7	- 2.2	53	11	- 20	10	9	0	T	0	2.1	25	13.0	28	16+	2	11	18	7.5	
PORTLAND	6	1014.6	1015.8	13.2	4.4	8.8	1.0	20.0	24	0.6	8	0	0	3.9	75	62	- 35	15	19	0	T	0	1.1	19	14.3	SW	1	2	5	24	8.4	53
SALEM	60	1008.5	1015.8	12.3	1.7	7.0	- 0.4	18.9	24	- 2.8	23	0	9	2.2	74	89	- 30	20	20	0	T	0	2.2	19	12.5	18	1	1	5	25	8.6	
SEXTON SUMMIT R	1169	881.1	1016.1	5.2	- 1.9	1.7	- 2.0	14.4	24+	- 5.0	17	0	26			109	21	27	19		820	279	1.1	23	18.8	20	16	1	3	27	8.8	
PACIFIC AREA																																
GUAM TAGUAC R	110			29.5	21.9	25.7	- 0.3	31.1	15	18.9	18+	0	0			40	- 27	9	21	0	0	0			11.2	E	27					66
JOHNSTON	2	1015.2	1015.7	26.1	22.7	24.4	- 0.7	27.8	14	19.4	15	0	0	20.6	78	59	- 1	40	17	0	0	0	9.1	8	17.0	E	16	9	19	3	4.6	77
KOROR R	29	1006.8	1010.5	31.2	24.2	27.7	0.7	32.2	12+	23.3	22+	2	0	22.8	78	75	-119	39	15	0	0	0	5.3	5	12.1	N	6	0	2	29	9.3	63
KWAJALEIN	4	1009.8	1010.4	31.4	25.7	28.6	1.6	32.2	26+	23.3	29	5	0	22.8	75	30	-134	17	11	0	0	0	7.0	6	11.2	8	15	0	12	19	7.9	
MAJURO	3	1009.8	1010.0	29.8	25.3	27.6	0.6	30.6	29+	23.3	8+	0	0	23.9	80	281	- 17	136	18	0	0	0	6.3	6	12.5	E	11	1	17	13	7.4	76
PAGO PAGO	4	1009.8	1010.1	31.8	24.7	28.3		32.8	28+	23.3	10+	12	0	24.4	82	125		31	21	0	0	0	1.6	8	11.2	NE	19	3	14	14	6.9	64
PONAPE R	37	1004.4	1009.4	30.7	25.1	27.9	0.9	32.2	24	23.3	28+	1	0	23.3	78	196	-174	48	23	0	0	0	4.2	5	8.5	NE	16	0	4	27	9.0	73
TRUK MOEN ISLAND	2	1009.8	1010.1	30.1	25.7	27.9	0.8	31.1	25	23.3	26	0	0	23.3	77	117	- 80	63	11	0	0	0	5.7	5	12.1	NE	11	0	1	30	9.5	62
WAKE	3	1014.9	1015.1	28.9	22.5	25.7	0.3	29.4	31+	20.6	12	0	0	20.6	76	36	- 2	20	13	0	0	0	4.0	8	11.2	E	31+	12	14	5	4.4	81
YAP R	13			30.9	24.2	27.6	0.4	31.7	30+	21.7	16	0	0			39	- 98	26	8	0	0	0			11.2	NE	6	1	4	26	8.5	66
PENNSYLVANIA																																
ALLENTOWN	118	1003.7	1018.0	11.9	1.8	6.8	3.7	21.1	17	- 6.7	1	0	9	0.0	68	71	- 25	20	16	0	5	T	1.1	2	14.8	25	18	3	6	22	8.0	
ERIE	223	988.8	1016.1	10.5	0.8	5.7	5.5	22.8	15	- 7.8	20	0	14	1.7	77	81	8	28	15	2	145	152	1.4	17	15.6	31	18	5	3	23	7.9	
HARRISBURG	103	1005.1	1017.8	12.2	2.5	7.3	2.7	21.1	17	- 3.9	1	0	10	1.1	70	51	- 36	13	14	0	T	T	0.8	4	18.8	SW	17	3	10	18	7.7	48
PHILADELPHIA	2	1016.6	1017.6	13.0	3.8	8.4	3.4	21.1	17	- 2.8	1	0	5	2.8	72	89	- 7	39	14	1	T	T	1.3	3	21.0	SW	17	3	4	24	8.3	40
PITTSBURGH	347	971.6	1016.0	14.2	3.9	9.1	6.4	25.6	14	- 5.6	21	0	9	2.8	69	98	14	40	14	2	117	102	0.1	12	14.3	24	17	4	4	23	8.1	42
SCRANTON	283	982.7	1017.4	10.5	0.5	5.5	3.2	20.6	17	- 7.8	21	0	15	- 0.6	69	45	- 26	13	16	0	48	51	0.5	36	19.2	SW	17	4	6	23	8.3	46
WILLIAMSPORT	160	998.3	1017.9	11.0	1.6	6.3	3.3	18.9	17	- 6.1	21	0	12	0.6	71	88	- 7	23	16	2	66	25	0.4	2	17.0	28	17	3	6	22	8.3	
RHODE ISLAND																																
BLOCK ISLAND	34			8.2	2.4	5.3	2.7	12.8	17+	- 3.3	1	0	7			86	- 18	26	13		36	25										
PROVIDENCE	16	1015.6	1018.0	11.3	1.6	6.5	3.7	21.1	12	- 5.0	1	0	11	0.0	69	71	- 35	23	13	0	15	T	1.4	3	14.8	5	27	3	2	26	8.4	59

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation ground	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Ice pellets		Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
																									Fastest mile (1.6 kilometers)							
		Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
SOUTH CAROLINA	M	Mb.	Mb	C.	C	C	C	C		C				C	%	Mm	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s.							%
CHARLESTON	12	1015.2	1017.4	21.5	10.7	16.1	2.4	31.7	12	0.6	1	0	0	10.6	75	156	56	32	12	4	0	0	0.7	18	22.8Y	SW	17	5	10	16	7.0	52
CHARLESTON J	3			19.6	12.3	15.9	1.8	27.2	15	4.4	23+	0	0			171	80	46	12		0	0			16.1	W	17					
COLUMBIA	65	1008.8	1017.1	20.8	8.7	14.8	2.3	31.1	14	-3.3	1	0	4	8.9	74	277	168	59	17	6	0	0	0.4	20	13.9	27	17	4	9	18	7.4	39
GRNVLLE-SPRTNBRG	292	982.1	1016.7	17.9	7.1	12.5	1.7	26.7	15	-1.7	23+	0	4	7.8	77	222	101	49	17	4	0	0	0.4	1	15.6	SW	17	5	5	21	7.6	40
SOUTH DAKOTA																																
ABERDEEN	395	967.2	1014.8	9.1	-0.7	4.2	6.3	16.7	26	-6.7	10+	0	18	0.0	80	33	5	14	8	0	T	T	1.4	9	13.4	16	21+	5	[illegible]	23	8.1	
HURON	390	966.8	1014.1	8.6	0.1	4.3	5.2	17.2	13	-5.6	17	0	14	0.0	76	55	27	16	12	1	T	T	1.2	10	14.3	S	21+	4	6	21	7.9	39
RAPID CITY	964	900.4	1012.9	8.8	-2.6	3.1	3.6	16.7	[illegible]	-7.2	16	0	25	-3.3	66	69	43	53	7	0	429	356	1.0	35	25.0	NW	14	10	5	16	6.6	59
SIOUX FALLS	432	962.1	1014.5	8.6	-0.1	4.3	5.3	19.4	13	-6.1	17	0	18	0.0	77	89	50	27	12	1	8	25	2.1	7	14.3	9	13	5	6	20	7.8	
TENNESSEE																																
BRISTOL	459	961.4	1015.7	18.1	6.2	12.2	4.4	27.2	14	-2.8	23	0	7	6.1	71	182	81	85	16	1	T	T	0.6	20	16.5	27	17	4	9	18	7.4	
CHATTANOOGA	203			18.2	7.7	13.0	2.3	25.6	14+	-1.1	22+	0	2			351	207	166	16	5	T	T			11.6	SE	25	3	3	25	8.2	35
KNOXVILLE	299	980.4	1015.4	18.8	7.7	13.2	3.4	28.9	14	-1.7	22	0	3	7.8	72	260	140	123	16	3	48	T	0.5	27	13.9	S	25	3	3	25	8.1	40
MEMPHIS	79	1002.4	1012.7	19.2	8.9	14.1	3.4	25.0	13+	0.0	18	0	1	7.2	65	194	65	36	15	8	0	0	2.0	17	17.9	16	10	9	6	16	6.7	54
NASHVILLE	180	991.9	1013.6	19.2	8.3	13.8	4.3	26.7	13	-1.7	18	0	1	8.3	75	251	119	66	16	10	5	T	2.0	17	13.9	SE	25	4	8	19	7.5	49
OAK RIDGE R	276			18.4	7.2	12.8	4.2	25.6	14	-2.2	22+	0	5			290	148	120	16		15	T			16.5Y		25+	4	2	25	8.4	
TEXAS																																
ABILENE	544	946.8	1009.4	20.7	7.3	14.0	1.2	26.7	3	3.3	29+	0	0	5.6	62	83	57	48	8	5	0	0	2.1	22	20.1	SW	10	16	9	6	4.2	84
AMARILLO	1098	884.5	1008.1	13.9	2.8	8.4	-0.3	23.3	17	-1.7	4	0	3	1.1	66	101	81	58	12	4	13	25	1.1	29	29.1	SW	13	8	9	14	6.1	63
AUSTIN	182	988.8	1010.6	23.6	11.6	17.6	2.2	28.3	12	5.0	17	0	0	10.0	66	74	20	29	11	6	0	0	0.4	20	14.8	NW	25	13	7	11	5.2	61
BROWNSVILLE	6	1009.5	1010.0	26.1	16.6	21.3	1.4	29.4	31+	8.9	17	0	0	17.2	80	3	-23	1	5	0	0	0	3.2	14	18.8	SE	13	7	2	22	7.4	47
CORPUS CHRISTI	12	1008.8	1010.4	26.1	14.8	20.4	2.0	32.2	6	4.4	17	1	0	15.6	77	4	-33	1	9	0	0	0	3.0	12	16.1	SE	13	8	4	19	6.6	50
DALLAS	147			21.8	11.4	16.6	3.2	28.3	19	4.4	17	0	0	8.3	61	104	32	60	9	4	0	0	1.5	18	13.4	33	16	7	11	13	5.9	
DEL RIO	313	973.9	1009.6	26.1	11.6	18.8	1.6	30.6	23	6.7	25+	0	0	7.2	53	30	9	14	6	3	0	0	1.2	9	15.6	34	15	16	9	6	3.8	
EL PASO	1194	877.8	1009.7	18.7	3.9	11.3	-1.4	24.4	18+	-2.2	16	0	4	-2.2	43	15	6	11	6	1	T	T	3.1	27	19.2	SW	21	12	13	6	4.3	77
FORT WORTH	164	990.2	1010.5	21.3	9.7	15.6	2.3	26.7	19	1.7	17	0	0	8.9	68	58	-6	31	10	6	0	0	1.5	21	15.6	24	6	9	9	13	6.0	
GALVESTON J	2			20.7	15.7	18.2	1.9	26.1	31	11.1	21	0	0			241	168	206	13		0	0			17.9	E	23					37
HOUSTON INTERCON	29	1007.8	1011.6	23.5	11.7	17.6	2.2	29.4	12	2.8	17	0	0	13.3	80	93	22	34	17	4	0	0	1.2	12	11.6	29	25+	8	5	18	6.9	44
LUBBOCK	992	897.7	1008.6	17.6	3.9	10.8	1.0	23.3	17	-0.6	4	0	2	1.1	58	48	30	46	6	5	T	T	1.5	25	22.8	22	13	14	8	9	4.4	
MIDLAND	869	910.6	1008.7	19.8	5.1	12.4	-0.4	26.1	23	0.6	4	0	0	0.0	47	44	35	39	6	5	0	0	2.2	25	17.0	25	13	19	8	4	3.0	
PORT ARTHUR	5	1011.5		22.4	12.6	17.5	1.3	27.2	12	5.0	17	0	0	14.4	84	184	97	134	14	7	0	0	2.1	15	19.2	[illegible]	24	7	6	18	6.9	41
SAN ANGELO	580	943.1	1009.5	23.1	6.9	15.0	1.1	27.8	23+	1.7	17	0	0	5.6	58	30	6	12	7	5	0	0	2.3	24	14.8	29	13	15	11	5	3.7	
SAN ANTONIO	240	982.7	1010.6	26.2	11.7	18.9	2.8	28.9	31+	3.3	17	0	0	10.6	63	40	-2	21	11	4	0	0	0.5	9	21.0	N	28	13	6	12	5.4	64
VICTORIA	32	1006.4	1010.7	25.4	14.2	19.8	2.5	30.0	6	7.8	17	0	0	13.9	75	26	-33	11	14	2	0	0	1.5	14	17.4Y	N	16	8	3	20	6.8	
WACO	153	992.6	1010.6	21.7	9.8	15.8	1.4	27.2	12	2.8	17	0	0	9.4	70	77	18	32	9	4	0	0	1.5	19	15.6	15	1	12	9	10	5.0	
WICHITA FALLS	303	973.2	1009.7	21.1	7.7	14.4	2.3	27.8	12	1.7	17	0	0	8.3	72	99	60	43	13	11	0	0	1.1	23	17.9	24	13	11	10	10	5.1	
UTAH																																
MILFORD	1533	840.8		8.0	-3.7	2.2	-1.4	12.8	26+	-11.7	30	0	29			42	16	13	17		513	152			16.1	SW	21+	2	12	17	7.7	45
SALT LAKE CITY	1286	866.9	1011.6	10.1	0.8	5.4	0.8	17.2	20	-2.8	3	0	13	-2.2	63	68	28	23	15	0	452	102	0.7	20	15.2	S	11	2	11	18	7.4	52
WENDOVER	1291	866.2	1012.1	9.4	0.3	4.9	-0.4	13.9	10	-3.3	6+	0	12	-3.9	54	30	20	18	7		48	51						5	8	18	7.5	
VERMONT																																
BURLINGTON	101	1005.1	1017.9	7.6	-1.9	2.8	5.8	18.	31	-12.2	1	0	21	-1.7	73	53	-1	24	13	2	58	127	0.8	21	13.4	S	29+	4	3	24	8.4	30
VIRGINIA																																
LYNCHBURG	279			15.4	5.4	10.4	2.9	29.4	14	-2.8	24+	0	5			164	72	32	17		135	127			15.2	W	17	4	5	22	7.7	38
NORFOLK	7	1016.3	1017.4	15.6	6.9	11.3	2.4	28.9	15	-3.9	1	0	1	6.1	73	119	31	41	17	2	T	0	1.1	35	20.6	22	17	4	6	21	7.7	41
RICHMOND	50	1010.8	1017.5	16.9	5.9	11.4	2.7	30.6	14	-5.6	1	0	6	6.1	75	87	1	19	16	3	36	25	0.4	36	15.6	W	17	5	4	22	8.0	44
ROANOKE	350	974.9	1017.1	15.3	5.8	10.6	3.1	28.9	14	-3.9	1	0	5	4.4	71	150	61	27	17	1	140	76	0.6	23	20.6	32	17	4	4	23	7.7	
WALLOPS ISLAND	3			12.5	5.3	8.9		26.1	15	-2.8	1	0	2			79		19	14		8	T			28.2Y	SW	17					
WASHINGTON																																
OLYMPIA	59	1007.5	1014.8	11.8	0.9	6.4	-0.4	18.3	24	-2.8	23	0	12	3.3	85	77	-60	21	19	0	T	T	2.3	20	13.9	17	18	1	6	24	8.5	
QUILLAYUTE	55	1006.8	1014.1	10.4	1.8	6.1	0.1	15.6	24	-2.2	22	0	7	3.9	86	247	-35	41	23	1	10	T	0.7	17	11.6	SW	18	2	4	25	8.5	19
SEATTLE-TACOMA	122	998.0	1014.5	10.2	3.3	6.7	0.2	16.7	24	-0.6	18	0	2	2.2	77	41	-55	16	18	0	20	25	1.7	19	14.3	SE	18	2	3	26	8.6	45
SEATTLE	6			11.6	4.8	8.2	0.5	17.2	24	2.2	18+	0	0			39	-37	11	18		0	0			16.1Y	SSW	1					
SPOKANE	718	927.9	1012.5	10.1	0.0	5.1	1.7	15.0	25+	-3.3	28	0	20	-1.7	66	20	-19	7	8	0	13	T	2.1	21	15.2	SW	10	5	9	17	7.4	48

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

MARCH 1973

State and Station	Elevation ground	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C.	C	C	C	C.		C				C	%	Mm.	Mm.	Mm			Mm	Mm	M.p.s.		M.p.s							%
WASHINGTON																																
STAMPEDE PASS R	1206	874.7		2.0	- 2.7	- 0.3	0.8	10.6	23	- 6.1	17	0	30			129	-140	26	23		1115	1981						0	3	28	9.2	
WALLA WALLA U	289			14.0	4.4	9.2	1.4	19.4	25	0.6	18	0	0			23	- 18	8	11		T	T			12.1	NW	10+	3	8	20	7.6	54
YAKIMA	321	974.9	1013.7	15.3	- 0.9	7.2	1.7	19.4	25	- 5.0	14	0	21	- 2.8	54	T	- 15	T	1	0	T	0	1.8	29	12.5	23	1	6	9	16	6.9	
WEST INDIES																																
SAN JUAN	4	1013.9	1016.3	28.9	22.8	25.9	1.8	31.7	22+	21.1	18	0	0	20.0	73	118	62	82	13	0	0	0	3.4	10	12.5	[illegible]	12	11	15	5	5.2	70
WEST VIRGINIA																																
BECKLEY	763	926.9	1016.0	14.2	4.2	9.2	4.8	26.1	14	- 5.6	23+	0	9	3.9	76	114	1	32	17	1	127	76	2.4	17	17.4	26	17	2	5	24	8.4	
CHARLESTON	286	981.0	1015.5	17.6	4.9	11.2	4.3	28.9	14	- 6.7	24	0	12	5.0	70	86	- 24	20	16	4	122	76	1.1	19	15.6	26	17	3	6	22	8.0	
ELKINS	594	944.8		15.8	1.9	8.9	4.7	27.2	14	- 9.4	24	0	12			54	- 51	12	16		193	76						2	5	24	8.2	
HUNTINGTON	252	984.8	1014.9	17.7	5.8	11.8	4.7	29.4	14	- 4.4	23	0	9	5.6	72	83	- 24	23	16	5	86	25	1.0	18	11.2	24	17+	2	8	21	8.1	
PARKERSBURG U	187			17.4	6.1	11.8	5.8	27.8	14	- 3.3	22	0	9			68	- 22	26	13		79	76			21.0	W	25					71
WISCONSIN																																
GREEN BAY	208	989.8	1016.1	8.6	- 0.3	4.2	6.3	16.7	11	- 6.1	21	0	16	0.0	77	62	28	20	10	1	T	51	2.0	3	16.1	SW	7	4	4	23	7.8	42
LA CROSSE	198	990.9	1015.9	9.9	0.4	5.2	6.0	19.4	14	- 6.1	18	0	13	0.0	76	94	41		11	2	T		0.6	4								
MADISON	262	983.1	1014.9	10.8	- 0.2	5.3	6.9	20.0	14	- 7.8	21	0	15	0.6	75	128	81	64	13	4	28	T	1.5	5	14.8	NE	31	4	5	22	7.9	39
MILWAUKEE	205	989.5	1015.2	7.7	1.1	4.4	4.9	20.0	14	- 3.3	21	0	13	0.6	78	73	14	23	16	1	46	51	1.9	1	16.1	N	16	5	4	22	7.9	37
WYOMING																																
CASPER	1627	831.7	1012.0	5.8	- 4.7	0.6	0.5	12.8	20	-10.6	16	0	31	- 5.0	69	13	- 13	10	6	0	272	203	2.9	23	14.3	34	14+	7	9	15	6.4	
CHEYENNE	1867	805.6	1012.4	4.4	- 4.5	- 0.1	- 0.3	12.2	12+	- 9.4	6	0	31	- 6.1	66	47	16	23	12	0	686	381	2.5	31	21.5	NW	14	4	8	19	7.4	59
LANDER	1696	823.6	1014.1	2.5	- 8.7	- 3.1	- 3.2	8.9	17	-16.7	4	0	31	- 7.8	74	77	47	32	10	0	1257	686	0.6	26	14.8	S	21	12	5	14	5.7	68
SHERIDAN	1208	873.7	1012.6	8.7	- 5.1	1.8	2.4	16.1	1	8.9	4	0	30	- 5.6	61	36	T	18	9	0	409	152	1.8	30	16.1	W	14	6	9	16	6.6	64

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

B Number of days maximum 21.1 C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

HEATING DEGREE DAYS

(Base 65°F.)

MARCH 1973

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	[illegible]	2759	2434
HUNTSVILLE	219	2914	2913
MOBILE	86	1521	1655
MONTGOMERY	[illegible]	2054	2201
ALASKA			
ANCHORAGE	1258	9636	8977
ANNETTE	827	5696	5610
BARROW	2667	15101	15828
BARTER ISLAND	2792	15478	15642
BETHEL	1829	10756	10815
BETTLES	2004	13536	
BIG DELTA	1635	11854	
COLD BAY	1105	7576	7547
FAIRBANKS	1637	[illegible]	12434
GULKANA	1437	12323	
HOMER			
JUNEAU	986	7562	7283
KING SALMON	1411	9407	9296
KODIAK	1080	6088	6882
KOTZEBUE	2177	12127	12858
MC GRATH	1749	12093	12255
NOME	1968	11033	11354
ST. PAUL ISLAND	1385	8544	8439
SHEMYA	1001	7308	7269
SUMMIT	1578	6586	
TALKEETNA	1354	10296	9697
UNALAKLEET	1858	10914	
YAKUTAT	1029	7621	7185
ARIZONA			
FLAGSTAFF	1176	6789	5884
PHOENIX	254	1514	1690
TUCSON	410	2206	1719
WINSLOW	640	4203	4395
YUMA	147	1173	1188
ARKANSAS			
FORT SMITH	315	3602	3126
LITTLE ROCK	216	3046	3084
CALIFORNIA			
BAKERSFIELD	324	2128	1998
BISHOP	681	4349	3742
BLUE CANYON	962	5253	4333
EUREKA U	537	3471	3548
FRESNO	444	2699	2286
LONG BEACH	295	1384	1435
LOS ANGELES	287	1179	1447
LOS ANGELES U	214	957	1140
MT SHASTA R	831	5219	4691
OAKLAND	415	2433	2345
RED BLUFF	466	2928	2300
SACRAMENTO	424	2706	2449
SANDBERG R	841	4402	3462
SAN DIEGO	208	1027	1196
SAN FRANCISCO	416	2546	2396
SAN FRANCISCO U	380	2464	2303
SANTA MARIA	496	2594	2287
STOCKTON	421	2628	2456
COLORADO			
ALAMOSA	1028	8286	7225
COLORADO SPRINGS	877	6027	5438
DENVER	771	5513	5371
GRAND JUNCTION	705	5856	5087
PUEBLO	685	5307	4844
CONNECTICUT			
BRIDGEPORT	704	4847	4872
HARTFORD	665	5240	5476
DELAWARE			
WILMINGTON	477	3877	4425
DIST.OF COLUMBIA			
WASHINGTON DULLES	500	4281	
WASHINGTON NATIONAL	423	3526	3862
FLORIDA			
APALACHICOLA U	71	1128	1275
DAYTONA BEACH	38	716	864
FORT MYERS	2	344	442
JACKSONVILLE	67	1130	1218
KEY WEST	0	61	108
LAKELAND U	21	606	661
MIAMI	0	138	214
ORLANDO	12	500	760
PENSACOLA	70	1365	1427
TALLAHASSEE	106	1424	1449
TAMPA	18	602	683
WEST PALM BEACH	4	183	253
GEORGIA			
ATHENS	248	2508	2766
ATLANTA	240	2697	2790
AUGUSTA	181	2204	2307
COLUMBUS	143	1972	2287
MACON	137	1930	2073
ROME	250	2923	3115
SAVANNAH	98	1508	1774
IDAHO			
BOISE	673	5073	5045
LEWISTON	588	4743	4787
POCATELLO	895	6498	6018
ILLINOIS			
CAIRO U	298	3630	3579
CHICAGO O HARE	645	5487	5773
CHICAGO MIDWAY	609	5310	5416
MOLINE	598	5478	5730
PEORIA	566	5434	5383
ROCKFORD	675	5765	6018
SPRINGFIELD	512	4981	4921
INDIANA			
EVANSVILLE	345	4215	4130
FORT WAYNE	607	5253	5506
INDIANAPOLIS	477	4698	5051
SOUTH BEND	561	5173	5615
IOWA			
BURLINGTON	576	5443	5478
DES MOINES	594	5978	6069
DUBUQUE	696	6302	6492
SIOUX CITY	679	6046	6215
WATERLOO	712	6504	6506
KANSAS			
CONCORDIA	622	5216	4940
DODGE CITY	717	5077	4499
GOODLAND	770	5786	5356
TOPEKA	537	4881	4716
WICHITA	506	4721	4257
KENTUCKY			
COVINGTON	445	4415	4702
LEXINGTON	353	3848	4253
LOUISVILLE	349	3807	4231
LOUISIANA			
ALEXANDRIA	133	2210	1852
BATON ROUGE	77	1549	1527
LAKE CHARLES	74	1695	1420
NEW ORLEANS	72	1505	1346
SHREVEPORT	135	2299	2103
MAINE			
CARIBOU	1092	8516	8258
PORTLAND	842	6325	6353
MARYLAND			
BALTIMORE	511	4083	4237
MASSACHUSETTS			
BLUE HILL OBS R	729	5413	5453
BOSTON	666	4791	4877
WORCESTER	748	5957	5975
MICHIGAN			
ALPENA	913	6921	7127
DETROIT	670	5290	5448
DETROIT METRO	667	5507	5641
FLINT	725	5717	5933
GRAND RAPIDS	708	5872	6025
HOUGHTON LAKE	829	6946	7076
LANSING	774	6121	5988
MARQUETTE U	916	7033	6977
MUSKEGON	726	5691	5714
SAULT STE MARIE	923	7444	7560
MINNESOTA			
DULUTH	1022	8586	8472
INTERNATIONAL FALLS	993	8674	9161
MINNEAPOLIS	761	7036	7392
ROCHESTER	792	7240	7271
ST CLOUD	849	7768	7782
MISSISSIPPI			
JACKSON	135	2213	2125
MERIDIAN	125	2113	2208
MISSOURI			
COLUMBIA REGIONAL	499	4763	4675
KANSAS CITY	529	4856	4683
ST JOSEPH	490	5035	4988
ST LOUIS	430	4444	4452
SPRINGFIELD	409	4269	4159
MONTANA			
BILLINGS	810	6547	6092
GLASGOW	802	7301	7863
GREAT FALLS	785	6453	6538
HAVRE	792	7004	7543
HELENA	892	7530	6902
KALISPELL	787	7003	6948
MILES CITY	752	6733	6769
MISSOULA	800	6649	6894
NEBRASKA			
GRAND ISLAND	734	5895	5812
LINCOLN	688	5805	5656
NORFOLK	735	6237	6200
NORTH PLATTE	756	6367	5860
OMAHA	636	5752	5619
SCOTTSBLUFF	825	6166	5761
VALENTINE	779	6516	6474
NEVADA			
ELKO	867	6523	6211
ELY	1067	6929	6380
LAS VEGAS	437	2897	2592
RENO	834	5539	5276
WINNEMUCCA	859	5835	5672
NEW HAMPSHIRE			
CONCORD	905	6830	6374
MT WASHINGTON OBS	1306	10797	11024
NEW JERSEY			
ATLANTIC CITY	523	4004	4244
ATLANTIC CITY U	508	3606	4060
NEWARK	504	4045	4520
TRENTON U	562	4203	4448
NEW MEXICO			
ALBUQUERQUE	607	4364	3979
CLAYTON	735	5010	4525
ROSWELL	386	3454	3065
NEW YORK			
ALBANY	729	5876	6027
BINGHAMTON	770	6192	6229
BUFFALO	696	5671	6010
NEW YORK U	572	4187	4336
NEW YORK KENNEDY	530	3860	4560
NEW YORK LA GUARDIA	613	4333	4267
ROCHESTER	690	5469	5824
SYRACUSE	687	5615	5893
NORTH CAROLINA			
ASHEVILLE	374	3455	4034
CAPE HATTERAS R	302	2130	2410
CHARLOTTE	341	3066	3013
GREENSBORO	396	3587	3524
RALEIGH	334	3143	3179
WILMINGTON	217	2109	2251
NORTH DAKOTA			
BISMARCK	787	7454	7760
FARGO	893	7950	8105
WILLISTON	855	7719	8064
OHIO			
AKRON	538	4918	5307
CINCINNATI ABBE OB	407	4184	4343
CLEVELAND	569	4997	5346
COLUMBUS	444	4625	5036
DAYTON	502	4746	4996
MANSFIELD	534	4964	5097
TOLEDO	639	5504	5649
YOUNGSTOWN	630	5541	5569
OKLAHOMA			
OKLAHOMA CITY	380	3884	3502
TULSA	321	3775	3600
OREGON			
ASTORIA	635	4082	4112
BURNS U	864	6184	5844
EUGENE	615	4164	3886
MEACHAM	954	6701	6282
MEDFORD	616	4176	4256
PENDLETON	588	4791	4463
PORTLAND	525	3761	3889
SALEM	626	4255	3920
SEXTON SUMMIT R	925	5348	4901
PENNSYLVANIA			
ALLENTOWN	633	4949	5148
ERIE	697	5521	5884
HARRISBURG	607	4469	4719
PHILADELPHIA	547	4171	4584
PITTSBURGH	508	4823	5273
SCRANTON	704	5576	5528
WILLIAMSPORT	664	5317	5265
RHODE ISLAND			
BLOCK ISLAND	716	4540	4749
PROVIDENCE	653	4898	5133
SOUTH CAROLINA			
CHARLESTON	167	1814	1979
CHARLESTON U	150	1610	1752
COLUMBIA	219	2291	2403
GRNVLLE-SPRTNBRG	323	2886	2876
SOUTH DAKOTA			
ABERDEEN	783	6991	7482
HURON	776	6731	7248
RAPID CITY	847	6441	6278
SIOUX FALLS	775	6817	6918
TENNESSEE			
BRISTOL	334	3521	3814
CHATTANOOGA	294	3455	3079
KNOXVILLE	283	3212	3253
MEMPHIS	237	3258	3063
NASHVILLE	261	3186	3349
OAK RIDGE R	304	3326	3533
TEXAS			
ABILENE	235	3080	2510
AMARILLO	548	4383	3677
AUSTIN	72	1997	1660
BROWNSVILLE	4	894	600
CORPUS CHRISTI	23	1191	914
DALLAS	113	2451	2267
DEL RIO	31	1676	1486
EL PASO	384	2695	2595
FORT WORTH	155	2509	2306
GALVESTON U	39	1329	1205
HOUSTON INTERCON	75	1776	1631
LUBBOCK	416	3780	3346
MIDLAND	320	3099	2501
PORT ARTHUR	77	1785	1408
SAN ANGELO	183	2550	2189
SAN ANTONIO	29	1762	1507
VICTORIA	20	1451	1152
WACO	149	2494	1964
WICHITA FALLS	213	3172	2706
UTAH			
MILFORD	895	6497	5612
SALT LAKE CITY	711	5545	5276
WENDOVER	745	5568	5142
VERMONT			
BURLINGTON	855	6902	7112
VIRGINIA			
LYNCHBURG	435	3733	3821
NORFOLK	403	2951	3168
RICHMOND	394	3375	3593
ROANOKE	428	3737	3824
WALLOPS ISLAND	515	3505	
WASHINGTON			
OLYMPIA	659	4793	4302
QUILLAYUTE	675	4744	4532
SEATTLE-TACOMA	639	4231	4217
SPOKANE	734	5648	5701
STAMPEDE PASS R	1033	7370	7291
WALLA WALLA U	500	4410	4241
YAKIMA	610	5200	5217
WEST VIRGINIA			
BECKLEY	506	4585	4769
CHARLESTON	394	3924	4071
ELKINS	522	4717	4985
HUNTINGTON	363	4053	4041
PARKERSBURG U	367	4043	4294
WISCONSIN			
GREEN BAY	785	6548	6941
LA CROSSE	727	6457	6735
MADISON	720	6383	6833
MILWAUKEE	769	6091	6486
WYOMING			
CASPER	984	7010	6243
CHEYENNE	1017	6693	6123
LANDER	1186	8060	6682
SHERIDAN	915	6808	6525

Data from airport unless otherwise specified.

COOLING DEGREE DAYS

(Base 65°F.)

State and station	Current season: This month	Current season: Period January through this month	Normals January through this month
ALABAMA			
BIRMINGHAM	24	24	
HUNTSVILLE	8	8	
MOBILE	80	81	
MONTGOMERY	54	54	
ALASKA			
ANCHORAGE	0	0	
ANNETTE	0	0	
BARROW	0	0	
BARTER ISLAND	0	0	
BETHEL	0	0	
BETTLES	0	0	
BIG DELTA	0	0	
COLD BAY	0	0	
FAIRBANKS	0	0	
GULKANA	0	0	
HOMER			
JUNEAU	0	0	
KING SALMON	0	0	
KODIAK	0	0	
KOTZEBUE	0	0	
MC GRATH	0	0	
NOME	0	0	
ST. PAUL ISLAND	0	0	
SHEMYA	0	0	
SUMMIT	0	0	
TALKEETNA	0	0	
UNALAKLEET	0	0	
YAKUTAT	0	0	
ARIZONA			
FLAGSTAFF	0	0	
PHOENIX	0	0	
TUCSON	0	0	
WINSLOW	0	0	
YUMA	0	0	
ARKANSAS			
FORT SMITH	0	0	
LITTLE ROCK	14	14	
CALIFORNIA			
BAKERSFIELD	0	0	
BISHOP	0	0	
BLUE CANYON	0	0	
EUREKA U	0	0	
FRESNO	0	0	
LONG BEACH	0	0	
LOS ANGELES	0	1	
LOS ANGELES U	0	11	
MT SHASTA R	0	0	
OAKLAND	0	0	
RED BLUFF	0	0	
SACRAMENTO	0	0	
SANDBERG R	0	0	
SAN DIEGO	0	0	
SAN FRANCISCO	0	0	
SAN FRANCISCO U	0	0	
SANTA MARIA	0	0	
STOCKTON	0	0	
COLORADO			
ALAMOSA	0	0	
COLORADO SPRINGS	0	0	
DENVER	0	0	
GRAND JUNCTION	0	0	
PUEBLO	0	0	
CONNECTICUT			
BRIDGEPORT	0	0	
HARTFORD	0	0	
DELAWARE			
WILMINGTON	0	0	
DIST.OF COLUMBIA			
WASHINGTON DULLES	0	0	
WASHINGTON NATIONAL	2	2	
FLORIDA			
APALACHICOLA U	46	53	
DAYTONA BEACH	148	207	
FORT MYERS	221	379	
JACKSONVILLE	105	128	
KEY WEST	339	681	
LAKELAND U	168	252	
MIAMI	301	594	
ORLANDO	207	323	
PENSACOLA	65	65	
TALLAHASSEE	101	116	
TAMPA	188	278	
WEST PALM BEACH	279	516	
GEORGIA			
ATHENS	13	13	
ATLANTA	11	11	
AUGUSTA	28	28	
COLUMBUS	41	41	
MACON	53	53	
ROME	13	13	
SAVANNAH	63	63	
HAWAII			
HILO	239	652	
HONOLULU	353	824	
KAHULUI	302	601	
LIHUE	328	718	
IDAHO			
BOISE	0	0	
LEWISTON	0	0	
POCATELLO	0	0	
ILLINOIS			
CAIRO U	3	3	
CHICAGO O HARE	0	0	
CHICAGO MIDWAY	0	0	
MOLINE	0	0	
PEORIA	0	0	
ROCKFORD	0	0	
SPRINGFIELD	0	0	
INDIANA			
EVANSVILLE	0	0	
FORT WAYNE	0	0	
INDIANAPOLIS	0	0	
SOUTH BEND	0	0	
IOWA			
BURLINGTON	0	0	
DES MOINES	0	0	
DUBUQUE	0	0	
SIOUX CITY	0	0	
WATERLOO	0	0	
KANSAS			
CONCORDIA	0	0	
DODGE CITY	0	0	
GOODLAND	0	0	
TOPEKA	0	0	
WICHITA	0	0	
KENTUCKY			
COVINGTON	4	4	
LEXINGTON	12	12	
LOUISVILLE	7	7	
LOUISIANA			
ALEXANDRIA	39	41	
BATON ROUGE	92	94	
LAKE CHARLES	65	66	
NEW ORLEANS	96	105	
SHREVEPORT	16	18	
MAINE			
CARIBOU	0	0	
PORTLAND	0	0	
MARYLAND			
BALTIMORE	0	0	
MASSACHUSETTS			
BLUE HILL OBS R	0	0	
BOSTON	0	0	
WORCESTER	0	0	
MICHIGAN			
ALPENA	0	0	
DETROIT			
DETROIT METRO	0	0	
FLINT	0	0	
GRAND RAPIDS	0	0	
HOUGHTON LAKE	0	0	
LANSING	0	0	
MARQUETTE U	0	0	
MUSKEGON	0	0	
SAULT STE MARIE	0	0	
MINNESOTA			
DULUTH	0	0	
INTERNATIONAL FALLS	0	0	
MINNEAPOLIS	0	0	
ROCHESTER	0	0	
ST CLOUD	0	0	
MISSISSIPPI			
JACKSON	51	52	
MERIDIAN	49	49	
MISSOURI			
COLUMBIA REGIONAL	0	0	
KANSAS CITY	0	0	
ST JOSEPH	0	0	
ST LOUIS	1	1	
SPRINGFIELD	0	0	
MONTANA			
BILLINGS	0	0	
GLASGOW	0	0	
GREAT FALLS	0	0	
HAVRE	0	0	
HELENA	0	0	
KALISPELL	0	0	
MILES CITY	0	0	
MISSOULA	0	0	
NEBRASKA			
GRAND ISLAND	0	0	
LINCOLN	0	0	
NORFOLK	0	0	
NORTH PLATTE	0	0	
OMAHA	0	0	
SCOTTSBLUFF	0	0	
VALENTINE	0	0	
NEVADA			
ELKO	0	0	
ELY	0	0	
LAS VEGAS	0	0	
RENO	0	0	
WINNEMUCCA	0	0	
NEW HAMPSHIRE			
CONCORD	0	0	
MT WASHINGTON OBS	0	0	
NEW JERSEY			
ATLANTIC CITY	0	0	
ATLANTIC CITY U	0	0	
NEWARK	0	0	
TRENTON U	0	0	
NEW MEXICO			
ALBUQUERQUE	0	0	
CLAYTON	0	0	
ROSWELL	0	0	
NEW YORK			
ALBANY	0	0	
BINGHAMTON	0	0	
BUFFALO	0	0	
NEW YORK U	0	0	
NEW YORK KENNEDY	0	0	
NEW YORK LA GUARDIA	0	0	
ROCHESTER	0	0	
SYRACUSE	0	0	
NORTH CAROLINA			
ASHEVILLE	0	0	
CAPE HATTERAS R	5	6	
CHARLOTTE	11	11	
GREENSBORO	6	6	
RALEIGH	24	24	
WILMINGTON	31	32	
NORTH DAKOTA			
BISMARCK	0	0	
FARGO	0	0	
WILLISTON	0	0	
OHIO			
AKRON	0	0	
CINCINNATI ABBE OB	5	5	
CLEVELAND	0	0	
COLUMBUS	3	3	
DAYTON	0	0	
MANSFIELD	0	0	
TOLEDO	0	0	
YOUNGSTOWN	0	0	
OKLAHOMA			
OKLAHOMA CITY	0	0	
TULSA	0	0	
OREGON			
ASTORIA	0	0	
BURNS U	0	0	
EUGENE	0	0	
MEACHAM	0	0	
MEDFORD	0	0	
PENDLETON	0	0	
PORTLAND	0	0	
SALEM	0	0	
SEXTON SUMMIT R	0	0	
PACIFIC AREA			
GUAM TAGUAC R	417	1089	
JOHNSTON	345	973	
KOROR R	530	1506	
KWAJALEIN	574	1560	
MAJURO	523	1497	
PAGO PAGO	561	1586	
PONAPE R	541	1492	
TRUK MOEN ISLAND	540	1523	
WAKE	421	1097	
YAP R	525	1443	
PENNSYLVANIA			
ALLENTOWN	0	0	
ERIE	0	0	
HARRISBURG	0	0	
PHILADELPHIA	0	0	
PITTSBURGH	0	0	
SCRANTON	0	0	
WILLIAMSPORT	0	0	
RHODE ISLAND			
BLOCK ISLAND	0	0	
PROVIDENCE	0	0	
SOUTH CAROLINA			
CHARLESTON	51	51	
CHARLESTON U	25	25	
COLUMBIA	28	28	
GRNVLLE-SPRTNBRG	6	6	
SOUTH DAKOTA			
ABERDEEN	0	0	
HURON	0	0	
RAPID CITY	0	0	
SIOUX FALLS	0	0	
TENNESSEE			
BRISTOL	0	0	
CHATTANOOGA	1	1	
KNOXVILLE	4	4	
MEMPHIS	4	4	
NASHVILLE	14	14	
OAK RIDGE R	2	2	
TEXAS			
ABILENE	0	0	
AMARILLO	0	0	
AUSTIN	34	45	
BROWNSVILLE	178	218	
CORPUS CHRISTI	149	176	
DALLAS	25	25	
DEL RIO	68	68	
EL PASO	0	0	
FORT WORTH	6	7	
GALVESTON U	41	42	
HOUSTON INTERCON	41	46	
LUBBOCK	0	0	
MIDLAND	0	0	
PORT ARTHUR	38	40	
SAN ANGELO	6	6	
SAN ANTONIO	69	77	
VICTORIA	109	122	
WACO	12	12	
WICHITA FALLS	3	3	
UTAH			
MILFORD	0	0	
SALT LAKE CITY	0	0	
WENDOVER	0	0	
VERMONT			
BURLINGTON	0	0	
VIRGINIA			
LYNCHBURG	3	3	
NORFOLK	16	16	
RICHMOND	13	13	
ROANOKE	3	3	
WALLOPS ISLAND	0	0	
WASHINGTON			
OLYMPIA	0	0	
QUILLAYUTE	0	0	
SEATTLE-TACOMA	0	0	
SEATTLE	0	0	
SPOKANE	0	0	
STAMPEDE PASS R	0	0	
WALLA WALLA U	0	0	
YAKIMA	0	0	
WEST INDIES			
SAN JUAN	428	1245	
WEST VIRGINIA			
BECKLEY	1	1	
CHARLESTON	4	4	
ELKINS	0	0	
HUNTINGTON	4	4	
PARKERSBURG U	9	9	
WISCONSIN			
GREEN BAY	0	0	
LA CROSSE	0	0	
MADISON	0	0	
MILWAUKEE	0	0	
WYOMING			
CASPER	0	0	
CHEYENNE	0	0	
LANDER	0	0	
SHERIDAN	0	0	

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

MARCH 1973

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				Ø ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE	
								PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS
Alabama	6	1		5	6							4	°C		3													7	°C
Alaska*																													
Arizona*																													
Arkansas	1	1			4			4		1		5																	
California*																													
Colorado	No Storm Data Report received for this State																												
Connecticut																3												4	
Delaware	No Storm Data Report received for this State																												
Florida	7	3		7	5						2			1															
Georgia	5	2	2	106	8							4																°6	C
Hawaii*																													
Idaho												4																	
Illinois	4	1			4						6	5				4										?	?	7	
Indiana								3				4								4									
Iowa*																													
Kansas	8	2		1	6			3			4	5								4	3							5	5
Kentucky												6																?	?
Louisiana	2	1			5		3	4				5				3										3			
Maine*																													
Maryland	No Storm Data Report received for this State																												
Massachusetts										1	2	4																	
Michigan												7	?							4									
Minnesota*																													
Mississippi	2	2		1	5			?	?		3	5				4												8	C
Missouri	5	2		5	4						6	5																7	7
Montana												2								3									
Nebraska								4											?	5									
Nevada*																													
New Hampshire																3												4	
New Jersey																												5	
New Mexico											1	4																	
New York																												7	
North Carolina								2				5				5										1		6	4
North Dakota*																													
Ohio											?	4	?		?	4	?		?	4	4						?	6	4
Oklahoma	7	3		6	6			4	4	1	1	5		1	1	4				4								5	4
Oregon	No Storm Data Report received for this State																												
Pacific*																													
Pennsylvania												5																	
Puerto Rico																												4	
Rhode Island																3												4	
South Carolina	2	1	7	30	6																							4	2
South Dakota																		1		5									
Tennessee	1	1	1	3	5							4														4		°8	C
Texas	29	9	7	131	7			5	3		1	6				2												3	
Utah																				6	5								
Vermont																												4	
U.S. Virgin Is.*																													
Virginia	No Storm Data Report received for this State																												
Washington*																													
West Virginia	No Storm Data Report received for this State																												
Wisconsin	2	1			4																					1		6	
Wyoming																				°5	C								

° Includes crop damage.
C Crop damage.
* No occurrence of storms or unusual weather phenomena reported.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
Ø For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5 Million
7 $5 Million to $50 Million
8 $50 Million to $500 Million
9 $500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

MARCH 1973

Elmer R. Nelson
Office of Hydrology

Major flooding began during March along the mainstem of the Mississippi River. By the end of March flooding was in progress along the Mississippi River from Clinton, Iowa, to Donaldsville, La., a distance of over 1,300 miles. Heavy damage occurred in the reach below Keokuk, Iowa. Major flooding occurred along the lower Missouri, the lower Ohio, and other tributaries in the Mississippi System. Record flooding occurred along tributary streams of the Tennessee River in Tennessee. Total damages in the Mississippi System during March were estimated at over $160 million, with the heaviest damages occurring in Missouri, Illinois, Tennessee, and Mississippi.

Major flooding occurred on streams in the East Gulf of Mexico Drainage in Mississippi and Alabama. Record flooding occurred on the Tombigbee River from Amory, Miss., to Gainesville, Ala., a distance of nearly 150 miles. Damages were estimated at over $35 million.

Date (March)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	HUDSON BAY DRAINAGE		
	Red River of the North Basin		
14-22	Heavy rain on the 13th and 14th caused more than 3 feet of overflow on the Maple River at Enderlin, N. Dak. Most of the snow cover in the Red River of the North Basin was depleted by the middle of March due to below normal precipitation and above normal temperatures through January, February into March.	0	Minor
	ST. LAWRENCE DRAINAGE		
	Lake Huron		
17-18	Strong northeast winds up to 50 m.p.h. caused water from Saginaw Bay to pile up on the Saginaw River from Essexville upstream to Saginaw, Mich. Near record snowfall of 10 to 12 inches with water equivalent of nearly 1.5 inches on the 17th contributed to the flooding.	0	$500
	Lake Erie		
11-28	The heaviest flooding in the Lake Erie Drainage occurred on the St. Marys River at Decatur, Ind., where flood stage was exceeded by over 4 feet. The prolonged flooding was due to slow snowmelt and thawing ground conditions.	0	N.A.
	Lake Ontario		
17-19	A period of significant rainfall during the middle of the month produced up to 2 feet of overflow on creeks in the lower Genesee Basin in New York. Warm weather early in the month caused streams to run quite full due to snowmelt with minor overflow on Black Creek on the 6th.	0	Minor
	ATLANTIC SLOPE DRAINAGE		
17-23	Urban and street flooding, and flash flooding of small streams occurred throughout Vermont. Street flooding and river overflows of small streams were observed at a few isolated points in Massachusetts and New Hampshire. The Connecticut River crested above flood stage from White River Junction, Vt., southward. Minor flooding occurred on the upper Merrimack in New Hampshire.	1	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

MARCH 1973

Date (March)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	ATLANTIC SLOPE DRAINAGE-Cont'd.		
2-19	Light flooding occurred on the Neuse and Cape Fear Rivers in eastern North Carolina. The Cape Fear River ran about 6 to 7 feet above the top of the lock at William O. Huske Dam near Tarheel, N.C., and about 6 feet above flood stage at Elizabethtown, N.C. The Neuse River was 2 to 4 feet above flood stage from east of Raleigh downstream through the Kinston, N.C., area.	0	Minor
Dec. 17 -1/	Flooding along streams in the Pee Dee, Santee, and Edisto River Basins in South Carolina during March was not nearly as high nor damages as heavy as in February. In the Congaree Basin, a thunderstorm at Columbia, S.C., on the 7th deposited 1.72 inches of rainfall in 1 hour over Six Mile Creek Basin. The flood crest came within 1 foot of the 50-yr. flood level and breached Lake Carolina Dam at Columbia, S.C. The monthly total precipitation of 10.89 inches was the highest of record for any March and twice the normal. This is the fourth consecutive month with flooding in the Lumber Basin. Damages in the Six Mile Creek Basin and in the Lumber Basin in North Carolina were estimated at $3,000 each.	0	$ 20
Feb 1-1/	Swamps were flooded throughout the month in the lower portion of the Savannah and Ogeechee Rivers. Minor overflow occurred along the Altamaha River at Charlotte, Ga., from the 25th into April. Rainfall in Georgia was above normal during March with the heaviest precipitation occurring on the 11th, 16th, and 31st.	0	Minor
	EAST GULF OF MEXICO DRAINAGE		
6-7	Severe thunderstorms produced flash flooding in some west-central counties in Alabama. Considerable damage occurred in Choctaw County to both public ($500,000) and private ($250,000) property. Several bridges and roads were washed out.	0	$750
11-19	Generally heavy rains on the 11th and 12th produced flash flooding over extreme southern Alabama. Rainfall amounts ranged to more than 7.5 inches in 24 hours in localized areas of Covington County. Most of the flood-producing rain was associated with severe thunderstorms that fell in 4 to 5 hours. Preliminary estimates of several hundred thousand dollars' damage resulted to both the public and private sector. This rain resulted in peak monthly stages for streams in southern Alabama and light flooding on the Choctawhatchee River.	0	Heavy
17-22	Major flooding occurred along the tributaries of the Alabama River in northwest Georgia following the heavy rain on the 16th. The Oostanaula River at Resaca, Ga., rose more than 6	0	$466

Date (March)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	EAST GULF OF MEXICO DRAINAGE-Cont'd.		
	feet above flood stage. Damages in the Oostanaula Basin were estimated at $431,000.		
12-1/	Heavy rain on the 11th, 12th, 15th, and 16th produced widespread flooding on streams in Mississippi with record flooding on the Tombigbee River. At Amory, Miss., the river crested at 34.3 feet., 6.7 feet above the previous record stage of 27.7 feet set in 1955. At Columbus, Miss., the crest was 42.2 feet, 2.8 feet above the previous record stage of 39.4 feet set in 1939. At Aberdeen, Miss., the crest was 47.3 feet, 2 feet above the previous record crest of 45.3 feet set in 1955. Widespread flooding along the river caused many people to evacuate their homes, especially in Columbus where the flooding was serious. Areas generally not subject to flooding were inundated, while other areas normally affected by high water remained out of the flooded area. Lowland flooding occurred on the Pearl and Leaf Rivers. During March over 6,000 people were evacuated from the flooded areas in Mississippi. More than 4,000 homes and over 200 business establishments were damaged. The total flood damages in the state of Mississippi during March is estimated at $75 million, and includes the damages in the Lower Mississippi Basin.	0	$35,000
	MISSISSIPPI SYSTEM		
	Upper Mississippi Basin		
9-29	Minor flooding occurred on streams in Minnesota. The Minnesota continued in flood from the 12th to the 29th and exceeded flood stage by over 3 feet. The Zumbro River continued in flood from the 10th to the 14th and exceeded flood stage by 4.5 to 5 feet.	0	Minor
8-25	Heavy intermittent rain from the 6th to the 16th caused damaging floods on streams in Wisconsin. The crest on the Wisconsin River at Portage, Wis., (20.15 feet) was the second highest of record. The Wolf River in eastern Wisconsin reached a crest of 11.2 feet, the third highest of record and the highest since 1922. The damages on the Wisconsin River was estimated at over $207,000 and the Wolf River at $98,000.		
4-Apr 1	It was the rainiest March of record in Iowa along with the least snow of record, and the warmest March since 1946. Flooding was only from one to a few days in duration except on the Raccoon River at Jefferson, Iowa, and on the Des Moines River upstream and downstream from the city of Des Moines. A flash flood occurred on the South River with a crest of	0	Minor

MISSISSIPPI SYSTEM-Cont'd.

Upper Mississippi Basin - Continued

Date (March)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	24.47 feet at Ackworth, Iowa, on the 31st (flood state 19 feet). Highest crest of record was 28.2 feet on July 18, 1969. Damage was confined to farmland near the rivers. The amount of damage will depend on the extent that the wetness of the soil delays or prevents field work and planting of crops.		
6-1/	Heavy rainfall during March caused damaging floods on streams in Illinois and Missouri. Rainfall during the month averaged close to 9 inches above normal. Flooding on major streams in the West Alton, Mo., area and Grafton, Ill., around the confluence of the Illinois, Missouri, and Mississippi Rivers caused considerable damage to farmland, homes, businesses, and farm machinery. Considerable farmland was inundated, with loss of winter crops such as wheat. The prolonged flooding will cause additional loss due to the inability of farmers to plant summer crops. A total of 17,325 persons were evacuated from their homes during the highest peaks of the flooding. The dollar estimate of flood damage in the state of Missouri was $33 million and in Illinois $33.1 million.	2	$66,100
8-1/	Flooding began along the Mississippi River in Grafton - Alton, Ill., area on the 8th. By the 20th, the Upper Mississippi River was in flood from Wabasha, Minn., to the mouth of the Ohio River, a distance of over 700 miles. It crested at and below Grafton, Ill., 5 to 9 feet above flood stage between the 17th and 20th and 11 to 13.5 feet above flood stage between April 5 and April 7. Above Grafton, Ill., the Mississippi crested 1 to 8 feet above flood stage between the 23d and 29th. It receded below flood stage in the reach above Clinton, Iowa, by the end of March and as far as Keokuk, Iowa, by April 8. Despite the fact that the Mississippi crested at its third highest level this century and the fifth highest of record at Davenport, Iowa, a preliminary evaluation by Civil Defense Directors indicated little or no damage occurred during March in the reach at and above Keokuk, Iowa. Considerable damage occurred in the reach below to farmland, homes, businesses, and farm machinery. Along the St. Louis, Mo., riverfront, tourist attractions were shut down due to flooding of Front Street, making attractions on thr riverfront unapproachable.		

Missouri Basin

Date (March)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
Feb 28-20	The warm weather at the end of February continued into March. This depleted the snow early in the month and caused some flooding in southeastern South Dakota, northwestern Iowa, and northeastern Nebraska. The Floyd River in Iowa crested nearly 4.5 feet above flood stage at	0	Minor

Date (March)	Flood Event		Preliminary estimate of property damage (thousands of dollars)
	MISSISSIPPI SYSTEM - Cont'd.		
	Missouri Basin - Continued		
	Alton. The Rock River at Rock Valley, Iowa, crested over 3 feet above flood stage. Lowland flooding occurred along the Big Sioux and lower James in South Dakota. Wet fields delayed planting. A number of locations including Sioux City, Iowa; Sioux Falls, and Rapid City, S. Dak., had the wettest March on record.		
3-11 15-20	Snowmelt, ice action, and precipitation kept the Little Sioux River at Linn Grove, Iowa, above flood stage for nearly 3 weeks. The higher crest was 2.5 feet above flood stage on the 6th.	0	Minor
1-Apr 5	Flooding was of unusual proportions and frequency over east-central, northeast, and north-central Kansas during March due to recordbreaking precipitation from several major storms. Most streams in the heavy rain area generally flooded more than once, and as many as five significant flood crests were reported on several streams. Most of the flood crests were the highest since 1967-1969 and, in general, the highest March crests of record in east-central Kansas and locally elsewhere in the heavy rain area. Recordbreaking precipitation was from 8 to 10 inches over portions of northeast and east-central Kansas or 300 to 500 percent of normal. Agricultural damage will run rather high from loss or damage of wheat, alfalfa, and fall crops not yet harvested.	0	$4,283
5-Apr 9	March was one of the wettest of record in west and central Missouri. Rainfall averaged 8 to 10 inches in west-central Missouri and 6 to 8 inches in northwest Missouri. Nearly continuous flooding occurred on streams, especially on the Missouri River and the Grand River in central Missouri. There were three separate periods of flooding on the Missouri River from Lexington, Mo., to Jefferson City, Mo. Each time the river crested higher than the time before. At Jefferson City, Mo., the crest of 28.8 feet on the 29th was the highest stage since the record stage of 34.2 feet in 1951. The lower reaches of the Grand River was flooded nearly all of March. Above Chillicothe, Mo., the Missouri River was flooded only during the last half of the month. Approximately 250,000 acres were flooded by the Missouri River and Grand River. Highway U.S. 63 was closed in central Missouri the last 4 days of March. Several homes and small businesses were flooded from backwater on the small streams in Jefferson City, Mo.	0	500

Date (March)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	MISSISSIPPI SYSTEM - Cont'd.		
	Ohio Basin		
17-18	Water overflowed a dam at Berwind, W. Va., and collected behind mounds of garbage at a town dump. These mounds of garbage burst under the pressure of the rising waters sending a 12- to 14-foot wall of water into the town.	0	$ 80
17-20	Minor flooding occurred along the Scioto River north and south of Columbus, Ohio. Flood stages were generally not exceeded by more than 2 feet.	0	Minor
16-17	Heavy rainfall over the mountainous headwaters of the North Fork of the Kentucky River caused nearly 5 feet of flooding at Hazard, Ky., and minor flooding at Jackson, Ky. Damages will probably run several hundred thousands of dollars.	0	N.A.
17-24	Heavy rainfall caused 1 to 3 feet of flooding on the Green River in Kentucky. The main loss was agricultural in that it delayed the preparation of the ground for planting and the eventual marketing of crops.	0	Minor
7-Apr 12	Excessive precipitation during the month with totals of 6 to 8 inches caused widespread minor flooding in the Wabash Basin. Crests were mostly 3 to 6 feet above flood stage. Much agricultural bottomland remained under water for an extended period, but only scattered winter wheat acreage was affected.	0	Minor
16-21	Heavy rainfall on the 14th-16th caused widespread flooding in the Cumberland Basin in Tennessee and southeast Kentucky. Rainfall totals ranged from 1.5 inches in the lower portion to over 8 inches along the southern edge in the headwater areas. The damage along the Cumberland River was estimated at $107,000 in the Barbourville, Ky., area where the crest was 12.5 feet above flood stage. Slight or no damage was reported from other areas along the Cumberland. Damage in the headwaters areas of the Harpeth, Stones, and Caney Fork Rivers was estimated at $29,000.	0	136
16-19	Heavy rains (4 to 7.5 inches) in the North Carolina mountains caused flash flooding throughout the mountains along with mud and rock slides. Flood stage along the French Broad River was exceeded by over 2 feet in the headwaters to 5.5 to 8 feet in the lower portion.	1	Heavy
15-Apr 2	Record flooding occurred on South Chickamauga Creek at Chattanooga, Tenn., on March 17. The crest was nearly 14 feet above flood stage and 3 feet above the previous record stage of 20.7 feet recorded in 1951. The WSO at Chattanooga was closed from 7:30 a.m. on	0	39,400

Date (March)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	MISSISSIPPI SYSTEM-Cont'd.		
	Ohio Basin-Cont'd		
	the 17th to around noon on the 18th, due to the high water. The damages at Chattanooga were estimated at $35 million. The Elk River reached a record high stage of 670.2 feet at Fayetteville, Tenn., (flood stage 661 feet) during the evening of the 16th. The previous record at Fayetteville was 669.2 feet in 1842. The Duck River in Tennessee crested 12.5 to nearly 18 feet above flood stage on the 16th-17th. The crest at Columbia, Tenn., was less than 2 feet below the record stage of 51.8 feet recorded in 1948. The Tennessee River crest 7 to 17 feet above flood stage from Chattanooga, Tenn., to Paducah, Ky.		
11-1/	Flooding occurred along the main stem of the Ohio River at and below Tell City, Ind., a distance of 254 miles. Crests downstream to Uniontown, Ky., during March ranged from 1 to 6 feet above flood stage. In the lower portion at Cairo, Ill., the crest on April 2 was 55.7 feet, 15.7 feet above flood stage. This was the fourth highest crest of record.	0	N.A.
	White Basin		
Oct 29-1/	Flooding continued along the Cache River at Patterson, Ark., for the fifth consecutive month. The lower White River at and below Clarendon, Ark., has continued in flood since January 25. The widespread flooding along the lower reaches of the White, Black, and Cache Rivers inundated thousands of acres of farm and timberland. Interference with farm and timber operations has been the most costly aspect of the flooding.	0	N.A.
	Arkansas Basin		
3-15	Widespread flooding occurred throughout the Arkansas Basin during March.	1	Heavy
19-1/	While daily rainfall values were not excessive, the monthly total amounts were recordbreaking over a large portion of the basin. Runoff from the rainfall was high as the soil moisture remained near the saturation level throughout the month. The crest of 27.8 feet on the Arkansas River at Van Buren, Ark., on the 25th was the highest since May 11, 1961, when it reached a stage of 28.2 feet. All major tributaries were out of their banks at some time during the month. Considerable damage resulted to growing crops, roads, and bridges. Damages in southern Kansas were estimated at about $125,000.		
	Red Basin		
2-1/	Significant flooding occurred in the basin. Four crests were reached on the Sulphur River at Hagansport, Tex. Downstream, Naples, Tex.,	0	N.A.

Date (March)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	MISSISSIPPI SYSTEM-Continued		
	Red Basin-Continued		
	remained above flood stage most of the month. Tributaries of the Red River in south-central Oklahoma reached flood stage, but were well below major flood levels. The Red River at Alexandria, La., reached flood stage on the 31st, for the first time since May 1968. Flash flooding occurred on many small streams in south-central Oklahoma. Major damage occurred to the new green levees along the Sulphur River in the Hagansport, Tex., area. The most costly aspect of the flooding was the interference with farm and timber operations.		
	Lower Mississippi Basin		
11-1/	Heavy rainfall (2.85 inches) over the St. Francis Basin on the 10th caused 3.5 to 4.5 feet of overflow at St. Francis, Ark., and Fisk, Mo.	0	N.A.
Feb 9- Apr 16	Flooding increased on streams in Mississippi during March when locally maintained levees on tributaries of the Tallahatchie and Yazoo Rivers burst under the pressure of the high water. Many families had to be evacuated as the flooding increased. Lowland flooding occurred on the Big Black River.	0	$ 5,000
13-1/	The Mississippi River below Cairo, Ill., began rising the first weekend in March, with sharp rises occurring from the 8th to the 14th. The river continued rising through March and April and was above flood stage along its entire course by April 3. The first crest of 42.4 feet at Caruthersville, Mo., on April 3-4 was the highest stage since the flood of 1937. Five persons lost their lives in southwestern Mississippi when they attempted to drive across a bridge that was already inundated and were swept into the stream. The total flood damages in the state of Mississippi during March is estimated at $75 million and includes the damages in the East Gulf of Mexico Drainage.	5	35,000
	Atchafalaya Basin		
Dec 20-1/	The Atchafalaya at Morgan City, La., continued above flood stage (7 feet) through March and April and crested 1.5 feet higher in March than in February. The crest of 9.9 feet on March 24 was due in part to significant tidal effect resulting from the Gulf storm. The Atchafalaya continued to rise to a record level during April.	0	N.A.

Date (March)	Flood Event	Lives Lost	Preliminary estimate of property damage (thousands of dollars)
	WEST GULF OF MEXICO DRAINAGE		
23-Apr 3	The Calcasieu River crested 6 feet above flood stage at Hineston and Kinder, La., on the 26th-27th. The Mermentau River at Mermentau, La., was out of its banks on the 25th-31st and crested nearly 2 feet above flood stage on the 29th.	0	N.A.
11-1/	There were two significant crests on the Sabine River below the Lake Fork Branch. Crests in the Gladewater-Longview, Tex., area averaged over 5 feet above flood stage. Some damage resulted to machinery, such as oil well pumps. Damage to roads was estimated at $20,000. Fences were damaged or destroyed.	0	Light
10-Apr 5	Heavy rains, exceeding 2 inches on the 9th and 23d, produced flooding along the Trinity River from Dallas to Long Lake, Tex., and at Liberty, Tex. The most prolonged flooding occurred from near Trinidad to near Long Lake, Tex., which was in flood from 9 to 12 days. Damage was restricted to the lowlands.	0	Minor
23-29	Heavy rains up to 5 inches on the morning of the 23d caused flooding on the Navidad, Lavaca, and Guadalupe Rivers in Texas. Flooding was limited to grazing land with little or no loss of livestock.	0	Minor

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1/ Continued at end of the month.

N.A. Damages not available.

FLOOD STAGE DATA

(All dates in March unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest*	
		From—	To—	Stage	Date
	Ft.			*Ft.*	
HUDSON BAY DRAINAGE					
Red River of the North Basin					
Maple:					
Enderlin, N. Dak.	6	14	22	9.1	17
ST. LAWRENCE DRAINAGE					
Lake Huron					
Saginaw:					
Saginaw, Mich.	19	17	18	19.9	17
Lake Erie					
St. Mary:					
Decatur, Ind.	15	11	22	19.1	15
St. Joseph:					
Montpelier, Ohio	10	12	28	11.4	13
Tiffin:					
Stryker, Ohio	11	12	28	12.0	14
Maumee:					
Fort Wayne, Ind.	15	12	12	15.3	12
		15	22	15.8	18
Lake Ontario					
Canaseraga Creek:					
Groveland, N.Y.	11	17	18	12.9	17
Oatka Creek:					
Garbutt, N.Y.	5	17	19	6.6	18
Black Creek:					
Churchville, N.Y.	5	6	6	5.1	6
		17	19	6.5	18
ATLANTIC SLOPE DRAINAGE					
Pemigewasset:					
Plymouth, N.H.	11	18	18	11.9	18
Merrimack:					
Concord, N.H.	12	19	20	12.9	20
Connecticut:					
White River Junction, Vt.	18	17	18	19.5	18
Montague City, Mass.	28	17	19	30.5	18
Hartford, Conn.	16	15	15	16.0	15
		17	22	21.0	19
Bodkin Rock (nr. Middletown, Conn.	8	18	23	12.0	20
Chemung:					
Chemung, N.Y.	12	18	18	14.2	18
James:					
Lick Run, Va.	16	17	18	18.7	17
Buchanan, Va.	17	17	18	19.2	18
Bremo Bluff, Va.	19	18	19	22.1	19
Columbia, Va.	18	18	19	U	
State Farm, Va.	12	18	20	U	
Richmond (Westham), Va.	12	19	20	13.7	19
Richmond (City Locks, Va.)	9	19	20	9.7	20
Roanoke:					
Williamston, N.C.	10	Dec 1	Mar 4	11.3	Dec 22
					Jan 22
				11.2	Feb 11-26
		9	12	10.0	9
		17	1/	11.1	31
				11.3	Apr 4-29
Neuse:					
Neuse, N.C.	14	4	7	15.7	6
Smithfield, N.C.	13	2	13	16.8	8
Goldsboro, N.C.	14	6	18	16.9	12
Kinston, N.C.	14	9	19	15.3	15
ATLANTIC SLOPE DRAINAGE (Continued)					
Cape Fear:					
William O. Huske, L&D(nr) Tarhell, N.C.	42	5	10	48.5	6
Lock No 2, Elizabethtown, N.C.	20	5	11	26.3	7
Yadkin:					
Yadkin College, N.C.	18	18	18	18.0	18
Lumber:					
Lumberton, N.C.	9	Dec 17	1/	12.3	Dec 23
				11.2	Jan 24
				14.3	Feb 6
				15.6	Feb 16
				12.6	10
				14.4	Apr 5
Little Pee Dee:					
Galivants Ferry, S.C.	9	Jan 20	Mar 25	11.4	Feb 11
				11.7	Feb 18
				10.0	11
Waccamaw:					
Conway, S.C.	7	Feb 12	8	9.0	Feb 17
Pee Dee:					
Cheraw, S.C.	30	19	19	#30.1	19
Peedee, S.C.	19	6	Apr 21	22.0	24
				27.0	Apr 6
Saluda:					
Chappells, S.C.	14	31	Apr 3	22.3	Apr 2
Broad:					
Gaffney (nr), S.C.	10	17	18	12.1	17
Blair, S.C.	14	12	13	15.0	13
		17	20	24.2	18
Congaree:					
Columbia, S.C.	19	19	19	19.2	19
Catawba:					
McAdenville, N.C.	10	17	18	12.0	17
Lookout Shoals, S.C.	100	17	22	103.4	17
Santee:					
Jamestown, S.C.	10	23	30	11.9	26
North Fork Edisto:					
Orangeburg, S.C.	8	8	16	8.8	13
Edisto:					
Givhans Ferry State Pk, S.C.	10	Feb 2	24	14.5	Feb 20
				12.4	12
Savannah:					
Wade Plantation, Ga.	15	19	1/	#17.6	27
				18.5	Apr 12
Clyo, Ga.	11	Feb 1	1/	#15.5	Feb 20
				#15.9	30
				17.3	Apr 15
Ogeechee:					
Scarboro, Ga.	8	7	28	# 9.0	10
Eden, Ga.	9	Feb 6	Apr 24	#12.3	Feb 10
				#10.6	14
				11.4	Apr 13
Ocmulgee:					
Macon, Ga.	18	13	13	#18.5	13
Altamaha:					
Charlotte, Ga.	15	25	Apr 23	#15.8	29
				19.3	Apr 12
EAST GULF OF MEXICO DRAINAGE					
Apalachicola:					
Blountstown, Fla.	15	8	11	#16.3	[illegible]
		13	Apr 21	#19.2	22
				#23.5	Apr 29
Choctawhatchee:					
Newton, Ala.	19	13	13	#22.7	13

FLOOD STAGE DATA

(All dates in March unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest	
		From–	To–	Stage	Date
	Ft.			Ft.	
EAST GULF OF MEXICO DRAINAGE (Continued)					
Choctawhatchee-Cont'd:					
Geneva, Ala.	23	15	15	#23.6	15
Caryville, Fla.	12	15	19	#13.5	16
Peachtree Creek:					
Atlanta, Ga.	13	17	17	#16.0	17
Oostanaula:					
Resaca, Ga.	22	18	22	#28.2	20
Etowah:					
Canton, Ga.	17	17	17	#17.5	17
Cahaba:					
Centreville, Ala.	23	31	Apr 1	24.1	31
Alabama:					
Millers Ferry, Ala.	66	18	21	#67.6	20
Claiborne, Ala.	40	20 27	23 29	#41.4 #40.5	22 28
Old Town Creek:					
Tupelo, Miss.	21	16	18	27.4	16
East Fork Tombigbee:					
Fulton, Miss.	16	12 25	21 28	22.5 16.3	17 25
Tibbee:					
Tibbee, Miss.	23	16 27	21 28	31.7 23.45	17 27
Black Warrior:					
Bankhead L&D, Ala.	15	31	31	#15.2	31
Oliver L&D, Tuscaloosa, Ala.	47	17	18	48.6	17
Warrior L&D, Ala.	30	18 26	23 29	34.7 33.0	20 27
Tombigbee:					
Amory, Miss.	20	12 25	23 27	34.3 21.5	17 26
Aberdeen, Miss.	34	16	24	47.3	18
Columbus, Miss.	29	17	25	42.2	19
Gainesville, Ala.	36	18	Apr 6	54.4	23
Demopolis L&D, Ala.	48	18	Apr 12	64.0	27
Coffeeville L&D, Ala.	43	8 16	10 Apr 16	44.0 58.7	9 Apr 1
Chickasawhay:					
Enterprise, Miss.	20	27	Apr 4	25.4	Apr 2
Leaf:					
Hattiesburg, Miss.	22	12 26	14 29	23.7 23.6	13 28
Beaumont, Miss.	20	11 26	13 Apr 8	20.4 23.9	11 30
Pascagoula:					
Merrill, Miss.	22	27	Apr 12	23.8	Apr 2
Bogue Chitto:					
Franklinton, La.	11	25	28	E17.6	27
Pearl:					
Edinburg, Miss.	20	17	24	24.8	19
Carthage, Miss.	17	17	Apr 7	22.8	19
Ofahoma, Miss.	14	12 17 28	14 22 30	15.6 18.8 14.8	12 19 28
Jackson, Miss.	18	12	1	31.9 33.0	22 Apr 19
Monticello, Miss.	19	12 17	14 Apr 15	19.8 27.85	13 26
Columbia, Miss.	17	25	Apr 13	23.5 23.0	28 Apr 2
Bogalusa, La.	15	7	1	20.5	30, Apr 1
Pearl River, La.	12	11	1	16.4 16.5	29-30 Apr 21

River and station	Flood stage	Above flood stages -dates		Crest	
		From–	To–	Stage	Date
	Ft			Ft	
EAST GULF OF MEXICO DRAINAGE (Continued)					
Comite:					
Comite, La.	18	25	27	21.0	2[illegible]
Amite:					
Darlington, La.	18	25	27	20.3	26
Denham Springs, La.	25	25	28	32.6	27
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Crow:					
Delano, Minn.	8	16	21	8.35	18
Rum:					
St. Franics, Minn.	8	18	21	8.25	19
Minnesota:					
Jordan, Minn.	20	12	27	23.1	19
Savage, Minn.	698	15	29	701.15	20
Redwood:					
Redwood Falls, Minn.	6	12	12	8.1	13
Chippewa:					
Eau Claire, Wis.	773	12	17	775.5	16
Durand, Wis.	11	13	19	14.4	16
South Branch Zumbro:					
Rochester, Minn.	12	10	12	15.4	11
Zumbro:					
Zumbro Falls, Minn.	18	10	12	22.5	11
Theilman, Minn.	38	11	14	43.0	12
Whitewater:					
Beaver, Minn.	7	9	10	8.5	11
Trempealeau:					
Dodge, Wis.	7	8	17	10.1	12
Black:					
Galesville, Wis.	12	10	18	14.5	13
Root:					
Hokah, Minn.	47	11	16	49.0	12
Kickapoo:					
Soldiers Grove, Wis.	723	13	13	723.2	13
Gays Mills, Wis.	698	14	14	698.2	14
Steuben, Wis.	8	9	20	9.2	15
Wisconsin:					
Merrill, Wis.	11	13	16	12.15	15
Wisconsin Rapids, Wis.	12	15	16	12.0	15
Portage, Wis.	17	11	30	20.15	17
Muscoda, Wis.	9	15	22	10.3	19
Wolf:					
New London, Wis.	9	8	25	11.2	16
Turkey:					
Garber, Iowa	17	12 15	12 15	18.0 17.5	12 15
Wapsipinicon:					
DeWitt, Iowa	10	8 11	9 25	10.7 11.4	8 21
Pecatonica:					
Darlington, Wis.	11	8	8	12.2	8
Martintown, Wis.	11	7	18	14.8	8
Freeport, Ill.	13	11	12	13.2	12
Shirland, Ill.	12	8	20	13.9	10
Plum:					
Savanna, Ill.	22	7	8	26.5	7

FLOOD STAGE DATA

(All dates in March unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–	To–	Crest * Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Cont'd.					
Upper Mississippi Basin-Continued					
Apple:					
Hanover, Ill.	16	6	7	19.6	7
Kishwaukee:					
Perryville, Ill.	10	7	10	12.5	8
Green:					
Geneseo, Ill.	8	7	17	12.0	8
		31	Apr 4	9.8	Apr 2
Rock:					
Afton, Wis.	8	12	1	10.0	20
				9.0	Apr 1
				9.6	Apr 22
Rockford, Ill.	13.5	8	24	14.1	8
Joslin, Ill.	12	8	24	14.1	10
Moline, Ill.	12	9	22	13.0	12
Edwards:					
New Boston, Ill.	17	7	11	20.1	9
Pope Creek:					
Keithsburg, Ill.	17	7	15	24.9	7
Shell Rock:					
Marble Rock, Iowa	4	11	14	6.0	11
Shell Rock, Iowa	12	12	13	12.4	12
		15	16	12.2	15
West Fork Cedar:					
Finchford, Iowa	12	13	16	12.3	14
Black Hawk Creek:					
Hudson, Iowa	12	15	15	12.4	15
Cedar:					
Austin, Minn.	15	11	11	15.8	11
Charles City, Iowa	12	12	13	14.7	12
Janesville, Iowa	11	14	14	11.05	14
Iowa:					
Marshalltown, Iowa	13	7	21	14.5	8
				15.05	12
				15.5	16
Wapello, Iowa	10	11	23	11.8	20
East Fork, Des Moines					
Burt, Iowa	10	4	9	10.6	5
		12	17	10.5	15
West Fork, Des Moines:					
Estherville, Iowa	7	14	14	7.1	14
Humboldt, Iowa	8	16	17	8.1	16
North Raccoon:					
Jefferson, Iowa	10	4	19	14.2	4
				13.5	13
				13.3	15
		26	29	11.5	27
Perry, Iowa	13	4	8	14.6	5
		13	18	14.35	14
Raccoon:					
Van Meter, Iowa	13	6	7	13.4	7
		13	16	14.8	14
Des Moines, Iowa	12	15	15	13.0	15
South:					
Ackworth, Iowa	19	31	Apr 1	24.5	31
Cedar Creek:					
Bussey, Iowa	16	26	26	18.3	26
Des Moines:					
Boone, Iowa	12	14	16	12.6	15
Saylorville, Iowa	T13	4	31	#17.1	9
				#19.25	16
Des Moines, Iowa	21	6	20	25.1	15
				22.0	19
MISSISSIPPI SYSTEM-Cont'd.					
Upper Mississippi Basin-Cont'd.					
Des Moines:					
Tracy, Iowa	14	9	13	14.9	13
Eddyville, Iowa	15	6	7	16.1	7
		9	13	17.3	11
Salt:					
New London, Mo.	19	7	13	22.2	12
		26	30	24.5	27
Cuivre:					
Old Monroe, Mo.	24	M	1	33.65	Apr 3
				33.1	Apr 29
Illinois:					
LaSalle, Ill.	20	9	24	30.9	16
		30	1/	27.4	Apr 23
Peoria, Ill.	18	14	1/	19.4	17
				21.8	Apr 5
				24.4	Apr 27
Havana, Ill.	14	10	1/	18.9	21
				21.0	Apr 6
				23.9	Apr 29
Beardstown, Ill.	14	9	1/	21.5	20
				24.0	Apr 6
				27.1	Apr 29
Meredosia, Ill.	32	M	1/	26.75	Apr 29
Bourbeuse:					
Union, Mo.	15	12	14	17.0	14
Big:					
Byrnesville, Mo.	16	11	13	19.0	12
Meramec:					
Sullivan, Mo.	15	11	13	15.9	12
Pacific, Mo.	18	12	15	23.0	14
Eureka, Mo.	18	12	15	20.5	13
Valley Park, Mo.	16	11	16	19.9	13
Kaskaskia:					
Carlule, Ill.	21	M	Apr 10	21.5	Apr 6
New Athens, Ill.	25	Apr 2	Apr 10	26.2	Apr 6
Big Muddy:					
Murphysboro, Ill.	16	M	1/	M	M
Mississippi:					
Wabasha, Minn.	12	15	23	13.45	19
Winona, Minn.	13	16	23	14.6	20
LaCrosse, Wis	12	16	23	13.0	20
Prairie du Chien, Wis.	18	17	26	20.15	22
Guttenburg, Iowa	15	16	28	18.6	22
Cassville, Wis.	18	20	25	19.15	23
Dubuque, Iowa	17	16	30	21.85	23
Sabula, Iowa	16	18	31	18.7	24-25
Clinton, Iowa	16	17	Apr 1	20.1	25
Camanache, Iowa	17	18	1/	20.6	25
Princeton, Iowa	13	19	1/	16.3	25
LeClaire, Iowa	10	17	Apr 3	13.6	25
Moline, Ill.	13.5	18	1/	16.6	25
Davenport, Iowa	15	19	Apr 2	18.8	25
Fairport, Iowa	14	16	Apr 5	19.6	26
Muscatine, Iowa	16	16	Apr 4	20.8	26
Keithsburg, Ill.	12	13	1/	17.05	26
				19.35	Apr 25
Burlington, Iowa	15	15	Apr 8	18.7	27
Ft. Madison, Iowa	528	M	M	530.5	28
Keokuk, Iowa	16	20	Apr 5	19.1	27
Quincy, Ill.	17	12	1/	24.0	Apr 2
				28.90	Apr 23

FLOOD STAGE DATA

(All dates in March unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Continued					
Upper Mississippi Basin-Cont'd.					
Mississippi:					
Hannibal, Mo.	16	10	1/	24.2	Apr 2
				28.59	Apr 25
Louisiana, Mo.	15	9	1/	23.01	Apr 3
				27.05	Apr 24
Clarksville, Mo.	25	9	1/	33.3	Apr 3
				36.8	Apr 24
Winfield, Mo.	26	10	1/	34.6	Apr 4
				36.9	Apr 27
Grafton, Ill.	18	8	1/	25.2	17-18
				29.5	Apr 5
				33.12	Apr 28
Alton, Ill.	21	8	1/	29.8	17-18
				33.9	Apr 5
St. Louis, Mo.	30	11	1/	35.3	17
				39.8	Apr 5
				43.23	Apr 28
Chester, Ill.	27	9	1	35.3	19
				39.95	Apr 6
				43.32	Apr 30
Cape Girardeau, Mo.	32	M	1/	40.3	20
				43.2	Apr 7
Missouri Basin					
Bazile Creek:					
Niobrara, Nebr.	B15	Feb 28	1	15.4	1
James:					
Scotland, S. Dak.	13	8	20	13.7	15
Rock:					
Rock Valley, Iowa	11	2	7	14.3	4
Big Sioux:					
Brookings, S. Dak.	9	4	10	10.3	8
Flandreau, S. Dak.	4.5	7	9	5.2	8
Dell Rapids, S. Dak.	12	9	9	12.1	9
Sioux Falls, (Western Ave), S. Dak.	10	15	15	10.3	15
Hawarden, Iowa	15	4	8	17.2	6
		12	16	15.4	14-15
Akron, Iowa	16	4	9	18.7	5
		13	17	16.6	14
West Branch Floyd:					
Struble, Iowa	14	3	3	H14.3	3
Floyd:					
Alton, Iowa	12	2	5	H16.4	3
Little Sioux:					
Linn Grove, Iowa	12	3	11	14.5	6
		15	20	12.5	17
Salt Creek:					
Roca, Nebr.	16	31	Apr 1	#17.7	31
Platte:					
North Bend, Nebr.	6	1	4	# 6.1	3
Nishnabotna:					
Hamburg, Iowa	18	11	16	20.1	15
Nemaha:					
Falls City, Nebr.	20	31	Apr 1	26.1	31
Little Platte:					
Smithville, Mo.	24	10	11	25.1	11
		13	15	28.5	14
		20	20	25.6	20
		24	26	29.8	25
		31	Apr 2	30.8	31
Platte:					
Agency, Mo.	20	13	16	22.7	15
		24	28	24.4	26
Buffalo Creek:					
Jamestown, Kans.	16	25	27	R17.1	26
		31	Apr 1	17.1	Apr 1
MISSISSIPPI SYSTEM-Cont'd					
Missouri Basin					
Republican:					
Clay Center, Kans.	15	31	Apr 1	17.9	Apr 1
Mulberry Creek:					
Salina, Kans.	24	1	5	24.1	5
		11	12	25.7	11
		25	26	24.8	25
		31	Apr 1	R 26.6	31
Saline:					
Lincoln, Kans.	30	31	Apr 3	34.5	Apr 2
Tescott, Kans.	25	25	27	26.4	26.
		31	Apr 4	29.6	Apr 2
South Fork Solomon:					
Osborne, Kans.	14	31	Apr 1	# 16.9	Apr 1
Solomon:					
Osborne, Kans.	14	31	Apr 1	# 17.2	Apr 1
Glasco, Kans.	22	31	Apr 2	# 24.0	Apr 1
Minneapolis, Kans.	26	Apr 1	Apr 1	# 26.55	Apr 1
Niles, Kans.	24	27	28	24.4	27
		31	Apr 5	29.2	Apr 2
Gypsum Creek:					
Gypsum, Kans.	15	25	26	16.9	25
		31	31	17.6	31
Turkey Creek:					
Abilene 8 S, Kans.	15	31	31	R 19.9	31
Chapman Creek:					
Chapman (nr), Kans.	10	5	5	19.35	5
		9	12	17.1	9
				R 20.2	11
Lyon Creek:					
Woodbine, Kans.	17	4	5	21.1	4
		9	9	R 21.4	9
		31	Apr 1	19.6	31
Smoky Hill:					
Lindsborg, Kans.	21	31	Apr 1	25.15	31
Mentor, Kans.	16	5	5	16.1	5
		10	11	18.6	11
		25	26	17.4	26
		31	Apr 2	21.65	Apr 1
New Cambria, Kans.	25	12	13	R 27.5	12
		26	27	# 26.85	27
		31	Apr 4	30.1	Apr 1
Abilene, Kans.	22	2	5	# 24.9	2
Enterprise, Kans.	21	11	12	22.5	12
		27	28	21.7	28
		Apr 1	Apr 6	24.4	Apr 3
Turkey Creek:					
Wilber 2 W, Nebr.	11	25	28	# 12.4	26
Mill Creek:					
Washington, Kans.	18	25	26	# 20.6	25
		31	Apr 1	19.6	31
Black Vermillion:					
Frankfort, Kans.	19	4	5	22.7	5
		10	11	25.85	11
		14	14	22.05	14
		25	26	19.9	26
		31	Apr 2	27.6	Apr 1
Fancy Creek:					
Winkler, Kans.	11	10	10	13.0	10
		31	31	15.3	31
Big Blue:					
Beatrice, Nebr.	16	1	2	16.9	1
Barneston, Nebr.	18	31	Apr 2	23.45	Apr 1
Blue Rapids, Kans.	1101	11	11	1101.9	11
		25	27	1104.7	26
		31	Apr 3	1106.3	Apr 2
Mill Creek:					
Paxico 1 SW, Kans.	19	11	11	19.4	11

FLOOD STAGE DATA

(All dates in March unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–	To–	Crest * Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Continued					
Missouri Basin-Cont'd					
Soldier Creek:					
Delia 6 SE, Kans.	17	31	31	18.9	31
Topeka 4 NW, Kans.	12	31	31	R13.5	31
Delaware:					
Muscotah, Kans.	25	31	31	R27.35	31
Wakarusa:					
Lawrence 4 S, Kans.	23	5	5	23.7	5
		11	11	23.9	11
		20	20	24.1	20
		25	26	R28.9	25
		31	Apr 1	28.3	31
Stranger Creek:					
Easton, Kans.	15	5	5	15.65	5
		7	7	15.25	7
		14	14	15.95	14
		25	26	17.2	26
		31	Apr 2	21.0	Apr 1
Tonganoxie 4 ENE, Kans.	22	25	26	23.5	25
		31	Apr 3	#24.8	Apr 2
Grand:					
Pattonsburg, Mo.	25	14	14	25.55	14
		25	27	29.25	27
Gallatin, Mo.	21	14	14	21.7	14
		25	27	23.3	27
Chillicothe, Mo.	24	7	8	25.7	7
		11	13	27.9	12
		14	17	28.0	15
		25	28	31.1	26
Sumner, Mo.	26	4	18	32.5	16
		25	Apr 7	34.7	28
				34.4	Apr 4
Brunswick, Mo.	12	5	22	19.9	16
		25	Apr 9	22.15	29
				23.9	Apr 4
Chariton:					
Prarie Hill (nr) Mo.	15	25	27	19.7	26
Lamine:					
Clifton, Mo.	19	6	8	24.2	7
		10	12	23.5	11
		24	26	27.3	25
Blackwater:					
Valley City, Mo	22	6	8	25.65	7
		10	12	25.0	11
		20	21	24.7	20
		24	27	29.1	25
Blue Lick, Mo.	25	11	16	28.9	14
		24	31	32.65	28
Pottawatomie Creek:					
Garnett 4 N, Kans.	26	11	11	#27.1	11
		25	25	#27.95	25
Lane, Kans.	23	11	12	26.0	12
		25	27	R26.9	26
		31	Apr 2	#23.9	Apr 1
Marmaton:					
Fort Scott (nr), Kans.	38	11	11	#39.0	11
		31	Apr 1	40.1	Apr 1
Marais des Cygnes:					
Reading 2 E, Kans.	18	4	5	R21.5	4
		7	7	19.4	7
		11	11	20.4	11
		31	31	18.0	31
Pomona 2 S, Kans.	20	20	20	20.6	20
		25	26	22.1	26
Ottawa, Kans.	27	24	26	R30.3	25
Osawatomie, Kans.	28	5	8	30.1	8
		20	22	30.2	21
		25	28	R35.1	27
		31	Apr 2	31.8	Apr 1
LaCygne, Kans.	25	6	15	#29.1	9
				#29.4	11
				#29.5	13
		20	23	#28.05	22
		25	30	R30.2	28
		31	Apr 4	#29.4	Apr 3
Trading Post, Kans.	24	7	16	#28.2	12
		21	Apr 4	#28.4	29
MISSISSIPPI SYSTEM-Cont'd					
Missouri Basin-Continued					
Marais des Cygnes:					
Kansas-Missouri State Line	25	9	16	R 29.6	10
		25	Apr 5	29.5	29
				28.8	Apr 2
Missouri:					
Rulo, Nebr.	17	11	12	17.5	11
		25	26	17.25	26
St. Joseph, Mo.	17	26	26	17.8	26
Leavenworth, Kans.	19	26	28	20.0	20
Napoleon, Mo.	17	11	18	18.6	13
		25	29	20.4	27
Lexington, Mo.	22	6	19	25.0	12-13
		20	22	22.5	21
		25	Apr 9	26.8	27
				22.9	Apr 2
Waverly, Mo.	18	5	6	18.8	5
		8	9	18.5	8
		11	19	21.4	16
		20	22	18.9	21
		25	Apr 9	23.3	27
				26.0	Apr 2
Miami, Mo.	18	25	Apr 7	23.6	27
				29.95	Apr 2
Glasgow, Mo.	25	11	18	27.6	15
		26	Apr 7	30.3	28
				31.7	Apr [illegible]
Boonville, Mo.	21	[illegible]	19	24.9	15
		25	Apr 8	27.1	28
				27.7	Apr [illegible]
Jefferson City, Mo.	23	7	19	26.9	14
		25	Apr 9	28.8	29
				25.5	Apr 3
Herman, Mo.	21	7	1/	30.6	7
				32.0	Apr 5
				33.66	Apr 24
St. Charles, Mo.	25	7	1/	33.5	15
				34.8	Apr 6
				36.4	Apr 26
Ohio Basin					
Allegheny:					
Olean, N. Y.	10	17	18	10.4	17
New:					
Radford, Va.	14	17	17	U	
Guyandotte:					
Logan, W. Va.	23	17	17	24.1	17
Branchland, W. Va.	30	18	18	U	
Tug Fork, Big Sandy:					
Williamson, W. Va.	27	17	17	34.3	17
Scioto:					
Prospect, Ohio	10	19	19	10.05	19
Circleville, Ohio	14	17	20	16.1	18
Piketon, Ohio	16	19	20	16.55	19
North Fork Kentucky:					
Hazard, Ky.	20	16	17	24.7	17
Jackson, Ky.	29	16	17	29.2	17
Green:					
Lock 4, Woodbury, Ky.	33	17	19	35.8	18
Lock 2, Calhoun, Ky.	23	20	24	24.2	21
Embarrass:					
Ste. Marie, Ill.	18	12	17	19.6	13
		27	28	18.45	28
Lawrenceville, Ill.	11	7	8	11.3	[illegible]
		11	Apr 7	17.8	16
East Fork White:					
Seymour, Ind.	14	18	18	14.0	18
Bedford, Ind.	20	16	18	20.4	18
White:					
Anderson, Ind.	10	12	12	10.1	12

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River and station	Flood stage	Above flood stages-dates From—	Above flood stages-dates To—	Crest * Stage	Crest * Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Continued					
Ohio Basin - Continued					
White: (Continued)					
Centerton, Ind.	602	27	28	602.3	28
Spencer, Ind.	14	12	15	16.6	13
		17	22	16.2	19
		26	Apr 3	16.95	28
Elliston, Ind.	18	11	23	21.8	14
		26	Apr 5	23.0	29
Newberry, Ind.	18	13	22	23.05	18
		30	Apr 4	19.6	31
Edwardsport, Ind.	15	11	Apr 8	19.5	31
Petersburg, Ind.	16	12	Apr 12	21.9	21
Hazleton, Ind.	16	15	Apr 6	22.9	21
Skillet Fork:					
Wayne City, Ill.	15	10	15	20.6	12
Little Wabash:					
Wilcox, Ill.	16	7	24	21.7	12
		25	Apr 6	20.15	27
Carmi, Ill.	27	14	Apr 9	31.5	22
Wabash:					
Bluffton, Ind.	10	14	14	10.6	14
		19	19	10.2	19
Lafayette, Ind.	11	13	22	14.9	18
		26	29	14.5	17
Covington, Ind.	16	12	23	19.4	20
		26	30	18.6	28
Montezuma, Ind.	14	11	Apr 7	20.25	18
				17.8	Apr 3
Terre Haute, Ind.	14	11	Apr 7	17.9	19
Hutsonville, Ill.	20	17	Apr 2	21.4	21
Riverton, Ind.	18	17	Apr 2	19.0	21
Vincennes, Ind.	16	14	Apr 8	19.1	22
Mt. Carmel, Ill.	17	14	Apr 12	23.4	23
New Harmony, Ind.	15	15	Apr 12	17.7	22
Harpeth:					
Kingston Springs, Tenn.	15	15	18	22.0	17
Red:					
Port Royal, Tenn.	30	16	17	33.3	17
Cumberland:					
Baxter, Ky.	16	16	17	20.8	16
Pineville, Ky.	1002	16	17	1004.1	17
Barbourville, Ky.	27	16	20	39.5	18
Williamsburg, Ky.	21	16	21	29.3	18
Clarksville, Tenn.	46	17	19	48.2	18
French Broad:					
Rosman, N.C.	8	16	17	10.2	16
Blantyre, N. C.	17	17	19	19.5	17
Asheville, N.C.	8	17	18	9.3	17
Marshall, N.C.	10	16	17	15.3	16
Hot Springs, N.C.	13	16	17	21.0	16
Tuckasegee:					
Bryson City, N.C.	11	16	17	13.45	16
Emory:					
Oakdale, Tenn.	25	16	17	27.8	16
South Chickamauga Creek:					
Chicamauga (nr), Tenn.	10	U	U	23.75	17
Elk:					
Fayetteville, Tenn.	18	U	U	28.6	16
	661	16	21	670.2	16
Duck:					
Shelbyville, Tenn.	23	U	U	35.9	16
	722	15	18	734.5	16

River and station	Flood stage	Above flood stages-dates From—	Above flood stages-dates To—	Crest * Stage	Crest * Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Cont'd					
Ohio Basin-Continued					
Duck: (Continued)					
Columbia, Tenn.	32	15	20	49.95	17
Tennessee:					
Knoxville, Tenn.	817	17	17	817.0	17
Chattanooga, Tenn.	651	16	20	658.1	18
Whitesburg, Ala.	560	16	28	575.1	19
		31	Apr 2	561.3	Apr 1
Florence, Ala.	419	15	27	431.15	17
Savannah, Tenn.	380	16	28	396.1	20
Paducah, Ky.	320	12	1/	336.8	23
				335.1	Apr 1
Ohio:					
Tell City, Ind.	38	21	24	39.2	23
Dam No 47, Newburgh, Ind.	38	20	28	41.8	24
Dam No 48, Cypress, Ind.	38	20	29	41.8	24
Mt. Vernon, Ind.	35	20	Apr 1	40.1	25
Dam No 49, Uniontown, Ky	37	20	Apr 4	43.3	26
Shawneetown, Ill.	33	19	1	36.6	Apr 28
Dam No 50, Fords Ferry, Ky	34	18	1	46.6	27
				39.4	Apr 14,27
Dam No 51, Golconda, Ill.	40	21	Apr 6	45.7	27
Paducah, Ky.	39	18	Apr 21	47.5	26
Dam No 52, Brookport, Ill	37	14	1	49.5	27
				42.9	Apr 28-29
				46.2	May 5
Dam No 53, Grand Chain, Ill	42	13	1	55.4	Apr 1
				53.9	May 5-6
Cairo, Ill.	40	11	1/	55.7	Apr 2
				50.1	Apr 22
				54.7	May 4
White Basin					
Buffalo:					
Gilbert, Ark.	30	11	11	31.5	11
Black:					
Poplar Bluff, Mo.	16	11	12	18.6	11
Pocahontas, Ark.	17	11	1/	22.2	16
				25.2	Apr 26
Black Rock, Ark.	14	8	1/	24.4	12
				29.3	Apr 24
Little Red:					
Judsonia, Ark.	30	11	11	31.4	11
Cache:					
Patterson, Ark.	7	Oct 29	1	10.0	Nov 9
				9.4	Dec 16
				8.2	Jan 7
				9.4	Jan 24
				9.2	Feb 10
				9.4	Mar 17,18
				10.3	Apr 26
White:					
Batesville, Ark.	23	10	12	26.3	12
Newport, Ark.	26	13	17	26.9	15
Augusta, Ark.	32	14	21	32.4	17
		27	31	32.15	28
Georgetown, Ark.	21	14	Apr 5	23.5	18
Des Arc, Ark.	24	15	1	26.5	20
				34.2	Apr 28
Clarendon, Ark.	26	Jan 25	8	27.0	Jan 30
				28.5	Feb 16
		12	1	29.45	26
St. Charles, Ark.	25	Jan 29	1	26.7	Feb 19
Arkansas Basin					
Walnut Creek:					
Albert, Kans.	22	31	Apr 4	24.45	Apr 3
Cow Creek:					
Lyons, Kans.	18	31	Apr 2	#18.7	Apr 1

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River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Cont'd.					
Arkansas Basin-Continued					
Little Arkansas:					
Sedgwick, Kans.	18	4	7	22.6	4
		9	9	19.3	9
		10	15	23.8	11
		25	28	22.3	31
		31	Apr 4	23.3	31
South Fork Ninnescah:					
Murdock, Kans.	8	10	10	8.1	10
Ninnescah:					
Peck, Kans.	17	11	11	17.7	11
		13	Apr 1	20.3	31
Whitewater:					
Towanda, Kans.	22	9	12	#24.1	11
Augusta, Kans.	23	10	12	26.5	12
Walnut:					
Augusta, Kans.	23	9	12	#26.9	11
Winfield, Kans.	30	11	12	30.9	11
Arkansas City, Kans.	18	10	13	21.6	12
Chikaskia:					
Blackwell, Okla.	26	9	12	#29.0	9
				#30.9	11
		26	26	#26.3	26
		31	Apr 2	30.7	Apr 1
Salt Fork:					
Tonkawa, Okla.	17	9	13	#22.0	11
		31	Apr 3	#20.2	Apr 2
Cimarron:					
Waynoka, Okla.	8	30	Apr 2	# 9.75	30
Dover, Okla.	17	9	9	#17.7	9
		10	12	#19.9	10
		30	Apr 1	#22.0	31
Guthrie, Okla.	10	U	U	U	
Perkins, Okla.	12	10	12	#13.5	11
Polecat Creek:					
Sapulpa, Okla.	21	6	7	#24.5	7
Little Caney:					
Copan, Okla.	21	6	9	#22.4	7
		10	13	#22.7	11
		25	27	#22.6	26
		31	Apr 1	#21.6	Apr 1
Caney:					
Ramona, Okla.	27	7	8	#27.9	8
		10	13	#28.9	12
		25	28	#28.7	26-27
		31	Apr 1	#27.5	Apr 1
Bird Creek:					
Avant, Okla.	16	6	6	#16.2	6
Sperry, Okla.	21	7	8	#26.1	7
		10	12	#27.1	11
		25	26	#25.5	26
		31	Apr 1	#22.3	31
Owasso 2 S, Okla.	25	6	9	#28.0	8
		10	13	#28.9	12
		25	27	#28.5	26
		31	Apr 2	25.25	Apr 1
Verdigris:					
Independence, Kans.	30	10	11	#32.1	10
		25	26	#31.6	25
Coffeyville, Kans.	18	11	11	#18.5	11
		25	26	#18.8	25-26
Lenapah, Okla.	30	25	26	#30.9	26
Cottonwood:					
Florence, Kans.	22	5	5	#22.8	5
		10	12	#24.6	11
		25	26	#22.3	26
Cedarpoint, Kans.	10	8	10	#17.05	10
		25	25	#10.8	25
Cottonwood Falls, Kans.	9	10	13	#11.2	11

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Cont'd					
Arkansas Basin-Continued					
Cottonwood-Continued:					
Plymouth, Kans.	28	4	8	# 33.0	7
		9	14	33.6	11
		25	28	# 30.9	26
Emporia 1 S, Kans.	20	5	15	25.05	11
		26	19	# 20.95	26
Spring:					
Carthage, Mo.	12	10	11	# 12.1	11-12
Waco, Mo.	19	11	11	# 20.2	11
Quapaw, Okla.	20	11	12	# 22.2	12
Elk:					
Tiff City, Mo.	15	10	11	# 19.4	11
Neosho:					
Neosho Rapids, Kans.	22	5	15	25.05	12
		26	27	22.25	26
Iola, Kans.	20	24	26	# 23.4	25
		31	Apr 1	# 21.5	31
Chanute, Kans.	23	20	21	# 24.7	20
		25	27	# 27.0	26
		31	Apr 1	# 24.85	Apr 1
Parsons, Kans.	22	26	28	# 22.3	26-27
Oswego, Kans.	17	6	9	# 21.3	8
		10	14	# 22.0	12
		21	23	# 19.4	22
		31	Apr 3	21.9	Apr 2
Commerce, Okla.	15	5	14	# 18.5	7-8
				# 18.8	12
		21	23	# 16.2	22
				# 16.2	23
		24	30	# 19.3	27
				# 19.1	29
		30	Apr 4	# 18.5	Apr 1
Illinois:					
Tahlequah, Okla.	11	3	3	# 11.2	3
Deep Fork:					
Beggs, Okla.	18	7	16	N22	12
		19	20	U	
		26	28	N25	27
Poteau:					
Poteau, Okla.	24	10	11	# 25.7	10
Panama, Okla.	24	10	12	# 30.6	11
Petit Jean:					
Danville, Ark.	20	10	13	23.6	11
		25	27	24.5	25
Fourche La Fave:					
Houston, Ark.	25	3	3	25.8	3
		8	8	25.45	8
		10	1/	28.2	12
				29.8	26
				34.1	Apr 27
Arkansas:					
Hutchinson, Kans.	8	13	15	8.6	14
		26	Apr 7	10.85	Apr 2
Oxford, Kans.	14	11	12	14.6	11
Arkansas City, Kans.	17	9	15	21.6	12
		25	Apr 7	23.0	Apr 2
Ponca City, Okla.	914	9	14	#916.8	13
Ralston, Okla.	16	10	14	# 19.3	12
Van Buren, Ark.	22	5	1/	# 27.8	25
Ozark, Ark.	357	10	12	359.7	11
Dardanelle, Ark.	32	10	11	34.4	11
Morrilton, Ark.	30	11	13	31.9	12
Red Basin					
Blue:					
Blue, Okla.	21	11	12	23.6	11
Clear Boggy:					
Caney, Okla.	19	4	14	22.5	11

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River and station	Flood stage	Above flood stages -dates		Crest	
		From–	To–	Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Continued					
Red Basin-Continued					
Sulphur:					
Hagansport, Tex.	44	2	3	44.6	2
		4	7	46.6	4
		10	15	47.7	12
		25	28	46.6	25
Naples, Tex.	22	6	23	29.1	15
		27	Apr 4	26.6	30
Little Missouri:					
Boughton, Ark.	20	26	26	20.2	26
Saline:					
Benton, Ark.	20	10	11	22.5	10
		25	25	21.5	25
Ouachita:					
Arkadelphia, Ark.	17	11	11	20.7	11
		25	25	18.1	25
Camden, Ark.	26	6	Apr 6	33.1	14
				32.2	30
Monroe, La.	40	18	1/	45.9	Apr 30
Columbia Lock, La.	65	24	1/	67.6	Apr 30
Black:					
Jonesville Lock, La.	52	24	1/	57.3	Apr 30
Red:					
Alexandria, La.	32	31	Apr 3	32.1	Apr 1
Lower Mississippi Basin					
St. Francis:					
Fisk, Mo.	20	11	1/	24.4	16-18
				22.8	Apr ,7-8
				22.6	Apr 13
				24.7	Apr 26
St. Francis, Ark.	18	11	1/	21.6	21
				21.1	Apr 1
				21.0	Apr 20
				22.3	Apr 28
Tallahatchie:					
Swan Lake, Miss.	26	Feb 9	Apr 16	31.55	18
Yazoo:					
Greenwood, Miss.	35	16	Apr 10	38.3	21
Yazoo City, Miss.	29	16	1/	34.2	25
				35.2	Apr 19
Big Black:					
West, Miss.	12	5	M	23.3	18
Bovina, Miss.	28	11	Apr 6	39.3	22
Mississippi:					
New Madrid, Mo.	34	14	1/	43.3	Apr 3-4
Caruthersville, Mo.	32	13	1/	42.4	Apr 3-4
Memphis, Tenn.	34	21	1/	40.4	Apr 5
Helena, Ark.	44	24	1/	48.5	Apr 7-10
Arkansas City, Ark.	44	Apr 6	Apr 14	44.4	Apr 9
Greenville, Miss.	48	26	1/	55.0	Apr 11
Vicksburg, Miss.	43	26	1/	50.6	Apr 13
Natchez, Miss.	48	26	1/	54.7	Apr 18
Red River Landing, La.	45	25	1/	G53.5	Apr 15
Baton Rouge, La.	35	28	1/	41.2	Apr 9
Donaldsonville, La.	28	30	1/	32.3	Apr 9
Reserve, La.	22	Apr 2	1/	24.5	Apr 8-9
New Orleans, La.	17	Apr 3	Apr 19	F18.5	Apr 7
Atchafalaya Basin					
Atchafalaya:					
Morgan City, La.	7	Dec 20	1/	8.6	Jan 21
				8.4	Feb 20
				9.9	24
				12.4	Apr 25+
WEST GULF OF MEXICO DRAINAGE					
Mermentau:					
Mermentau, La.	5	25	31	6.9	29
Calcasieu:					
Hineston, La.	12	23	24	12.3	23
		24	Apr 1	18.0	26
Oakdale, La.	12	25	28	13.6	26
Kinder, La.	16	25	Apr 1	22.0	27
Old Town Bay, La.	4	24	Apr 3	8.3	28-29
Lake Charles 2 N, La.	3	23	Apr 3	4.1	25
				5.9	29
Lake Fork Creek:					
Quitman, Tex.	16	11	13	18.2	12
		26	27	17.6	26
Sabine:					
Emory, Tex.	12	11	19	13.0	13
		25	28	13.8	25
Mineola, Tex.	14	11	Apr 3	17.2	12,28
Gladewater, Tex.	26	16	Apr 7	31.7	19
				30.85	Apr 1
Longview, Tex.	25	19	Apr 11	29.7	26
				28.0	Apr 4
Bon Wier 2 E, Tex.	17	18	23	19.6	19
		25	Apr 3	19.45	25
Deweyville, Tex.	14	20	1/	15.65	27
				16.1	Apr 21
Trinity:					
Dallas, Tex.	30	10	11	32.2	11
Rosser, Tex.	26	11	12	27.2	11
Trinidad, Tex.	28	11	18	34.3	13
		25	28	31.0	26
Longlake, Tex.	35	17	22	37.0	20
		28	30	35.5	30
Liberty, Tex.	24	26	Apr 5	27.75	31
Navasota:					
Easterly 7 NE, Tex.	14	7	8	14.8	8
		19	20	14.2	19
		25	29	16.5	26
Bryan 17 NE, Tex.	12	3	17	13.4	9
		19		13.85	28
Navidad:					
Ganado, Tex.	21	23	28	26.0	24
Lavaca:					
Edna, Tex.	21	24	26	25.1	25
Guadalupe:					
Dupont, Tex.	20	24	29	24.0	28
PACIFIC SLOPE DRAINAGE					
Sacramento:					
Colusa Weir, Calif.	W61.8	Feb 27	10	M	
Colusa, Calif.	W63	Feb 28	2	M	
Tisdale Weir, Calif.	W45.5	Jan 10	Mar 16	E49.2	Jan 13
				E49.4	Jan 18
				E49.6	Jan 20
				E48.4	Feb 8
Fremont Weir, Calif.	W33.5	Feb 28	13	M	

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*	Provisional
#	Highest Stage observed
+	Occurred on later dates
1/	Continued at the end of the month
_	Highest stage of record
B	Bankfull
E	Estimated
F	Bonnet Carre Floodway opened Apr 8
G	Morganza Floodway opened Apr 17 (10 gates)
H	High Water mark
M	Missing
N	Near
R	Highest March crest of record
T	Tentative
U	Unknown
W	Warning stage

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y. 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	86	1.2	-1.8	28	.7
1000	24	197	1.7	-2.8	17	.8
950	31	570	1.7	-3.0	26	.8
900	31	1,015	.8	-5.1	26	2.3
850	31	1,465	1.0	-7.6	27	4.7
800	31	1,952	-.4	-9.9	27	6.1
750	31	2,466	-2.6	-11.4	27	7.5
700	31	3,011	-5.3	-15.9	27	8.7
650	31	3,590	-7.9	-19.1	27	10.7
600	31	4,219	-11.2	-23.1	27	11.9
550	31	4,871	-15.3	-26.2	27	12.5
500	31	5,584	-20.4	-30.5	27	14.5
450	31	6,356	-25.8	-35.9	27	16.7
400	31	7,199	-31.9	-41.7	27	19.8
350	31	8,132	-38.7	-45.8	27	22.2
300	31	9,170	-46.5		27	23.7
250	31	10,360	-54.1		27	25.6
200	30	11,774	-58.0		27	27.7
175	31	12,617	-57.3		28	24.7
150	30	13,597	-55.3		27	22.5
125	30	14,759	-55.7		27	19.0
100	29	16,177	-57.0		28	16.9
80	29	17,581	-59.5		28	13.4
70	29	18,415	-60.1		29	12.8
60	29	19,375	-61.0		29	10.6
50	28	20,507	-61.6		29	8.0
40	28	21,892	-60.9		30	5.9
30	28	23,685	-59.9		31	4.1
25	28	24,826	-59.2		30	4.2
20	27	26,228	-57.8		29	4.8
15	26	28,049	-56.3		28	9.2
10	11	30,605	-52.1			
7						

ALBUQUERQUE, N. MEX. 832 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,619	2.5	-2.2	14	.3
1000						
950						
900						
850						
800	31	1,936	1.9	-6.2	29	1.6
750	31	2,453	-1.4	-8.2	28	3.7
700	31	2,999	-5.4	-11.3	27	5.5
650	31	3,577	-8.9	-16.8	27	7.6
600	31	4,193	-12.6	-24.2	27	9.0
550	31	4,851	-17.1	-27.9	26	10.5
500	31	5,560	-22.2	-33.4	26	12.6
450	31	6,326	-27.6	-38.5	26	14.3
400	30	7,163	-34.0	-44.8	26	16.5
350	30	8,088	-40.6	-50.2	25	19.6
300	30	9,120	-47.4		26	23.2
250	30	10,312	-52.6		26	26.9
200	30	11,746	-53.3		26	26.6
175	31	12,610	-52.1		26	24.5
150	31	13,606	-53.3		26	21.7
125	30	14,772	-56.3		26	20.5
100	29	16,181	-58.6		25	16.1
80	28	17,573	-61.2		25	11.9
70	27	18,399	-60.9		24	9.7
60	26	19,354	-62.2		24	6.8
50	25	20,480	-61.7		25	4.5
40	24	21,861	-62.0		27	2.8
30	23	23,646	-60.5		29	1.6
25	21	24,791	-58.9		29	3.3
20	19	26,200	-57.0		27	5.9
15	13	28,035	-53.3		27	11.9
10	6	30,641	-47.0			
7						

AMARILLO, TEXAS 885 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,095	4.3	.2	28	1.0
1000						
950						
900						
850	31	1,419	5.3	-2.4	27	2.8
800	31	1,914	3.8	-5.2	26	6.1
750	31	2,436	1.3	-8.9	26	8.1
700	31	2,968	-2.0	-13.3	26	8.9
650	31	3,574	-5.7	-18.1	26	10.2
600	31	4,196	-9.9	-23.2	25	12.2
550	31	4,861	-14.6	-28.3	25	13.7
500	31	5,576	-19.9	-33.4	25	15.4
450	31	6,349	-25.7	-38.4	25	17.6
400	31	7,191	-32.3	-44.4	24	19.0
350	31	8,123	-39.1	-48.7	24	20.5
300	31	9,160	-46.5		24	24.0
250	31	10,350	-53.1		25	28.2
200	31	11,779	-54.4		25	30.6
175	31	12,637	-53.2		25	29.1
150	31	13,629	-54.1		25	27.0
125	31	14,792	-56.5		25	24.6
100	31	16,199	-59.4		25	17.7
80	31	17,589	-61.4		25	12.6
70	31	18,416	-62.1		25	10.2
60	31	19,367	-63.3		25	7.3
50	30	20,489	-62.7		26	3.8
40	30	21,866	-62.3		28	2.2
30	29	23,651	-60.3		29	3.2
25	28	24,793	-59.2		28	3.4
20	25	26,200	-56.7		27	6.1
15	19	28,032	-53.6		26	11.5
10	11	30,641	-47.3			
7						

* ANCHORAGE, ALASKA 997 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	45	-4.0	-7.7	04	.5
1000	10	19	-2.3	-5.9		
950	30	423	-4.2	-7.7	15	1.1
900	30	848	-6.3	-9.5	16	3.4
850	30	1,263	-9.0	-11.4	15	5.1
800	30	1,761	-11.8	-13.8	16	6.1
750	30	2,252	-14.7	-16.8	17	7.3
700	30	2,771	-18.0	-20.6	18	6.9
650	30	3,322	-21.5	-24.4	19	6.4
600	30	3,908	-25.2	-28.6	19	6.6
550	30	4,535	-28.9	-33.9	20	7.3
500	30	5,211	-33.1	-38.6	21	7.9
450	30	5,945	-37.9	-41.1	22	9.2
400	30	6,746	-43.7	-42.2	23	9.5
350	30	7,635	-49.2		23	10.7
300	30	8,635	-52.2		24	11.7
250	30	9,817	-50.5		25	11.7
200	30	11,262	-47.8		25	11.4
175	29	12,167	-47.3		25	12.3
150	29	13,188	-47.2		25	12.0
125	29	14,354	-47.7		26	13.0
100	29	15,865	-48.6		26	11.1
80	29	17,328	-50.1		26	10.0
70	29	18,199	-50.5		26	8.6
60	29	19,204	-51.0		26	7.6
50	29	20,368	-51.9		26	5.9
40	28	21,830	-52.1		25	5.1
30	26	23,697	-53.2		26	3.9
25	25	24,870	-54.0		29	2.1
20	23	26,302	-54.7		01	1.3
15	19	28,155	-55.9		02	1.8
10	14	30,761	-57.7		04	4.6
7	7	33,048	-57.3			

* ANNETTE, ALASKA 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	37	2.4	.0	13	2.1
1000	24	106	2.9	.5	14	2.0
950	31	490	.0	-1.5	17	4.3
900	31	921	-2.9	-4.0	18	6.2
850	31	1,372	-5.7	-8.0	20	6.8
800	31	1,845	-8.4	-13.4	21	6.7
750	31	2,343	-11.6	-16.7	21	6.7
700	31	2,869	-14.7	-21.1	22	7.2
650	31	3,426	-18.2	-24.6	23	8.0
600	31	4,019	-22.0	-28.0	23	9.1
550	31	4,654	-26.2	-32.7	24	10.1
500	31	5,338	-30.4	-37.6	25	12.1
450	31	6,080	-34.9	-42.0	25	13.6
400	31	6,893	-40.5	-43.5	26	15.0
350	31	7,794	-46.4		26	16.5
300	31	8,803	-51.3		27	17.7
250	31	9,962	-52.8		28	16.7
200	31	11,432	-49.9		27	14.6
175	31	12,307	-49.0		27	13.8
150	31	13,321	-49.0		28	12.7
125	31	14,516	-49.9		28	11.9
100	31	15,970	-51.8		28	10.0
80	31	17,413	-53.0		28	7.8
70	31	18,273	-53.6		28	7.4
60	31	19,263	-54.3		29	6.0
50	30	20,427	-55.1		30	4.5
40	30	21,852	-55.4		33	3.1
30	27	23,692	-55.9		36	3.5
25	26	24,855	-56.3		02	4.5
20	25	26,277	-56.9		04	5.2
15	21	28,112	-57.4		03	6.6
10	13	30,686	-57.2		04	9.5
7	10	32,990	-54.3			

ATHENS, GEORGIA 988 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	9.8	8.0	04	.7
1000						
950	31	571	11.4	6.4	20	1.6
900	31	1,022	9.7	4.3	21	4.1
850	31	1,495	7.5	.3	22	6.0
800	31	1,993	5.5	-3.9	24	7.5
750	31	2,519	3.3	-9.2	24	10.3
700	31	3,076	.6	-14.8	25	11.1
650	31	3,668	-2.2	-19.9	26	12.8
600	30	4,298	-5.9	-24.2	26	14.3
550	30	4,974	-10.4	-29.0	26	16.3
500	30	5,700	-15.8	-32.9	26	18.9
450	30	6,466	-21.5	-37.2	26	21.6
400	30	7,343	-27.8	-41.0	26	21.8
350	30	8,293	-34.5	-46.3	26	24.3
300	30	9,350	-42.5	-49.9	27	27.3
250	30	10,558	-51.2		27	31.3
200	30	11,983	-58.1		27	38.2
175	30	12,824	-57.9		27	35.3
150	30	13,796	-58.4		27	33.3
125	30	14,936	-60.9		27	29.3
100	30	16,315	-63.7		27	22.0
80	30	17,677	-65.7		27	16.9
70	30	18,489	-65.5		27	13.2
60	30	19,428	-65.0		28	8.0
50	29	20,542	-64.4		28	5.1
40	29	21,911	-63.0		30	4.1
30	28	23,692	-59.8		32	3.3
25	28	24,837	-57.5		29	6.1
20	26	26,258	-54.5		28	7.6
15	21	28,108	-50.8		27	14.9
10	11	30,796	-41.8			
7						

* BARROW, ALASKA 1020 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	20	8	-29.1	-32.2	07	4.6
1000	20	151	-25.5	-26.6	08	8.0
950	20	527	-20.3	-22.9	09	11.1
900	20	935	-17.6	-23.4	08	11.7
850	20	1,359	-17.1	-24.1	08	11.4
800	20	1,813	-18.2	-26.1	08	10.1
750	20	2,293	-20.1	-27.5	08	9.3
700	20	2,802	-22.6	-30.6	08	8.5
650	20	3,343	-25.7	-33.7	08	8.2
600	20	3,919	-29.0	-37.1	08	6.9
550	20	4,537	-32.7	-39.8	08	5.8
500	20	5,202	-36.9	-43.0	08	4.3
450	20	5,924	-41.5	-43.3	07	3.0
400	20	6,714	-46.6		07	1.6
350	20	7,594	-51.7		28	.5
300	20	8,579	-55.7		27	1.2
250	20	9,743	-53.5		24	2.9
200	20	11,194	-49.4		25	6.1
175	19	12,070	-48.5		25	6.2
150	19	13,087	-47.5		25	7.2
125	18	14,294	-47.6		25	9.0
100	18	15,768	-47.8		25	10.2
80	18	17,239	-48.2		25	11.8
70	18	18,119	-48.6		25	11.0
60	18	19,132	-49.1		25	11.9
50	18	20,327	-49.5		25	11.8
40	16	21,782	-50.2		26	12.2
30	12	23,665	-50.6		25	13.3
25	6	24,888	-50.3			
20						
15						
10						
7						

BARTER IS., ALASKA 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	-32.6	-32.9	11	1.3
1000	30	136	-29.9	-32.3	10	3.6
950	31	501	-23.1	-24.4	10	7.0
900	31	901	-20.0	-23.3	10	6.5
850	31	1,325	-19.6	-24.6	10	5.9
800	31	1,775	-20.8	-26.6	10	4.5
750	31	2,250	-22.5	-29.1	10	3.6
700	31	2,755	-24.7	-31.7	10	2.9
650	31	3,292	-27.2	-34.2	11	.9
600	31	3,865	-30.2	-37.2	27	1.6
550	31	4,479	-33.9	-40.3	27	2.5
500	31	5,141	-38.0	-43.7	27	4.0
450	31	5,860	-42.4	-43.0	27	5.8
400	31	6,648	-46.9		27	8.1
350	31	7,527	-51.1		27	9.6
300	31	8,519	-54.1		27	10.6
250	31	9,694	-51.5		26	11.3
200	31	11,155	-48.4		27	11.5
175	31	12,035	-47.7		27	11.7
150	31	13,055	-47.2		27	11.8
125	31	14,261	-47.3		27	12.0
100	31	15,737	-47.6		27	12.7
80	31	17,209	-48.2		28	12.6
70	31	18,088	-48.7		28	12.3
60	31	19,100	-49.4		28	12.6
50	31	20,294	-49.9		28	13.9
40	31	21,749	-51.0		28	13.2
30	31	23,616	-52.2		29	14.2
25	31	24,794	-53.1		29	14.0
20	29	26,250	-54.2		29	14.3
15	26	28,107	-55.7		30	15.7
10	11	30,700	-58.6			
7						

BETHEL, ALASKA 997 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	39	-15.3	-19.9	35	.7
1000	12	91	-17.6	-19.4	29	1.6
950	30	408	-11.4	-13.6	05	.9
900	30	822	-12.4	-14.5	20	1.9
850	30	1,258	-13.4	-16.1	21	2.6
800	30	1,720	-14.2	-17.5	22	3.0
750	30	2,208	-16.2	-19.9	23	3.4
700	30	2,724	-19.3	-25.2	23	3.9
650	30	3,272	-22.2	-27.8	24	5.0
600	30	3,857	-25.4	-32.0	23	5.4
550	30	4,484	-28.9	-36.2	24	6.6
500	30	5,160	-32.9	-40.7	25	8.1
450	30	5,895	-37.4	-43.7	25	9.3
400	30	6,700	-42.3	-47.6	25	10.0
350	30	7,595	-47.3		25	10.3
300	30	8,603	-51.0		25	11.6
250	30	9,788	-50.3		25	12.5
200	30	11,257	-47.0		25	12.1
175	30	12,142	-46.8		24	12.8
150	30	13,165	-46.8		24	11.9
125	30	14,374	-47.1		24	12.2
100	30	15,847	-48.3		24	11.4
80	29	17,318	-49.2		24	9.9
70	29	18,193	-49.7		24	8.7
60	29	19,200	-50.7		23	7.9
50	29	20,387	-51.3		22	6.7
40	29	21,836	-51.5		21	5.2
30	27	23,698	-51.8		18	3.5
25	26	24,876	-52.4		17	4.0
20	23	26,309	-53.4		17	3.0
15	14	28,142	-54.4		12	3.5
10						
7						

* BISMARCK, N. DAK. 953 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	503	.7	-2.7	01	.4
1000						
950	20	560	-.4	-3.3	04	.5
900	29	965	-.8	-4.5	20	1.0
850	29	1,421	-1.5	-7.4	26	1.5
800	29	1,904	-2.5	-11.3	29	1.6
750	29	2,414	-5.0	-14.0	27	1.9
700	29	2,953	-8.3	-17.2	25	2.7
650	29	3,524	-11.7	-19.4	24	3.3
600	29	4,133	-15.3	-24.1	24	4.7
550	29	4,785	-19.5	-28.3	25	5.9
500	29	5,487	-24.4	-32.6	24	6.2
450	29	6,245	-30.2	-38.6	24	6.7
400	29	7,073	-36.4	-45.3	24	7.8
350	29	7,988	-43.4		24	9.0
300	29	9,005	-51.1		24	10.6
250	29	10,173	-57.0		25	12.0
200	29	11,590	-54.5		25	11.6
175	28	12,447	-52.7		26	10.7
150	28	13,445	-52.1		26	9.7
125	28	14,622	-53.5		26	9.6
100	28	16,052	-55.4		27	8.5
80	27	17,472	-57.1		27	8.0
70	26	18,320	-57.8		27	6.5
60	25	19,297	-58.4		27	4.6
50	25	20,442	-59.1		27	4.2
40	25	21,840	-59.4		30	2.8
30	25	23,641	-59.2		32	1.8
25	22	24,794	-58.9		36	2.9
20	21	26,198	-58.4		01	2.8
15	20	28,007	-58.0		02	2.9
10	19	30,585	-56.2		32	4.5
7	7	32,861	-51.7			

BOISE, IDAHO 911 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	871	2.8	-3.7	15	.7
1000						
950						
900	31	972	3.6	-4.3	15	.6
850	31	1,435	2.1	-6.8	30	.5
800	31	1,922	-1.4	-8.3	30	1.6
750	31	2,433	-5.0	-10.8	30	2.9
700	31	2,971	-8.7	-15.1	29	3.8
650	31	3,542	-12.1	-19.0	28	4.1
600	31	4,150	-16.1	-23.7	28	4.9
550	31	4,801	-20.1	-27.8	26	6.4
500	31	5,500	-24.9	-32.5	26	7.2
450	31	6,258	-30.3	-39.2	26	7.6
400	31	7,085	-36.5	-44.5	25	8.2
350	31	8,000	-43.5		25	7.8
300	31	9,017	-51.2		27	9.4
250	31	10,187	-56.1		28	11.5
200	31	11,606	-54.7		28	10.4
175	31	12,466	-52.4		28	10.7
150	31	13,464	-52.1		29	9.6
125	31	14,640	-54.0		28	8.8
100	31	16,065	-56.3		28	7.3
80	31	17,478	-57.7		28	5.8
70	31	18,320	-58.5		29	4.8
60	28	19,283	-58.8		28	3.4
50	28	20,426	-59.7		28	2.4
40	27	21,819	-59.8		29	1.7
30	25	23,619	-59.6		31	.3
25	24	24,762	-59.1		34	1.4
20	23	26,164	-58.8		04	2.6
15	19	27,990	-57.2		32	2.1
10	8	30,560	-55.3			
7						

BOOTHVILLE, LA. 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1	16.8	15.5	16	1.6
1000	31	114	18.1	15.1	16	4.2
950	31	553	16.2	12.0	18	8.5
900	31	1,013	14.7	6.7	20	7.8
850	31	1,495	12.8	2.7	22	8.0
800	31	2,003	10.7	-1.2	23	9.5
750	31	2,539	8.1	-5.9	24	11.1
700	31	3,105	5.1	-12.2	25	12.7
650	31	3,706	1.5	-15.4	25	14.7
600	31	4,346	-2.6	-19.3	26	17.0
550	31	5,030	-7.5	-23.6	25	18.5
500	31	5,764	-12.8	-26.6	25	20.7
450	31	6,559	-18.6	-31.5	25	23.0
400	31	7,426	-25.1	-35.9	26	27.0
350	31	8,385	-32.2	-42.6	26	31.3
300	31	9,452	-40.3	-47.6	26	37.2
250	31	10,672	-48.9		26	43.0
200	31	12,111	-56.3		27	47.2
175	31	12,957	-57.7		27	44.2
150	31	13,924	-60.5		27	41.3
125	31	15,051	-64.1		27	33.9
100	31	16,404	-68.2		26	24.9
80	29	17,737	-71.0		26	17.8
70	28	18,528	-70.4		26	11.8
60	27	19,452	-67.9		26	7.0
50	26	20,554	-65.4		26	4.1
40	23	21,919	-63.5		29	2.3
30	22	23,708	-58.4		32	3.1
25	21	24,859	-55.4		30	3.7
20	21	26,296	-51.3		26	7.9
15	19	28,178	-47.6		26	15.0
10	10	30,885	-41.0			
7						

* BROWNSVILLE, TEXAS 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	7	18.7	16.8	15	2.3
1000	30	84	19.5	17.4	15	3.2
950	31	520	18.2	12.3	16	7.2
900	31	983	17.3	6.8	18	7.1
850	31	1,471	16.1	-1.7	20	6.7
800	31	1,965	15.0	-6.3	21	7.4
750	31	2,528	12.2	-9.5	23	8.8
700	31	3,101	8.6	-14.0	24	12.2
650	31	3,709	4.2	-17.2	24	15.1
600	31	4,354	-.9	-19.1	24	16.7
550	31	5,041	-6.2	-22.3	25	18.8
500	31	5,779	-11.7	-27.9	25	22.2
450	31	6,578	-17.1	-32.2	25	25.9
400	31	7,451	-23.3	-36.9	25	31.9
350	30	8,416	-30.4	-41.8	25	36.8
300	30	9,494	-38.2	-48.3	26	43.6
250	30	10,[illegible]72	-47.2		26	51.5
200	30	12,172	-56.1		26	53.1
175	29	13,013	-59.9		26	52.0
150	27	13,974	-62.5		26	43.5
125	27	15,087	-67.1		26	36.5
100	27	16,422	-70.5		26	28.3
80	27	17,732	-74.2		25	14.9
70	27	18,511	-73.7		25	8.8
60	27	19,416	-70.8		24	5.7
50	27	20,510	-66.9		24	3.3
40	25	21,869	-63.9		23	1.3
30	24	23,658	-58.0		31	3.6
25	24	24,817	-54.4		28	4.9
20	24	26,259	-51.1		27	8.8
15	23	28,149	-46.9		26	12.9
10	12	30,885	-38.4			
7	4	33,379	-31.9			

BUFFALO, N. Y. 991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	218	3.0	-1.2	21	.8
1000						
950	31	559	3.7	-1.1	22	3.1
900	31	998	2.7	-2.3	25	5.0
850	31	1,459	1.2	-6.0	26	6.1
800	31	1,946	-.4	-8.8	26	7.4
750	31	2,460	-2.7	-11.0	26	8.2
700	31	3,005	-5.4	-15.3	26	8.4
650	31	3,584	-7.9	-19.2	27	9.8
600	31	4,203	-11.4	-23.2	27	11.6
550	31	4,865	-15.6	-26.2	27	13.2
500	31	5,577	-20.5	-30.8	27	14.3
450	31	6,348	-26.2	-34.2	27	15.7
400	31	7,189	-32.5	-41.0	27	18.0
350	31	8,119	-39.6	-44.2	27	20.2
300	31	9,153	-47.4		26	20.6
250	31	10,339	-54.3		27	22.1
200	31	11,755	-57.7		27	25.2
175	30	12,601	-56.6		27	23.1
150	28	13,591	-55.2		27	20.2
125	27	14,761	-55.9		27	17.4
100	27	16,176	-57.4		27	14.3
80	27	17,581	-59.3		27	12.6
70	27	18,416	-60.1		28	10.9
60	27	19,377	-60.9		29	8.6
50	27	20,508	-61.7		29	7.5
40	27	21,892	-61.2		30	5.7
30	26	23,681	-60.1		31	4.3
25	26	24,820	-59.6		31	3.9
20	26	26,218	-58.8		30	4.6
15	21	26,036	-56.4		29	7.8
10	13	30,596	-52.3		27	17.9
7						

CAPE HATTERAS, N. C. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	11.4	8.8	35	1.2
1000	31	146	14.2	10.4	28	.9
950	31	578	12.0	7.1	24	2.7
900	31	1,030	9.5	3.5	25	3.5
850	31	1,503	7.3	-1.2	26	4.4
800	31	2,001	5.4	-4.9	27	5.7
750	31	2,526	2.9	-7.8	27	7.1
700	31	3,082	.1	-11.2	27	8.7
650	31	3,673	-3.1	-14.7	27	10.6
600	31	4,302	-7.0	-19.4	27	11.5
550	31	4,976	-11.0	-24.9	27	13.2
500	31	5,701	-15.9	-28.3	27	14.1
450	31	6,486	-21.7	-33.6	27	15.9
400	31	7,343	-28.0	-37.9	27	19.0
350	31	8,291	-35.0	-43.4	27	22.2
300	31	9,347	-42.5	-46.8	27	25.1
250	31	10,556	-50.9		28	30.2
200	31	11,962	-58.4		28	34.5
175	31	12,822	-57.7		28	31.6
150	31	13,798	-57.1		28	29.2
125	30	14,944	-59.6		28	26.9
100	29	16,335	-62.1		28	22.3
80	29	17,707	-64.1		28	16.5
70	28	18,523	-64.0		28	12.9
60	27	19,465	-63.5		29	8.2
50	27	20,595	-63.2		29	6.3
40	27	21,962	-61.8		31	5.1
30	26	23,753	-59.3		31	5.3
25	26	24,903	-56.5		30	5.6
20	24	26,324	-53.5		28	8.7
15	19	28,184	-49.8		27	15.2
10	8	30,887	-41.3			
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

• CARIBOU, MAINE
995 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	191	-5.1	-9.1	35	1.3
1000	15	234	-7.5	[illegible]	34	.6
950	29	555	-4.2	-9.6	23	.9
900	29	981	-4.3	-10.6	28	3.0
850	29	1,431	-4.8	-12.1	29	4.3
800	29	1,908	-5.8	-14.1	28	6.1
750	29	2,412	-7.2	-15.8	28	7.2
700	29	2,948	-9.4	-19.1	28	8.5
650	29	3,518	-11.9	-22.1	29	10.1
600	29	4,128	-15.1	-25.3	29	12.0
550	29	4,780	-19.3	-28.8	28	13.6
500	29	5,482	-24.0	[illegible]	28	15.5
450	29	6,243	-29.4	-37.8	28	18.6
400	29	7,073	-35.5	-44.0	28	20.0
350	29	7,993	-41.9	-46.2	28	21.8
300	27	9,022	-48.5		28	26.3
250	27	10,205	-54.7		28	27.4
200	26	11,623	-55.6		28	26.4
175	24	12,478	-54.7		28	21.9
150	24	13,468	-53.9		28	19.0
125	24	14,640	-54.2		28	17.2
100	24	16,[illegible]65	-56.0		28	14.5
80	23	17,471	-58.2		29	13.9
70	22	18,315	-58.7		29	12.1
60	22	19,282	-59.3		29	9.9
50	22	20,423	-59.4		30	7.8
40	22	21,818	-60.1		30	6.3
30	21	23,610	-59.7		31	5.9
25	21	24,750	-59.6		30	6.1
20	19	26,151	-58.9		31	6.7
15	19	27,961	-57.7		29	7.9
10	15	30,528	-54.1		28	15.2
7	11	32,822	-50.9		27	21.3
5	6	35,156	-46.6			

CHARLESTON, S. C.
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	13	12.7	[illegible]	25	.4
1000	29	151	14.0	9.6	15	.9
950	31	575	13.3	[illegible]	23	2.9
900	31	1,029	11.3	4.2	24	4.3
850	31	1,505	9.0	.5	24	5.7
800	31	[illegible]	6.9	-4.4	25	6.8
750	31	2,533	4.6	[illegible]	25	8.3
700	31	3,093	[illegible]	[illegible]	26	10.8
650	31	3,688	-1.3	-17.3	26	11.9
600	31	4,322	-4.6	-21.0	26	13.4
550	31	5,001	-9.0	-23.4	26	15.3
500	31	5,731	-13.9	-28.0	27	17.0
450	31	6,523	-19.8	-32.5	27	19.4
400	31	7,386	-26.2	-38.7	27	21.8
350	31	8,341	-33.2	-43.7	27	25.1
300	31	9,403	-41.6	-47.4	27	28.3
250	31	10,616	-50.3		28	33.4
200	31	12,044	-58.0		29	37.3
175	31	12,884	-58.2		29	36.1
150	31	13,854	-58.9		29	35.0
125	31	14,993	-61.1		27	30.3
100	31	16,369	-64.3		27	23.0
80	31	17,725	-66.5		27	17.4
70	31	18,533	-66.4		28	10.7
60	30	19,470	-65.4		28	8.0
50	30	20,584	-64.3		29	4.4
40	30	21,953	-62.7		31	3.8
30	28	23,748	-58.4		31	3.8
25	26	[illegible]	-55.0		29	5.8
20	22	26,314	-51.8		28	9.3
15	18	28,186	-48.5		27	16.0
10	9	30,906	-39.0			

CHATHAM, MASS.
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	16	3.5	.5	04	1.4
1000	28	164	[illegible]	[illegible]	[illegible]	2.3
950	30	565	4.0	-2.4	33	.7
900	30	1,004	2.8	-6.9	30	2.2
850	30	1,466	1.6	-8.7	27	4.1
800	30	1,954	.0	-9.3	27	5.8
750	30	2,469	-2.0	-12.7	27	7.9
700	30	3,015	-4.7	-14.7	27	9.2
650	30	3,596	-7.4	[illegible]	27	10.8
600	30	4,215	-10.8	[illegible]	27	12.0
550	30	4,880	-14.6	[illegible]	28	13.1
500	30	5,595	-19.6	-31.4	28	14.7
450	30	6,369	-25.0	-35.6	28	16.5
400	30	7,214	-31.5	[illegible]	28	18.6
350	30	8,148	-38.6	-44.0	28	20.9
300	30	9,187	-46.0		28	24.9
250	30	10,390	-53.6		29	27.7
200	30	11,796	-58.3		29	28.4
175	30	12,638	-57.1		28	24.9
150	30	13,616	-56.2		28	21.1
125	29	14,777	-56.8		[illegible]	19.2
100	29	16,187	-58.4		28	16.7
80	29	17,585	-60.1		28	14.3
70	29	18,417	-60.5		29	11.6
60	28	19,373	-61.4		29	10.7
50	28	20,504	-61.5		30	7.9
40	26	21,865	-60.9		31	6.0
30	26	23,678	-59.6		30	5.0
25	24	24,922	-58.2		30	5.4
20	23	26,233	-56.4		28	6.2
15	20	28,061	-54.4		28	[illegible]
10	15	[illegible]	-49.1		27	10.2
7	12	[illegible]	-42.5		[illegible]	[illegible]

CHIHUAHUA, MEXICO
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,428	8.4	-4.4	24	2.6
850	24	1,469	9.2	-3.3	25	1.9
800	31	1,959	8.0	-6.2	25	[illegible]
750	31	2,488	4.8	-9.7	25	[illegible]
700	31	3,048	2.0	-14.0	25	[illegible]
650	31	3,642	-1.3	-18.8	25	15.9
600	31	4,275	-5.3	-23.7	26	14.8
550	31	4,953	-9.8	-28.1	26	18.5
500	31	5,681	-14.9	-32.1	26	21.3
450	31	6,470	-20.3	[illegible]	26	24.9
400	31	7,331	-26.7	-41.5	26	28.5
350	31	[illegible]	-34.1	-46.4	26	29.9
300	31	9,343	-41.6	-48.6	26	33.0
250	31	[illegible]	-49.2		[illegible]	38.2
200	31	[illegible]	-54.1		26	42.4
175	31	12,856	-55.9			
150	31	13,933	-58.7			
125	31	14,970	-62.0			
100	29	16,335	-65.9			
80	29	17,684	-67.3			
70	28	18,491	-66.6			
60	28	19,424	-65.9			
50	28	20,537	-64.4		26	2.4
40	27	21,905	-62.7		26	.4
30	27	23,698	-58.4		27	3.8
25	26	24,855	-55.5		27	4.5
20	25	[illegible]	-52.9		26	8.5
15	19	28,144	-50.1		26	15.9
10	11	[illegible]	-41.9			

• COLD BAY, ALASKA
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	30	[illegible]	[illegible]	[illegible]	1.4
1000	13	[illegible]	-4.6	[illegible]	30	4.3
950	29	[illegible]	-4.3	-5.6	[illegible]	2.5
900	29	832	-6.4	[illegible]	[illegible]	3.8
850	29	1,277	-8.6	[illegible]	[illegible]	5.7
800	29	1,746	[illegible]	[illegible]	[illegible]	[illegible]
750	29	2,240	[illegible]	[illegible]	[illegible]	8.3
700	29	[illegible]	[illegible]	[illegible]	[illegible]	8.3
650	29	3,320	[illegible]	[illegible]	[illegible]	9.2
600	29	3,913	[illegible]	[illegible]	[illegible]	9.9
550	29	4,549	[illegible]	[illegible]	[illegible]	10.7
500	29	[illegible]	[illegible]	[illegible]	[illegible]	12.6
450	29	5,981	-34.2	[illegible]	[illegible]	13.1
400	29	6,795	[illegible]	-45.1	[illegible]	15.6
350	29	[illegible]	-45.9		[illegible]	[illegible]
300	29	8,708	[illegible]		[illegible]	16.4
250	29	[illegible]	[illegible]		[illegible]	17.3
200	28	11,349	[illegible]		[illegible]	15.2
175	28	12,228	-48.1		[illegible]	13.8
150	28	13,244	-47.8		[illegible]	11.7
125	28	14,447	-48.3		[illegible]	11.6
100	28	15,913	-49.2		[illegible]	9.9
80	27	17,368	-50.6		[illegible]	8.7
70	27	18,237	[illegible]		[illegible]	[illegible]
60	27	19,237	[illegible]		[illegible]	7.1
50	26	[illegible]	[illegible]		[illegible]	5.9
40	26	21,863	-53.2		[illegible]	4.7
30	26	23,714	-53.7		19	2.7
25	25	24,892	-54.3		[illegible]	3.8
20	24	26,323	-54.4		[illegible]	4.1
15	19	28,155	-54.5		[illegible]	5.4
10	15	30,753	-54.6		[illegible]	5.6

DAYTON, OHIO
980 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	299	6.0	3.2	15	1.0
1000						
950	31	550	7.2	3.1	20	3.4
900	31	994	5.7	[illegible]	23	4.9
850	31	1,461	4.1	-3.3	24	5.3
800	31	1,953	2.1	-7.2	24	6.4
750	31	2,472	-.2	[illegible]	24	7.0
700	31	[illegible]	-2.7	[illegible]	24	7.2
650	31	3,607	-5.9	-18.4	24	8.4
600	31	4,229	-9.8	-20.8	24	9.8
550	31	4,895	-14.1	-24.7	25	11.2
500	31	5,612	-18.9	-28.8	25	13.3
450	31	6,389	-24.4	-33.7	25	14.7
400	31	7,236	-30.6	-39.7	25	17.0
350	31	8,173	-37.8	-44.1	25	19.3
300	31	9,215	-45.9	-46.7	25	21.5
250	31	10,409	-53.2		26	25.2
200	31	11,828	-57.7		26	26.7
175	31	12,671	-56.8		26	25.5
150	31	13,650	-56.3		27	22.2
125	29	14,814	-56.6		27	20.2
100	29	16,225	-58.4		26	15.9
80	29	17,622	-60.6		26	14.0
70	29	18,453	-60.8		27	11.2
60	29	19,411	-61.4		27	8.1
50	29	20,540	-61.8		28	6.7
40	28	21,922	-61.6		29	4.6
30	26	23,710	-60.2		30	4.0
25	26	24,851	-58.9		30	3.9
20	26	26,258	-57.1		28	5.4
15	22	28,093	-54.0		27	9.5
10	13	30,720	-49.0			

DEL RIO, TEXAS
974 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	314	13.7	8.6	08	1.4
1000						
950	31	523	15.0	6.4	13	1.5
900	31	980	13.6	4.1	19	2.7
850	31	1,460	11.1	1.1	22	4.1
800	31	1,965	9.0	-2.9	24	6.4
750	31	2,497	6.6	-9.5	24	8.9
700	31	3,060	3.4	[illegible]	25	12.2
650	31	3,656	-.6	-18.2	24	15.2
600	31	4,290	-5.2	[illegible]	24	18.1
550	31	4,968	-9.7	-27.2	24	20.0
500	31	5,696	-14.8	-32.8	25	23.4
450	31	6,485	-20.2	[illegible]	25	27.3
400	31	7,347	-26.7	-42.4	25	31.2
350	31	8,300	-33.6	-47.8	25	34.9
300	31	9,361	-41.5	-49.7	26	39.9
250	30	10,576	-49.4		26	45.9
200	30	12,021	-54.2		26	48.3
175	30	12,874	-56.1		26	46.5
150	30	13,849	-58.4		26	41.6
125	29	14,989	-62.0		26	35.1
100	29	16,356	-65.9		26	26.8
80	29	17,702	-67.6		26	17.5
70	29	18,504	-68.0		25	12.4
60	28	19,434	-66.7		25	7.5
50	28	20,543	-64.7		26	3.5
40	28	21,913	-62.5		26	2.3
30	27	23,705	-58.2		29	3.9
25	27	24,860	-55.6		28	5.0
20	26	26,291	-52.8		27	9.0
15	23	28,177	-48.7		26	13.2
10	13	30,922	-40.2			

DENVER, COLO.
831 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,611	.1	-5.5	21	.7
800	31	1,918	.1	-7.7	31	1.2
750	31	2,433	-2.6	-11.2	32	3.0
700	31	2,977	-5.9	-14.3	31	3.6
650	31	3,554	-9.5	-17.9	30	4.5
600	31	4,168	-13.2	-21.4	29	5.2
550	31	4,825	-17.5	-26.0	28	5.7
500	31	5,532	-22.6	-31.8	27	6.3
450	31	6,297	-28.3	-37.1	25	7.9
400	31	7,139	-35.2	-43.3	24	10.4
350	31	8,048	-42.6	-46.4	24	11.5
300	31	9,068	-50.6		23	11.9
250	31	10,243	-55.3		24	13.2
200	31	11,671	-53.1		25	14.3
175	31	12,534	-52.3		25	13.9
150	31	13,531	-52.7		25	14.0
125	31	14,705	-54.1		26	13.2
100	31	16,128	-56.7		26	11.0
80	31	17,538	-58.2		25	9.5
70	30	18,377	-59.2		25	7.6
60	30	19,341	-60.1		26	6.5
50	30	20,477	-61.0		25	5.8
40	30	21,862	-61.4		27	4.3
30	28	23,647	-60.9		30	2.2
25	28	24,783	-60.1		31	1.8
20	28	26,179	-59.0		29	2.8
15	[illegible]	27,999	-56.5		28	5.8
10	17	30,610	-52.1		28	12.4

DODGE CITY, KANS.
918 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	791	2.5	.6	01	1.2
900	30	958	3.9	1.5	02	1.9
850	31	1,418	3.5	[illegible]	33	2.8
800	31	1,909	1.9	-3.6	[illegible]	3.3
750	31	2,428	-.5	-8.1	28	3.9
700	31	2,976	-3.8	-12.0	26	4.7
650	31	3,558	-7.1	-16.0	26	6.0
600	31	4,178	-10.9	-20.4	25	7.9
550	31	4,841	-15.3	-25.3	24	9.7
500	31	5,554	-20.4	-31.3	24	11.7
450	31	6,326	-25.9	-35.3	24	13.6
400	31	7,168	-32.4	-41.2	24	15.1
350	31	8,097	-39.8	-47.1	24	16.3
300	31	9,130	-47.8		23	19.6
250	31	10,316	-53.7		24	23.1
200	30	11,748	-54.6		24	25.5
175	30	12,606	-53.0		25	23.6
150	30	13,600	-53.4		25	22.4
125	30	14,771	-54.7		25	19.0
100	30	16,189	-57.7		25	15.3
80	29	17,589	-59.6		25	11.7
70	29	18,423	-60.8		25	9.1
60	26	19,379	-61.4		25	7.4
50	27	20,510	-61.5		27	4.7
40	24	21,869	-61.7		28	4.1
30	24	23,678	-60.4		28	2.5
25	23	24,814	-59.4		29	3.0
20	21	26,212	-57.7		28	4.7
15	18	28,024	-55.5		27	8.5
10	18	30,634	-50.2		27	8.2

EL PASO, TEXAS
877 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	[illegible]	[illegible]	-3.6	[illegible]	[illegible]
850	31	1,451	[illegible]	[illegible]	27	4.2
800	31	1,948	4.5	[illegible]	27	8.1
750	31	2,471	[illegible]	[illegible]	26	11.3
700	31	3,022	[illegible]	-16.7	26	11.4
650	31	3,605	[illegible]	-21.0	25	12.7
600	31	4,227	[illegible]	[illegible]	25	15.6
550	31	4,892	-14.5	-30.3	25	18.4
500	31	5,607	-19.5	-34.7	26	[illegible]
450	31	6,382	[illegible]	-38.9	26	[illegible]
400	31	7,227	-31.0	[illegible]	26	[illegible]
350	31	8,164	[illegible]	[illegible]	26	30.6
300	31	[illegible]	-44.6		26	35.4
250	31	10,411	-50.9		26	38.7
200	31	11,851	-54.0		26	[illegible]
175	31	12,708	-54.4		26	37.5
150	31	13,694	-55.7		26	35.6
125	31	14,847	-56.7		26	[illegible]
100	28	16,239	-61.4		26	24.9
80	23	17,613	-62.8		26	[illegible]
70	21	18,433	-63.9		25	10.1
60	21	19,377	-64.8		25	5.7
50	20	20,497	[illegible]		27	3.1
40	17	21,875	[illegible]		30	1.7
30	13	23,658	[illegible]		31	2.3
25	12	24,810	[illegible]		29	5.6
20	9	26,228	-54.5			
15	7	[illegible]	[illegible]			
10	5	[illegible]	[illegible]			

ELY, NEV.
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,908	-4.6	-8.2	20	.6
1000						
950						
900						
850						
800	[illegible]	1,958	-4.3	-7.7	22	1.5
750	31	2,439	-4.5	-7.3	36	.1
700	31	2,979	-7.7	[illegible]	31	1.8
650	31	[illegible]	-10.5	-16.2	30	2.7
600	31	4,165	-14.0	[illegible]	29	2.8
550	31	4,820	-18.5	[illegible]	29	3.3
500	31	5,524	-23.6	[illegible]	29	4.2
450	31	6,286	-29.3	[illegible]	28	4.6
400	31	7,116	-35.8	-42.8	28	5.0
350	31	8,033	-43.1	[illegible]	28	5.4
300	31	[illegible]	-50.1		28	8.8
250	31	10,232	-54.0		29	13.0
200	31	11,662	-53.9		29	13.7
175	31	12,523	-52.0		29	13.4
150	31	13,522	-52.2		28	13.0
125	30	14,697	-54.1		28	11.8
100	27	16,124	-57.0		28	9.8
80	25	17,533	-58.1		28	7.5
70	25	18,370	-59.5		27	7.1
60	22	19,334	-60.0		27	5.0
50	21	20,471	-60.3		26	3.7
40	[illegible]	21,868	-60.3		27	2.7
30	19	23,666	-59.5		29	2.5
25	19	24,812	-59.3		31	2.3
20	[illegible]	26,213	-58.5		[illegible]	[illegible]
15	[illegible]	28,034	-56.1		[illegible]	[illegible]
10	8	[illegible]	-51.2			

EMPALME, MEXICO
1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	13.4	[illegible]	32	1.0
1000	31	114	15.8	5.9	32	2.2
950	31	548	14.1	2.5	31	3.7
900	31	1,002	11.3	-.5	29	2.7
850	31	1,477	8.2	-4.3	24	3.5
800	31	1,975	4.5	-13.1	24	5.4
750	31	2,503	[illegible]	-17.0	25	7.6
700	31	3,062	[illegible]	[illegible]	26	10.0
650	31	3,656	-1.5	-23.7	26	12.1
600	31	4,289	-5.1	[illegible]	27	15.5
550	31	[illegible]	-9.7	-30.1	27	18.2
500	31	5,694	[illegible]	-34.1	26	21.6
450	31	6,484	[illegible]	[illegible]	27	25.4
400	31	7,345	-26.7	[illegible]	27	28.6
350	31	8,298	-33.6	[illegible]	26	32.4
300	31	9,359	-41.5	[illegible]	26	36.0
250	31	10,574	-49.1		26	41.4
200	31	12,020	[illegible]		26	[illegible]
175	31	12,874	[illegible]		26	41.8
150	31	[illegible]	-58.4		26	[illegible]
125	31	14,988	-61.6		26	[illegible]
100	31	16,357	-65.1		26	24.0
80	31	17,712	-67.1		26	7.3
70	30	18,518	[illegible]		26	2.6
60	30	19,451	[illegible]		26	9.4
50	30	[illegible]	[illegible]		27	4.7
40	[illegible]	21,940	-62.4		29	3.1
30	27	[illegible]	-59.1		29	4.6
25	25	24,887	[illegible]		28	5.1
20	23	26,319	-52.6		27	7.2
15	22	28,189	[illegible]		27	12.5
10	[illegible]	30,901	[illegible]			

• FAIRBANKS, ALASKA
998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	135	-14.1	[illegible]	36	1.9
1000						
950	31	436	-11.7	-16.4	[illegible]	2.5
900	31	851	-11.0	-15.4	[illegible]	2.4
850	31	1,289	-12.0	-15.9	[illegible]	3.2
800	31	1,752	-13.4	-16.2	[illegible]	4.0
750	31	2,242	-15.6	-18.8	[illegible]	4.4
700	31	2,759	-19.1	-22.3	27	5.1
650	31	3,307	-22.8	[illegible]	23	6.2
600	31	3,890	-26.5	[illegible]	23	6.8
550	31	4,513	-30.8	[illegible]	23	7.4
500	31	[illegible]	-35.0	[illegible]	[illegible]	8.7
450	31	5,911	-39.8	[illegible]	[illegible]	8.9
400	31	[illegible]	-44.9		[illegible]	8.4
350	31	7,592	-50.0		[illegible]	[illegible]
300	31	8,588	-53.8		[illegible]	11.8
250	31	9,760	-52.7		[illegible]	11.2
200	31	11,216	-46.3		[illegible]	[illegible]
175	31	12,097	-48.0		[illegible]	[illegible]
150	31	13,115	-47.2		[illegible]	[illegible]
125	31	14,321	-47.8		[illegible]	[illegible]
100	31	15,796	-48.1		[illegible]	11.7
80	[illegible]	17,265	-48.9		[illegible]	[illegible]
70	[illegible]	18,141	-49.7		[illegible]	8.7
60	[illegible]	19,154	[illegible]		[illegible]	[illegible]
50	[illegible]	20,342	[illegible]		[illegible]	7.5
40	[illegible]	21,793	-51.3		[illegible]	6.9
30	[illegible]	[illegible]	-51.9		[illegible]	[illegible]
25	[illegible]	24,826	-53.4		[illegible]	[illegible]
20	[illegible]	26,274	[illegible]		[illegible]	[illegible]
15	[illegible]	28,156	[illegible]		[illegible]	[illegible]
10	[illegible]	30,715	[illegible]			

FLINT, MICH.
987 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	[illegible]	3.0	.5	[illegible]	.4
1000						
950	31	545	3.1	[illegible]	[illegible]	1.7
900	31	983	2.0	[illegible]	[illegible]	[illegible]
850	31	1,444	1.2	-7.2	26	4.0
800	31	1,930	-.3	[illegible]	25	5.0
750	31	2,445	-2.2	[illegible]	25	6.1
700	31	2,991	-4.9	[illegible]	25	8.0
650	31	3,570	-8.0	-18.5	[illegible]	9.0
600	31	4,188	-11.7	[illegible]	[illegible]	[illegible]
550	31	4,849	-16.2	[illegible]	[illegible]	11.7
500	31	5,560	-21.1	[illegible]	[illegible]	[illegible]
450	31	6,330	-26.5	[illegible]	[illegible]	13.9
400	31	7,170	-32.8	[illegible]	[illegible]	15.4
350	31	8,099	-39.9	[illegible]	[illegible]	18.2
300	31	9,132	-47.8		[illegible]	19.8
250	31	[illegible]	-55.1		[illegible]	22.4
200	31	11,726	-58.0		[illegible]	24.1
175	31	[illegible]	-56.6		[illegible]	22.0
150	31	13,552	-55.3		[illegible]	20.0
125	31	14,716	-56.3		[illegible]	[illegible]
100	[illegible]	16,125	-57.3		[illegible]	15.0
80	[illegible]	17,532	-58.8		[illegible]	12.4
70	[illegible]	18,372	-60.0		[illegible]	[illegible]
60	[illegible]	[illegible]	-60.6		[illegible]	[illegible]
50	[illegible]	[illegible]	-61.5		[illegible]	[illegible]
40	[illegible]	21,851	-61.2		[illegible]	[illegible]
30	[illegible]	23,540	-60.6		[illegible]	[illegible]
25	[illegible]	24,776	-59.6		[illegible]	[illegible]
20	[illegible]	26,176	-58.3		[illegible]	[illegible]
15	[illegible]	[illegible]	-57.0		[illegible]	[illegible]
10	[illegible]	30,596	-52.1			

FORT WORTH, TEXAS
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1000						
950	[illegible]	517	[illegible]	[illegible]	[illegible]	[illegible]
900	[illegible]	969	[illegible]	[illegible]	[illegible]	[illegible]
850	[illegible]	1,445	[illegible]	[illegible]	[illegible]	[illegible]
800	31	1,945	[illegible]	[illegible]	[illegible]	[illegible]
750	31	2,473	[illegible]	[illegible]	[illegible]	[illegible]
700	31	3,032	[illegible]	[illegible]	[illegible]	[illegible]
650	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
600	[illegible]	4,257	-6.1	[illegible]	[illegible]	[illegible]
550	[illegible]	4,932	-10.9	[illegible]	[illegible]	[illegible]
500	[illegible]	[illegible]	-16.3	[illegible]	[illegible]	[illegible]
450	[illegible]	6,440	-22.1	-37.3	[illegible]	[illegible]
400	[illegible]	7,295	[illegible]	[illegible]	[illegible]	[illegible]
350	[illegible]	8,240	-36.1	[illegible]	[illegible]	[illegible]
300	[illegible]	9,291	-43.5		[illegible]	[illegible]
250	[illegible]	10,495	-51.7		[illegible]	[illegible]
200	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
175	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
150	[illegible]	13,758	[illegible]		[illegible]	[illegible]
125	[illegible]	[illegible]	-59.5		[illegible]	[illegible]
100	[illegible]	16,297	[illegible]		[illegible]	[illegible]
80	[illegible]	17,668	-64.1		[illegible]	[illegible]
70	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
60	[illegible]	19,420	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
40	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
15	[illegible]	28,121	[illegible]		[illegible]	[illegible]
10						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

GLASGOW, MONT.
930 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	696	-1.7	-5.3	10	2.1
1000						
950						
900	31	955	.6	-5.1	21	2.0
850	31	1,416	.4	-9.1	27	3.4
800	31	1,901	-1.9	-11.7	28	3.6
750	31	2,411	-5.3	-15.0	27	3.6
700	31	2,949	-8.7	-18.6	27	4.5
650	31	3,521	-11.7	-22.8	26	5.5
600	31	4,130	-15.2	-26.2	26	6.4
550	31	4,783	-19.6	-30.2	26	7.2
500	31	5,482	-24.8	-35.2	25	7.6
450	31	6,243	-30.4	-39.2	25	8.5
400	31	7,067	-36.8	-44.3	25	9.8
350	31	7,961	-43.9		26	11.1
300	31	8,945	-51.6		26	12.0
250	31	10,161	-57.4		26	11.3
200	31	11,577	-54.3		27	10.1
175	31	12,439	-51.5		26	9.5
150	31	13,442	-51.3		26	8.5
125	31	14,523	-52.5		27	8.3
100	31	16,059	-54.7		27	6.7
80	31	17,481	-56.3		27	5.9
70	30	18,331	-57.7		27	5.0
60	30	19,307	-58.3		28	3.7
50	29	20,456	-58.0		28	2.2
40	27	21,860	-58.3		30	1.9
30	27	23,669	-58.7		35	2.8
25	26	24,815	-58.6		01	2.8
20	21	26,218	-58.7		36	3.4
15	16	28,037	-58.4		02	4.1
10	9	30,572	-57.8			
7						
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GRAND JUNCTION, COLO.
848 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,472	1.3	-3.2	07	1.3
1000						
950						
900						
850	7	1,497	2.2	-6.2		
800	31	1,926	.4	-6.1	13	1.7
750	31	2,441	-3.0	-8.8	15	1.1
700	31	2,984	-7.0	-13.5	21	2.1
650	31	3,558	-10.5	-14.6	24	3.3
600	31	4,170	-14.0	-21.1	24	5.1
550	31	4,826	-18.0	-27.6	24	6.0
500	31	5,532	-22.9	-32.9	24	6.9
450	31	6,295	-29.0	-38.3	25	7.2
400	31	7,125	-35.8	-44.3	24	8.7
350	31	8,042	-43.0		25	9.0
300	31	9,061	-50.7		26	8.4
250	31	10,235	-54.7		27	12.8
200	30	11,671	-53.0		27	14.0
175	30	12,534	-52.0		26	14.7
150	30	13,533	-52.2		26	14.5
125	30	14,708	-54.3		26	13.1
100	30	16,129	-57.0		26	11.8
80	30	17,537	-58.4		25	9.5
70	29	18,376	-59.0		25	8.3
60	29	19,341	-60.0		25	7.1
50	29	20,477	-60.8		25	5.4
40	29	21,865	-61.0		26	3.9
30	29	23,554	-60.7		28	2.2
25	27	24,741	-59.7		29	2.0
20	27	26,190	-58.7		29	2.9
15	20	28,004	-56.6		28	6.2
10	9	30,647	-52.1			
7						
5						

* GREAT FALLS, MONT.
888 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,118	.0	-9.6	22	3.7
1000						
950						
900						
850	31	1,422	1.0	-9.0	24	6.5
800	31	1,907	-2.3	-10.8	27	5.8
750	31	2,416	-6.0	-13.7	27	5.4
700	31	2,953	-9.5	-16.7	28	5.2
650	31	3,522	-13.0	-20.7	28	6.1
600	31	4,128	-16.3	-26.1	27	6.2
550	31	4,776	-20.4	-30.6	26	6.4
500	31	5,476	-25.4	-35.0	26	7.6
450	31	6,233	-30.8	-38.7	25	9.0
400	31	7,058	-37.0	-43.3	26	10.5
350	31	7,971	-43.7		26	10.9
300	31	8,987	-51.3		26	10.9
250	31	10,154	-57.5		26	10.6
200	31	11,569	-54.0		27	9.3
175	31	12,432	-51.6		27	9.8
150	30	13,435	-51.2		27	8.4
125	29	14,615	-52.5		27	8.7
100	29	16,050	-54.7		27	7.0
80	29	17,473	-56.4		27	5.5
70	28	18,319	-57.2		28	5.0
60	28	19,293	-57.7		29	4.2
50	28	20,443	-58.1		29	3.2
40	28	21,848	-58.3		32	1.7
30	27	23,661	-58.8		36	2.3
25	27	24,806	-58.9		02	2.8
20	27	26,206	-59.0		03	3.8
15	25	28,011	-58.6		02	3.7
10	21	30,568	-56.8		36	3.6
7	16	32,856	-53.3		31	8.3
5	17	35,119	-50.6			

GREEN BAY, WIS.
990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	210	1.1	-1.2	02	1.4
1000						
950	31	539	.6	-2.2	07	1.5
900	31	975	1.2	-5.3	24	.7
850	31	1,434	.1	-8.2	27	.6
800	31	1,919	-1.6	-11.1	26	1.5
750	31	2,431	-3.5	-13.7	27	2.6
700	31	2,974	-6.0	-18.1	27	3.5
650	31	3,551	-9.3	-21.5	27	4.6
600	31	4,166	-13.0	-25.0	26	6.6
550	31	4,823	-17.1	-27.4	26	8.4
500	31	5,532	-21.8	-31.9	26	9.8
450	31	6,299	-27.4	-37.1	26	10.6
400	31	7,136	-33.9	-41.9	26	12.0
350	31	8,061	-41.0	-42.6	25	14.5
300	31	9,088	-48.8		25	17.6
250	31	10,266	-55.8		25	20.1
200	31	11,676	-57.2		25	21.6
175	31	12,525	-55.3		26	18.4
150	31	13,512	-54.2		26	16.6
125	31	14,679	-55.3		26	14.8
100	31	16,099	-56.4		27	12.6
80	30	17,508	-58.4		27	11.3
70	30	18,347	-59.1		27	10.4
60	29	19,313	-59.9		28	8.4
50	29	20,450	-60.4		28	7.1
40	29	21,839	-61.0		28	5.1
30	28	23,631	-60.3		31	4.2
25	27	24,766	-59.7		32	3.6
20	26	26,164	-58.5		31	3.8
15	24	27,973	-57.3		29	6.0
10	21	30,569	-53.5		28	12.1
7	5	32,965	-48.5			
5						

GREENSBORO, N. C.
985 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	275	7.4	5.7	32	.2
1000						
950	31	573	9.3	4.5	24	1.6
900	31	1,021	8.2	3.0	25	4.9
850	31	1,492	5.3	-.7	25	6.4
800	31	1,989	4.9	-4.9	26	7.5
750	31	2,513	2.4	-8.9	26	8.6
700	31	3,068	-.6	-13.1	26	9.3
650	31	3,657	-3.5	-17.5	26	10.4
600	31	4,286	-6.7	-23.4	26	12.1
550	31	4,960	-11.2	-26.7	26	14.1
500	31	5,684	-16.6	-30.8	26	15.7
450	31	6,467	-22.5	-34.5	26	18.2
400	31	7,320	-28.8	-40.1	27	19.5
350	31	8,265	-36.0	-43.9	27	20.8
300	31	9,316	-43.7	-42.9	27	25.0
250	31	10,518	-51.8		27	28.7
200	31	11,942	-58.2		28	34.0
175	31	12,783	-57.9		28	32.0
150	31	13,757	-57.3		28	29.2
125	30	14,901	-59.0		28	24.1
100	30	16,290	-62.2		27	21.3
80	30	17,663	-63.7		28	16.5
70	30	18,462	-64.0		28	13.2
60	30	19,427	-63.7		29	8.4
50	30	20,546	-63.5		28	5.5
40	30	21,920	-62.4		30	5.0
30	30	23,705	-60.0		31	4.2
25	28	24,849	-57.8		30	5.1
20	27	26,265	-55.3		29	8.2
15	26	28,117	-51.0		27	15.0
10	12	30,814	-43.0			
7						
5						

GUADALUPE IS., MEXICO
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	23	13.6	9.1	34	8.0
1000	31	145	12.4	7.2	32	7.2
950	31	573	8.4	5.1	31	7.2
900	31	1,017	5.7	1.2	30	6.5
850	31	1,484	4.5	-6.6	30	6.2
800	31	1,978	4.3	-14.4	29	6.6
750	31	2,502	3.0	-17.3	30	8.7
700	31	3,058	.7	-19.6	29	10.7
650	31	3,650	-2.2	-22.2	29	12.3
600	31	4,281	-6.1	-25.3	29	13.5
550	31	4,956	-10.6	-29.5	29	14.8
500	31	5,682	-15.7	-34.1	29	16.5
450	31	6,468	-21.2	-38.4	28	18.2
400	31	7,326	-27.8	-43.8		
350	31	8,273	-35.4	-49.6		
300	31	9,326	-43.2			
250	31	10,530	-51.6			
200	31	11,960	-55.4			
175	31	12,810	-56.2			
150	31	13,785	-58.5			
125	31	14,923	-61.6			
100	31	16,293	-65.1			
80	30	17,649	-66.6			
70	30	18,458	-66.0			
60	30	19,397	-64.6			
50	29	20,515	-62.9			
40	29	21,896	-61.6			
30	27	23,694	-59.1			
25	26	24,842	-56.9			
20	25	26,267	-53.5			
15	22	28,120	-49.8			
10	10	30,824	-42.4			
7						
5						

* GUAM, MARIANA IS.
1001 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	111	24.2	21.3	07	3.2
1000	24	121	24.3	20.9	07	4.6
950	31	565	21.4	16.1	07	9.9
900	31	1,033	18.6	14.6	08	9.4
850	31	1,522	16.1	10.2	08	8.0
800	31	2,036	14.2	1.9	08	6.3
750	31	2,581	14.3	-9.4	07	4.4
700	31	3,161	13.1	-15.1	07	4.1
650	31	3,779	9.6	-16.8	08	4.1
600	31	4,438	5.8	-19.8	09	4.1
550	31	5,143	1.2	-23.9	08	4.1
500	31	5,903	-3.8	-28.7	09	4.6
450	31	6,727	-8.6	-32.6	09	4.3
400	31	7,629	-14.5	-37.1	09	3.9
350	31	8,631	-21.3	-42.6	08	3.0
300	31	9,746	-29.7	-48.6	04	1.6
250	31	11,019	-39.9	-55.3	20	.5
200	31	12,503	-52.2		20	3.1
175	31	13,354	-59.1		19	3.7
150	31	14,303	-66.9		17	4.2
125	31	15,383	-75.1		16	4.2
100	30	16,648	-83.0		13	5.5
80	29	17,884	-82.9		10	7.2
70	28	18,634	-79.3		09	6.5
60	26	19,519	-74.3		10	4.8
50	26	20,602	-67.5		12	4.4
40	26	21,957	-63.5		14	1.4
30	26	23,750	-56.8		28	3.4
25	25	24,917	-52.4		28	5.5
20	25	26,375	-48.4		28	7.7
15	25	28,285	-45.0		29	10.8
10	21	31,021	-40.5		29	6.7
7						
5						

HILO, HAWAII
1020 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	19.8	18.1	26	.3
1000	31	178	19.6	17.1	06	1.4
950	31	619	16.5	15.2	07	4.8
900	31	1,078	13.4	12.6	08	5.5
850	31	1,558	10.3	9.8	08	4.7
800	31	2,061	7.5	5.1	08	4.2
750	31	2,592	5.4	-2.3	08	4.3
700	31	3,153	3.3	-12.1	09	3.5
650	31	3,751	.2	-15.4	09	2.6
600	31	4,388	-3.7	-19.9	08	.8
550	31	5,070	-7.6	-26.3	33	.8
500	31	5,805	-12.5	-32.4	31	2.1
450	31	6,601	-17.6	-36.5	30	4.8
400	31	7,473	-23.8	-40.5	29	8.8
350	31	8,438	-30.8	-46.5	29	11.7
300	31	9,511	-38.6	-51.2	28	18.0
250	31	10,745	-45.2		28	22.5
200	31	12,215	-51.5		28	24.3
175	30	13,075	-56.3		28	24.7
150	29	14,040	-61.5		28	23.3
125	29	15,155	-67.0		28	20.3
100	29	16,484	-72.4		29	13.1
80	29	17,787	-74.3		29	6.6
70	29	18,566	-73.6		28	3.8
60	27	19,470	-71.5		26	1.7
50	27	20,557	-67.9		01	.6
40	27	21,913	-63.6		09	.6
30	26	23,703	-58.1		30	1.5
25	25	24,861	-54.9		29	4.1
20	23	26,304	-50.3		28	6.2
15	15	28,193	-46.9		28	9.1
10	14	30,916	-41.2			
7						
5						

HUNTINGTON W. VA.
986 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	7.3	3.6	17	1.0
1000						
950	31	551	8.8	4.0	20	4.4
900	31	997	7.0	2.7	22	6.9
850	31	1,466	5.5	.8	24	7.9
800	31	1,961	3.3	-3.0	25	9.5
750	31	2,482	1.0	-7.5	25	9.7
700	31	3,034	-1.8	-11.7	25	10.3
650	31	3,621	-4.8	-16.4	25	10.0
600	31	4,246	-8.8	-20.9	25	10.7
550	31	4,914	-13.2	-24.8	25	12.4
500	31	5,634	-18.0	-28.5	25	15.1
450	31	6,413	-23.5	-33.1	25	17.3
400	31	7,264	-29.8	-38.9	26	19.4
350	31	8,204	-36.9	-45.2	26	20.7
300	31	9,250	-44.8	-44.6	26	23.7
250	31	10,449	-52.3		26	28.2
200	31	11,873	-57.4		27	31.0
175	31	12,716	-57.0		27	30.0
150	31	13,694	-56.3		27	26.2
125	31	14,850	-57.3		27	23.1
100	31	16,253	-59.4		26	17.4
80	29	17,640	-61.3		27	14.0
70	29	18,467	-61.9		27	11.7
60	28	19,420	-61.9		28	8.8
50	27	20,550	-61.9		28	5.9
40	26	21,933	-61.4		30	4.8
30	24	23,723	-59.4		30	3.5
25	23	24,868	-58.2		31	4.4
20	21	26,280	-56.1		29	6.3
15	18	28,129	-52.6		27	11.9
10	9	30,807	-46.0			
7						
5						

* INTERNATIONAL FALLS, MINN.
973 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	359	-2.8	-6.4	07	1.0
1000						
950	31	550	-1.0	-5.6	13	1.3
900	31	961	-1.9	-7.7	21	1.8
850	31	1,435	-3.2	-10.6	24	1.9
800	31	1,914	-4.1	-14.4	25	1.7
750	31	2,422	-5.9	-17.8	25	3.0
700	31	2,960	-8.3	-21.2	26	3.9
650	31	3,532	-11.5	-23.1	26	4.8
600	31	4,141	-15.2	-26.7	27	6.0
550	31	4,793	-19.5	-29.6	26	7.4
500	31	5,495	-24.3	-33.2	26	8.6
450	31	6,255	-29.6	-37.6	26	9.7
400	31	7,084	-36.2	-43.9	26	11.8
350	31	8,000	-43.0		26	13.5
300	31	9,019	-50.8		25	16.9
250	31	10,188	-57.1		25	17.8
200	31	11,598	-55.6		26	14.9
175	30	12,457	-53.1		26	13.3
150	30	13,454	-52.1		26	12.1
125	30	14,633	-53.1		27	10.3
100	30	16,065	-54.9		27	9.6
80	29	17,486	-56.5		27	9.4
70	28	18,332	-57.5		27	7.6
60	28	19,305	-58.1		28	6.7
50	28	20,452	-58.5		28	5.1
40	25	21,852	-59.1		30	4.2
30	26	23,656	-59.0		32	2.8
25	24	24,800	-58.8		32	2.9
20	26	26,202	-58.6		33	3.6
15	24	28,020	-58.5		33	4.3
10	23	30,573	-56.0		31	6.1
7	18	32,845	-53.7		29	11.2
5	11	35,043	-48.7			

JACKSON, MISS.
1001 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	100	13.0	10.6	17	1.5
1000	21	132	12.5	9.5	16	1.8
950	31	542	13.2	7.9	20	4.7
900	31	997	11.6	3.9	22	7.1
850	31	1,473	9.8	-1.2	23	9.1
800	31	1,976	8.1	-5.0	24	10.4
750	31	2,506	5.4	-8.2	24	11.3
700	31	3,067	2.6	-13.3	24	12.4
650	31	3,663	-.5	-17.1	25	14.7
600	31	4,298	-4.5	-21.3	25	16.9
550	31	4,977	-9.4	-26.2	25	19.3
500	31	5,707	-14.5	-30.5	25	21.8
450	30	6,496	-20.6	-34.4	25	23.6
400	30	7,356	-27.0	-39.1	25	26.2
350	30	8,307	-34.2	-46.0	25	29.1
300	30	9,365	-42.4	-47.6	25	34.5
250	30	10,574	-50.7		25	40.9
200	30	12,005	-56.2		26	46.0
175	30	12,853	-56.5		26	41.7
150	29	13,826	-58.8		26	37.6
125	29	14,963	-61.7		26	33.8
100	28	16,338	-64.5		26	24.7
80	27	17,692	-67.1		26	16.3
70	26	18,499	-67.4		25	12.1
60	25	19,429	-66.4		27	7.5
50	24	20,546	-64.9		26	3.2
40	24	21,913	-63.1		28	2.5
30	23	23,701	-59.3		29	2.7
25	23	24,850	-56.7		29	4.4
20	22	26,274	-53.4		27	7.5
15	19	28,123	-50.3		26	14.6
10	16	30,826	-42.8		26	26.4
7	6	33,192	-36.4			

JOHN F. KENNEDY INT. AP NY
1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	5.3	[illegible]	03	2.0
1000	27	176	4.7	-.8	04	3.4
950	31	567	5.0	-.7	01	.9
900	31	1,008	3.6	-2.6	27	2.6
850	31	1,472	2.8	-5.5	28	3.7
800	31	1,961	1.0	-9.4	29	5.5
750	31	2,478	-1.3	-11.5	28	6.4
700	31	3,026	-3.6	-16.4	28	7.7
650	31	3,608	-6.5	-18.6	27	9.6
600	31	4,230	-10.0	-22.2	27	11.0
550	31	4,896	-13.7	-25.7	28	12.4
500	31	5,614	-19.0	-29.6	28	14.3
450	31	6,391	-24.6	-34.9	28	16.1
400	30	7,250	-30.8	-40.9	28	18.5
350	28	8,202	-38.1	-47.2	28	20.3
300	28	9,241	-46.7		28	23.4
250	28	10,427	-55.1		28	26.9
200	27	11,837	-59.0		28	33.3
175	27	12,677	-57.6		28	29.3
150	27	13,651	-57.1		28	24.0
125	26	14,801	-56.9		28	21.9
100	25	16,212	-58.7		28	18.1
80	25	17,610	-59.7		29	14.4
70	25	18,443	-60.4		29	12.2
60	24	19,400	-61.3		30	9.6
50	24	20,530	-61.9		30	6.5
40	23	21,917	-61.1		31	5.6
30	23	23,710	-59.7		32	4.3
25	23	24,854	-58.2		32	3.5
20	22	26,262	-56.5		[illegible]	5.1
15	16	28,110	-53.7		29	9.5
10						
7						

JOHNSTON IS., PACIFIC AREA
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	24.3	20.4	08	8.9
1000	31	145	22.5	18.9	08	10.2
950	31	565	18.7	16.9	08	11.9
900	31	1,048	15.6	12.5	09	11.4
850	31	1,532	12.9	8.5	09	9.3
800	31	2,040	10.6	1.8	09	7.5
750	31	2,576	8.7	-7.1	17	6.1
700	31	3,145	6.9	-12.8	09	5.2
650	31	3,750	4.5	-16.5	08	3.7
600	31	4,398	1.4	-20.2	05	2.7
550	31	5,093	-2.2	-24.1	01	4.0
500	31	5,845	-6.4	-29.0	33	5.5
450	31	6,660	-11.8	-33.6	33	8.3
400	31	7,551	-18.1	-38.6	33	11.7
350	31	8,539	-24.3	-42.9	32	15.7
300	31	9,644	-31.6	-49.0	32	19.6
250	31	10,908	-41.2	-56.7	31	21.6
200	31	12,387	-52.2		31	22.3
175	31	13,240	-58.4		31	20.6
150	31	14,193	-65.3		31	19.7
125	31	15,283	-73.0		32	17.2
100	29	16,567	-79.0		32	10.2
80	29	17,827	-80.6		35	3.9
70	29	18,565	-77.8		05	1.4
60	29	19,479	-72.3		11	1.5
50	29	20,563	-68.0		14	1.6
40	29	21,923	-62.2		06	.5
30	28	23,723	-57.1		29	2.0
25	28	24,889	-52.9		28	4.1
20	27	26,343	-48.4		28	4.9
15	25	28,251	-43.6		27	7.1
10	17	31,090	-39.0		27	8.0
7	7	33,414	-35.8			

KEY WEST, FLA.
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	22.6	18.9	13	3.8
1000	31	131	22.2	18.5	13	4.8
950	31	575	18.9	16.6	14	6.0
900	31	1,039	16.7	10.7	16	4.5
850	31	1,525	14.8	4.5	20	3.2
800	31	2,037	13.0	-3.5	22	3.0
750	31	2,577	10.6	-6.4	24	3.4
700	31	3,148	7.7	-13.9	26	5.2
650	31	3,754	4.2	-16.4	27	7.1
600	31	4,400	.2	-19.6	28	8.9
550	31	5,092	-4.1	-21.9	28	10.5
500	31	5,836	-9.2	-26.6	28	12.9
450	31	6,643	-14.8	-31.3	28	15.5
400	31	7,523	-21.4	-36.1	28	19.0
350	31	8,496	-28.6	-41.6	28	21.8
300	31	9,579	-36.7	-47.7	29	26.1
250	31	10,818	-45.5		29	33.3
200	31	12,274	-55.1		28	39.2
175	30	13,118	-59.5		28	38.2
150	30	14,074	-63.6		28	34.0
125	30	15,184	-67.6		28	27.4
100	30	16,512	-72.5		28	22.2
80	29	17,812	-75.3		27	14.3
70	29	18,588	-73.8		28	8.9
60	29	19,495	-70.9		27	4.2
50	28	20,563	-67.3		29	3.3
40	28	21,942	-63.3		34	2.8
30	27	23,734	-56.7		35	3.3
25	26	24,901	-52.7		31	2.0
20	25	26,354	-48.6		29	4.0
15	23	28,265	-44.2		26	7.9
10	17	31,011	-37.7		25	10.0
7						

+ KOROR, CAROLINE IS.
1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	27.4	23.3	05	4.9
1000	31	99	26.5	23.1	06	5.9
950	31	552	22.9	21.2	06	9.6
900	31	1,022	19.7	17.6	07	10.0
850	31	1,514	16.7	12.9	07	7.7
800	31	2,030	15.4	6.4	08	5.9
750	31	2,577	14.1	-.5	08	6.2
700	31	3,156	11.2	-3.2	09	6.7
650	31	3,772	8.0	-6.6	09	7.8
600	31	4,428	4.3	-9.9	10	10.0
550	31	5,131	.5	-15.1	10	11.0
500	31	5,890	-4.0	-18.9	10	12.1
450	31	6,715	-8.2	-24.9	10	12.5
400	31	7,619	-13.9	-29.3	10	11.0
350	31	8,624	-20.4	-36.0	10	11.1
300	31	9,742	-29.2	-43.6	10	10.6
250	31	11,017	-39.6	-50.3	12	12.9
200	31	12,503	-52.2		12	14.8
175	31	13,354	-59.0		12	15.1
150	31	14,303	-66.7		11	15.4
125	31	15,385	-74.5		10	16.1
100	30	16,658	-81.6		10	14.1
80	30	17,903	-81.3		09	8.8
70	30	18,659	-78.5		08	8.2
60	30	19,549	-72.5		08	9.5
50	30	20,640	-65.6		10	6.3
40	30	22,017	-59.7		23	2.3
30	30	23,836	-54.9		27	7.7
25	29	25,010	-51.8		27	10.5
20	28	26,469	-48.3		27	11.9
15	27	28,377	-44.9		27	13.0
10	20	31,108	-41.1		27	12.3
7	8	33,559	-36.6			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

KWAJALEIN, MARSHALL IS.
1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	[illegible]	26.9	23.1	06	6.7
1000	31	[illegible]	26.1	22.8	07	8.0
950	31	553	22.4	20.6	07	10.4
900	31	1,027	19.2	16.8	08	9.9
850	31	1,513	16.9	12.1	09	7.3
800	31	2,030	15.9	3.9	[illegible]	4.4
750	31	2,576	13.7	-1.0	[illegible]	3.2
700	31	3,155	11.2	-8.5	08	3.6
650	31	3,770	8.3	[illegible]	08	5.5
600	31	4,421	5.1	[illegible]	08	7.1
550	31	5,132	1.1	-22.5	08	9.0
500	31	5,891	-3.5	-26.6	08	10.8
450	31	6,716	-8.5	-31.8	09	11.8
400	31	7,619	-14.3	[illegible]	08	10.7
350	31	[illegible]	-21.2	[illegible]	07	7.4
300	31	9,738	-29.5	[illegible]	07	4.4
250	31	[illegible]	[illegible]	[illegible]	07	2.0
200	31	12,494	-52.5	[illegible]	[illegible]	2.5
175	31	13,344	-59.6	-71.4	11	2.8
150	31	14,290	-67.3		09	3.5
125	31	15,367	-75.5		08	5.5
100	25	16,630	-83.3		08	8.2
80	20	17,865	-84.5		04	10.9
70	14	18,620	[illegible]		10	8.5
60	12	19,514	[illegible]		09	7.5
50	12	20,604	-66.6		08	3.0
40	12	21,769	-61.6		25	2.6
30	12	23,775	-56.2		26	8.7
25	12	24,945	[illegible]		27	11.6
20	[illegible]	26,411	[illegible]		26	13.6
15	9	28,337	-43.0			
10	6	31,132	-38.1			
7	5	33,584	[illegible]			

LAKE CHARLES, LA.
1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	5	15.4	13.8	14	1.9
1000	31	100	16.1	12.1	16	3.1
950	31	536	14.7	6.4	18	6.2
900	31	993	13.4	4.0	21	6.7
850	31	1,473	11.8	-.5	23	8.2
800	31	1,979	9.3	[illegible]	24	9.5
750	31	2,512	7.4	[illegible]	24	10.7
700	31	[illegible]	4.5	-16.3	25	13.1
650	31	3,677	1.3	[illegible]	25	[illegible]
600	31	4,315	-3.1	-23.8	25	17.4
550	31	4,997	-8.5	-26.8	25	20.3
500	31	5,728	-14.1	[illegible]	25	21.3
450	31	6,519	-19.8	[illegible]	25	[illegible]
400	31	7,382	-26.2	[illegible]	25	[illegible]
350	31	8,337	-33.3	[illegible]	25	[illegible]
300	31	[illegible]	-41.0	[illegible]	25	[illegible]
250	31	[illegible]	-49.8		26	[illegible]
200	31	12,052	-56.0		26	49.7
175	31	12,899	-57.2		26	45.5
150	31	13,867	-59.0		26	43.0
125	31	[illegible]	-62.3		26	[illegible]
100	28	16,374	-66.3		26	[illegible]
80	27	17,717	-68.7		26	[illegible]
70	25	18,517	-68.4		26	[illegible]
60	24	19,441	-66.7		25	[illegible]
50	23	20,550	-64.1		26	4.9
40	22	21,921	-62.1		29	2.2
30	21	23,717	-57.9		30	3.9
25	21	24,874	-55.1		28	5.7
20	20	26,302	-52.4		27	8.2
15	18	28,175	-48.2		26	13.7
10	9	30,862	-40.6			

LANDER, WYO.
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	1,697	-6.2	[illegible]	24	[illegible]
800	31	1,924	-2.9	[illegible]	28	.5
750	31	2,434	-4.8	[illegible]	[illegible]	1.8
700	31	2,974	-7.4	[illegible]	[illegible]	2.9
650	31	3,547	[illegible]	[illegible]	[illegible]	3.6
600	31	4,153	-14.6	[illegible]	27	4.0
550	31	4,812	-18.8	-28.4	26	5.2
500	31	5,515	-23.8	[illegible]	27	5.2
450	31	6,275	-29.7	-38.9	26	5.5
400	31	7,103	-36.5	[illegible]	26	4.9
350	31	8,017	-43.9		27	4.9
300	31	9,031	-51.9		27	5.5
250	31	10,196	-57.4		27	7.1
200	31	11,611	-54.2		26	9.2
175	31	12,471	-52.8		26	10.4
150	31	13,407	-52.3		26	9.5
125	31	14,643	-54.5		27	8.7
100	30	16,063	-56.0		27	7.7
80	30	17,476	-57.8		26	7.0
70	[illegible]	18,317	-58.7		27	6.0
60	[illegible]	19,284	-59.7		26	4.8
50	29	20,422	-60.3		27	4.4
40	29	21,812	-60.8		26	3.1
30	27	23,605	-60.4		30	1.1
25	26	24,742	[illegible]		34	1.6
20	23	26,131	-59.8		33	2.6
15	13	27,937	-57.9		[illegible]	3.3

LIHUE, HAWAII
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	36	[illegible]	[illegible]	[illegible]	[illegible]
1000	31	[illegible]	[illegible]	[illegible]	[illegible]	8.6
950	31	632	16.9	[illegible]	07	10.2
900	31	1,091	[illegible]	[illegible]	07	9.8
850	31	1,571	[illegible]	8.8	08	9.0
800	31	2,074	8.3	[illegible]	[illegible]	9.2
750	31	2,606	7.5	-13.6	08	8.6
700	31	3,172	5.1	[illegible]	08	7.1
650	31	3,773	1.6	-21.4	08	5.8
600	31	4,412	-2.4	-25.3	07	5.7
550	31	5,097	-6.8	-28.1	06	5.4
500	31	5,834	-11.4	-32.8	04	4.8
450	31	6,634	-16.9	[illegible]	[illegible]	5.1
400	31	7,506	[illegible]	[illegible]	36	6.0
350	31	8,470	[illegible]	[illegible]	34	8.6
300	31	[illegible]	[illegible]	[illegible]	33	14.5
250	31	10,780	-45.6		32	[illegible]
200	31	12,247	[illegible]		31	25.8
175	31	13,102	-56.4		31	25.4
150	31	14,069	[illegible]		31	[illegible]
125	31	15,165	-67.2		[illegible]	19.2
100	29	16,513	[illegible]		[illegible]	13.5
80	29	17,815	-74.1		[illegible]	[illegible]
70	[illegible]	18,596	-72.9		30	3.5
60	28	19,505	[illegible]		31	1.3
50	28	[illegible]	-66.7		11	.8
40	28	[illegible]	-63.4		[illegible]	.2
30	28	23,751	-57.5		28	[illegible]
25	[illegible]	24,912	-54.7		28	[illegible]
20	[illegible]	26,354	[illegible]		27	5.5
15	24	[illegible]	-45.5		[illegible]	[illegible]
10	[illegible]	31,004	[illegible]		[illegible]	[illegible]

LITTLE ROCK, ARK.
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	[illegible]	11.1	[illegible]	[illegible]	.3
1000	24	116	11.4	[illegible]	[illegible]	[illegible]
950	31	526	[illegible]	[illegible]	21	[illegible]
900	31	976	[illegible]	[illegible]	22	[illegible]
850	31	1,449	[illegible]	[illegible]	23	[illegible]
800	[illegible]	[illegible]	[illegible]	[illegible]	23	[illegible]
750	[illegible]	2,475	3.5	[illegible]	24	[illegible]
700	[illegible]	[illegible]	.4	[illegible]	[illegible]	[illegible]
650	[illegible]	3,622	[illegible]	[illegible]	[illegible]	[illegible]
600	[illegible]	[illegible]	[illegible]	[illegible]	25	[illegible]
550	30	4,924	[illegible]	[illegible]	25	[illegible]
500	[illegible]	5,647	[illegible]	[illegible]	[illegible]	[illegible]
450	[illegible]	6,430	[illegible]	[illegible]	25	[illegible]
400	[illegible]	7,281	[illegible]	[illegible]	[illegible]	[illegible]
350	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
300	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
250	[illegible]	10,482	[illegible]		[illegible]	[illegible]
200	[illegible]	11,903	[illegible]		[illegible]	[illegible]
175	[illegible]	12,753	-55.9		[illegible]	[illegible]
150	[illegible]	13,733	[illegible]		[illegible]	[illegible]
125	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
100	[illegible]	16,277	[illegible]		[illegible]	[illegible]
80	[illegible]	17,654	[illegible]		[illegible]	[illegible]
70	[illegible]	18,473	[illegible]		[illegible]	[illegible]
60	[illegible]	19,417	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	-62.6		[illegible]	[illegible]
40	24	21,917	[illegible]		28	[illegible]
30	24	23,705	-59.3		30	[illegible]
25	[illegible]	24,853	[illegible]		30	[illegible]
20	[illegible]	26,269	[illegible]		[illegible]	[illegible]
15	[illegible]	28,130	[illegible]		26	[illegible]
10	13	[illegible]	[illegible]			

MCGRATH, ALASKA
992 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	22	103	-19.4	-22.3	34	.4
1000						
950	22	424	-15.3	-17.8	08	3.2
900	22	833	-14.0	-15.8	10	3.0
850	22	1,268	-14.2	[illegible]	15	1.9
800	22	1,727	-14.7	[illegible]	18	3.9
750	22	2,214	-17.1	[illegible]	19	4.5
700	22	2,728	-20.3	[illegible]	19	5.3
650	22	3,274	-23.3	[illegible]	19	5.7
600	22	3,856	-26.9	[illegible]	20	6.5
550	22	4,479	-30.5	[illegible]	21	7.7
500	22	5,151	-34.4	-40.0	22	8.3
450	22	5,881	-38.8	-42.3	22	9.7
400	22	6,682	-43.5	-43.4	23	10.2
350	22	7,573	-48.4		23	9.8
300	22	8,576	-51.5		24	9.8
250	22	[illegible]	-49.8		25	10.9
200	21	11,232	-47.0		26	12.3
175	21	12,118	-46.5		26	12.5
150	21	13,143	-45.9		26	12.9
125	21	14,357	-46.3		26	13.7
100	21	15,837	-47.5		25	13.6
80	[illegible]	17,305	-48.3		26	12.3
70	20	18,184	-49.0		25	10.3
60	[illegible]	19,194	-50.0		25	9.0
50	[illegible]	20,384	-50.6		25	8.0
40	20	21,836	-51.2		25	7.2
30	[illegible]	23,706	-51.6		25	6.1
25	[illegible]	[illegible]	[illegible]		26	5.0
20	18	26,343	-53.5		[illegible]	3.4
15	[illegible]	28,211	-55.0		28	5.2
10	5	30,718	-58.3			
7						
5						

MAJURO, MARSHALL IS.
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	3	27.8	22.5	06	6.0
1000	31	100	27.0	22.3	06	7.7
950	31	553	23.3	21.1	06	10.1
900	31	1,025	20.4	17.8	07	10.0
850	31	1,517	17.5	13.4	08	8.6
800	31	2,035	15.6	8.6	09	6.4
750	31	2,582	13.6	3.5	09	4.7
700	31	3,161	11.1	[illegible]	10	2.7
650	31	3,776	8.0	-7.8	[illegible]	3.6
600	31	4,433	5.4	-15.0	09	5.3
550	31	5,138	1.2	-18.6	09	7.1
500	31	5,898	-3.2	-23.4	08	8.6
450	31	6,725	-7.6	[illegible]	08	11.0
400	31	7,631	-13.5	[illegible]	07	10.7
350	31	8,637	-20.0	-38.7	07	7.9
300	31	9,760	-28.2	-45.2	08	3.7
250	31	11,040	-38.7	-53.6	12	1.9
200	31	12,552	-51.1		10	3.1
175	31	13,367	-57.8		09	3.6
150	31	14,342	-65.6		07	4.6
125	30	15,431	-73.6		06	6.0
100	28	16,708	[illegible]		07	8.4
80	27	17,955	-82.7		08	9.3
70	27	18,711	-76.6		09	8.5
60	27	19,612	-71.0		10	8.6
50	27	20,713	-63.9		09	5.3
40	27	22,099	-58.3		27	2.3
30	27	23,932	-53.6		27	10.0
25	27	25,114	-50.4		27	11.5
20	26	26,581	-47.1		26	13.6
15	26	28,507	-42.6		27	14.5
10	18	[illegible]	-37.8		25	5.7
7	11	33,756	-34.1			

MEDFORD, OREG.
969 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	401	3.2	.0	28	.5
1000						
950	31	561	3.9	1.5	29	1.0
900	31	[illegible]	2.3	-.8	22	1.0
850	31	1,450	-.8	-3.8	22	1.7
800	31	1,942	-3.5	[illegible]	25	[illegible]
750	31	2,450	-5.8	-12.9	27	4.3
700	31	2,968	-8.4	-16.4	28	6.1
650	31	3,560	-11.4	-19.8	30	6.7
600	31	4,171	-14.8	-23.4	30	7.1
550	31	4,824	-19.2	-26.7	30	8.4
500	31	5,526	-24.2	[illegible]	30	9.2
450	31	6,286	-29.5	-39.1	30	11.3
400	31	7,117	-35.6	[illegible]	30	12.9
350	31	8,036	-42.4	-44.7	30	14.4
300	31	9,058	-49.5		30	17.4
250	31	10,238	-54.6		31	20.1
200	30	11,660	-54.9		30	15.7
175	29	12,520	-53.3		30	14.5
150	27	13,507	-52.9		30	13.3
125	27	14,681	-54.0		30	11.4
100	27	16,106	-56.4		29	8.8
80	27	[illegible]	-58.3		30	7.6
70	27	18,356	-59.0		31	5.8
60	25	19,326	-59.8		31	4.1
50	25	20,464	-60.2		32	2.4
40	24	21,858	-60.1		33	1.9
30	24	23,656	-59.4		05	1.8
25	24	24,798	-59.1		04	1.4
20	23	26,199	-58.1		04	2.2
15	[illegible]	28,014	-56.9		[illegible]	1.4
10	19	30,604	-53.7		30	5.2
7	16	32,922	-48.4		29	14.3
5	12	35,143	-44.0			

MERIDA, MEXICO
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	11	[illegible]	20.6	12	2.1
1000	31	99	22.6	[illegible]	[illegible]	5.1
950	31	546	20.7	18.4	14	10.6
900	31	1,015	[illegible]	[illegible]	15	8.8
850	31	1,509	[illegible]	[illegible]	17	5.9
800	31	[illegible]	16.4	[illegible]	19	4.2
750	31	2,574	[illegible]	[illegible]	18	3.2
700	31	[illegible]	11.6	[illegible]	22	2.5
650	31	3,768	7.7	[illegible]	[illegible]	[illegible]
600	31	4,422	3.2	-16.6	28	4.8
550	31	5,121	-1.4	-22.7	27	6.8
500	31	5,872	-6.8	-26.5	27	8.7
450	31	6,687	[illegible]	-30.8	27	12.8
400	31	7,576	[illegible]	-34.7	27	15.3
350	31	8,560	-25.7	-40.1	27	19.2
300	31	9,657	-33.6	-46.5	27	24.1
250	31	10,910	-43.6		27	27.1
200	31	12,376	-54.0		28	27.4
175	31	13,223	-59.5		27	27.6
150	31	[illegible]	-65.2		27	22.1
125	31	15,275	-68.8		27	19.1
100	31	16,594	-73.8		27	12.6
80	31	17,884	-77.1		26	7.3
70	31	18,652	-75.8		26	5.3
60	30	19,552	-72.1		26	5.2
50	29	20,638	-67.8		26	[illegible]
40	27	21,999	-62.6		[illegible]	[illegible]
30	27	23,863	-55.4		[illegible]	[illegible]
25	24	24,975	-51.5		02	[illegible]
20	24	26,437	-47.6		31	[illegible]
15	23	[illegible]	-43.7		28	5.8
10	[illegible]	31,101	-36.3			

MIAMI, FLA.
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	4	21.2	[illegible]	11	[illegible]
1000	31	142	20.9	17.5	[illegible]	3.4
950	31	585	17.6	14.7	14	5.3
900	31	1,046	[illegible]	[illegible]	[illegible]	4.2
850	31	1,531	13.7	5.7	21	[illegible]
800	31	[illegible]	12.1	.6	[illegible]	[illegible]
750	31	2,580	9.9	[illegible]	[illegible]	4.6
700	31	[illegible]	[illegible]	[illegible]	27	[illegible]
650	31	3,755	[illegible]	[illegible]	27	[illegible]
600	31	4,401	[illegible]	[illegible]	[illegible]	[illegible]
550	31	5,091	[illegible]	[illegible]	28	[illegible]
500	31	5,834	[illegible]	[illegible]	28	[illegible]
450	31	[illegible]	[illegible]	[illegible]	28	[illegible]
400	31	7,515	[illegible]	[illegible]	[illegible]	[illegible]
350	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
300	31	9,565	[illegible]	[illegible]	[illegible]	[illegible]
250	31	10,799	-46.4		[illegible]	[illegible]
200	31	12,251	-55.4		29	[illegible]
175	31	13,096	-58.6		[illegible]	[illegible]
150	31	[illegible]	[illegible]		[illegible]	[illegible]
125	[illegible]	15,170	-66.5		[illegible]	[illegible]
100	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
80	[illegible]	17,816	[illegible]		[illegible]	[illegible]
70	[illegible]	18,597	[illegible]		[illegible]	[illegible]
60	[illegible]	19,508	[illegible]		[illegible]	[illegible]
50	[illegible]	20,601	[illegible]		31	3.3
40	[illegible]	21,962	[illegible]		[illegible]	[illegible]
30	[illegible]	23,761	[illegible]		35	[illegible]
25	[illegible]	[illegible]	[illegible]		31	3.7
20	[illegible]	26,385	[illegible]		[illegible]	[illegible]
15	[illegible]	28,290	[illegible]		27	9.8
10	[illegible]	31,046	[illegible]			

MIDLAND, TEXAS
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	874	7.2	.8	24	1.5
1000						
950						
900	31	[illegible]	[illegible]	[illegible]	24	2.2
850	31	[illegible]	[illegible]	[illegible]	[illegible]	6.1
800	31	1,943	[illegible]	[illegible]	26	8.4
750	31	2,471	[illegible]	[illegible]	26	[illegible]
700	31	3,027	.0	[illegible]	25	[illegible]
650	31	3,617	-3.5	[illegible]	25	15.2
600	31	4,244	[illegible]	[illegible]	25	[illegible]
550	31	4,915	-12.5	[illegible]	24	[illegible]
500	31	5,635	-18.1	[illegible]	24	[illegible]
450	31	6,413	[illegible]	[illegible]	24	[illegible]
400	[illegible]	7,263	-29.9	[illegible]	25	27.2
350	31	8,204	-36.8	[illegible]	25	30.9
300	31	9,252	[illegible]		25	34.3
250	31	10,456	[illegible]		26	39.0
200	31	11,893	-54.3		26	[illegible]
175	[illegible]	12,754	[illegible]		[illegible]	[illegible]
150	29	13,741	[illegible]		[illegible]	34.9
125	[illegible]	14,895	[illegible]		[illegible]	[illegible]
100	[illegible]	16,279	[illegible]		[illegible]	[illegible]
80	[illegible]	17,645	[illegible]		[illegible]	[illegible]
70	[illegible]	18,459	[illegible]		25	[illegible]
60	25	19,400	[illegible]		[illegible]	[illegible]
50	[illegible]	20,514	[illegible]		[illegible]	[illegible]
40	[illegible]	21,885	-63.3		[illegible]	[illegible]
30	[illegible]	23,668	-59.6		[illegible]	2.8
25	[illegible]	24,812	-57.8		[illegible]	4.5
20	[illegible]	26,229	-54.9		27	4.9
15	[illegible]	28,077	[illegible]		26	[illegible]
10	[illegible]	[illegible]	[illegible]			

MONTERREY, MEXICO
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	423	15.5	[illegible]	34	.5
1000						
950	31	528	16.8	[illegible]	[illegible]	.4
900	31	990	[illegible]	8.3	18	1.3
850	31	1,477	[illegible]	[illegible]	[illegible]	4.0
800	31	1,991	14.5	[illegible]	24	7.5
750	31	2,533	[illegible]	[illegible]	24	[illegible]
700	31	3,105	[illegible]	[illegible]	24	13.1
650	31	[illegible]	3.6	[illegible]	24	[illegible]
600	31	4,355	[illegible]	-20.5	25	[illegible]
550	31	5,042	[illegible]	[illegible]	25	[illegible]
500	31	5,781	[illegible]	[illegible]	25	[illegible]
450	31	6,581	[illegible]	[illegible]	[illegible]	[illegible]
400	31	7,455	[illegible]	-36.8	[illegible]	[illegible]
350	31	8,423	[illegible]	-42.5	[illegible]	[illegible]
300	31	9,500	[illegible]	-47.7	[illegible]	[illegible]
250	31	10,733	-46.8			
200	31	12,182	-55.9			
175	31	13,024	[illegible]			
150	[illegible]	13,981	[illegible]			
125	31	[illegible]	[illegible]			
100	[illegible]	16,432	-70.2			
80	[illegible]	[illegible]	-72.8			
70	[illegible]	18,538	-71.5			
60	[illegible]	19,453	[illegible]			
50	[illegible]	[illegible]	[illegible]		27	.2
40	[illegible]	21,919	[illegible]		[illegible]	.7
30	[illegible]	23,712	[illegible]		27	[illegible]
25	[illegible]	24,877	[illegible]		[illegible]	[illegible]
20	[illegible]	26,315	-51.1		[illegible]	[illegible]
15	[illegible]	[illegible]	-46.7			
10	[illegible]	30,925	-41.2			

MONETT, MO.
959 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	438	6.9	4.3	13	1.3
1000						
950	27	535	7.5	[illegible]	[illegible]	1.5
900	31	964	[illegible]	.6	21	3.8
850	31	1,433	4.9	[illegible]	[illegible]	4.9
800	31	1,926	[illegible]	[illegible]	[illegible]	6.7
750	31	2,447	[illegible]	[illegible]	[illegible]	8.8
700	31	2,999	[illegible]	[illegible]	[illegible]	[illegible]
650	31	[illegible]	-5.5	[illegible]	[illegible]	12.1
600	31	[illegible]	[illegible]	[illegible]	[illegible]	13.9
550	31	4,876	[illegible]	[illegible]	[illegible]	15.2
500	31	5,594	[illegible]	[illegible]	[illegible]	16.5
450	31	6,372	[illegible]	[illegible]	[illegible]	17.7
400	31	7,219	[illegible]	[illegible]	[illegible]	19.5
350	31	8,156	[illegible]	[illegible]	[illegible]	22.1
300	31	9,197	[illegible]		25	[illegible]
250	31	10,393	[illegible]		[illegible]	29.5
200	[illegible]	11,918	[illegible]		[illegible]	31.0
175	[illegible]	12,670	[illegible]		[illegible]	30.2
150	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
125	[illegible]	14,817	[illegible]		[illegible]	[illegible]
100	27	16,222	[illegible]		[illegible]	18.1
80	27	17,613	[illegible]		[illegible]	[illegible]
70	[illegible]	18,444	-62.1		[illegible]	10.4
60	[illegible]	19,393	-62.8		[illegible]	[illegible]
50	[illegible]	20,515	-62.7		[illegible]	4.1
40	[illegible]	21,892	[illegible]		[illegible]	2.8
30	[illegible]	23,676	[illegible]		[illegible]	2.4
25	[illegible]	[illegible]	[illegible]		[illegible]	3.3
20	[illegible]	26,226	[illegible]		[illegible]	5.3
15	[illegible]	[illegible]	[illegible]		[illegible]	10.5
10	[illegible]	[illegible]	[illegible]			

MONTGOMERY, ALA.
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	57	18.4	[illegible]	15	.7
1000	[illegible]	135	13.8	10.7	15	1.5
950	31	[illegible]	13.1	8.6	[illegible]	[illegible]
900	31	1,014	[illegible]	4.9	[illegible]	[illegible]
850	31	[illegible]	9.0	-.1	22	[illegible]
800	31	[illegible]	[illegible]	-3.2	23	9.5
750	31	[illegible]	4.5	-9.2	[illegible]	[illegible]
700	31	[illegible]	1.7	-15.0	25	[illegible]
650	31	[illegible]	-1.2	-19.0	26	[illegible]
600	31	4,305	-4.9	[illegible]	[illegible]	[illegible]
550	31	[illegible]	-9.3	[illegible]	[illegible]	[illegible]
500	31	5,713	-14.6	-31.8	[illegible]	[illegible]
450	31	6,502	-20.4	-35.5	[illegible]	[illegible]
400	31	7,363	-26.8	[illegible]	[illegible]	[illegible]
350	31	[illegible]	-33.8	[illegible]	[illegible]	[illegible]
300	31	9,373	-41.8	-51.7	[illegible]	[illegible]
250	31	[illegible]	-50.7		[illegible]	[illegible]
200	31	[illegible]	-57.6		[illegible]	[illegible]
175	31	12,657	-57.7		[illegible]	[illegible]
150	31	13,827	[illegible]		[illegible]	35.2
125	31	14,962	-62.2		[illegible]	31.8
100	[illegible]	16,329	-65.4		[illegible]	[illegible]
80	[illegible]	17,676	-67.4		[illegible]	17.7
70	[illegible]	18,480	-67.8		[illegible]	[illegible]
60	[illegible]	19,412	-66.1		[illegible]	7.7
50	[illegible]	20,523	-64.4		[illegible]	3.7
40	[illegible]	[illegible]	-63.3		[illegible]	3.3
30	[illegible]	23,676	-59.0		[illegible]	[illegible]
25	[illegible]	[illegible]	-56.3		[illegible]	5.5
20	[illegible]	[illegible]	-52.9		[illegible]	[illegible]
15	[illegible]	[illegible]	-49.1		[illegible]	[illegible]
10	[illegible]	[illegible]	-40.9			

NASHVILLE, TENN.
993 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	31	180	10.1	[illegible]	17	1.4
1000						
950	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
900	31	[illegible]	8.5	[illegible]	[illegible]	[illegible]
850	31	[illegible]	6.6	[illegible]	[illegible]	[illegible]
800	31	1,963	[illegible]	[illegible]	[illegible]	[illegible]
750	31	2,486	[illegible]	[illegible]	24	[illegible]
700	31	3,040	[illegible]	[illegible]	25	[illegible]
650	31	3,629	-4.3	[illegible]	[illegible]	[illegible]
600	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
550	31	4,927	[illegible]	[illegible]	[illegible]	[illegible]
500	31	5,647	[illegible]	[illegible]	[illegible]	[illegible]
450	31	6,428	[illegible]	[illegible]	[illegible]	[illegible]
400	31	7,281	[illegible]	[illegible]	[illegible]	[illegible]
350	31	8,225	[illegible]	[illegible]	[illegible]	[illegible]
300	31	9,275	[illegible]	[illegible]	[illegible]	[illegible]
250	31	10,478	[illegible]		[illegible]	[illegible]
200	31	11,900	[illegible]		[illegible]	[illegible]
175	31	12,742	[illegible]		[illegible]	[illegible]
150	31	13,718	[illegible]		[illegible]	[illegible]
125	31	[illegible]	[illegible]		[illegible]	[illegible]
100	31	[illegible]	[illegible]		[illegible]	[illegible]
80	31	17,637	[illegible]		[illegible]	[illegible]
70	31	18,458	[illegible]		[illegible]	[illegible]
60	31	19,403	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
40	[illegible]	21,894	[illegible]		[illegible]	[illegible]
30	[illegible]	23,680	[illegible]		[illegible]	[illegible]
25	[illegible]	24,822	[illegible]		[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
15	[illegible]	28,109	[illegible]		[illegible]	[illegible]
10	[illegible]	30,763	[illegible]			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* NOME, ALASKA
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	-17.3	-21.6	[illegible]	2.8
1000	22	72	-14.7	-20.4	[illegible]	2.1
950	31	428	-14.2	-19.6	06	3.3
900	31	837	-15.7	-20.0	[illegible]	3.0
850	31	[illegible]	-16.7	-21.0	08	3.3
800	31	[illegible]	-17.4	-22.1	08	3.3
750	31	[illegible]	-19.0	-24.0	08	2.4
700	31	2,716	-21.1	-27.9	10	2.0
650	31	3,260	-24.1	-31.8	10	1.4
600	31	3,840	-27.7	-35.5	15	.9
550	31	4,461	-31.6	-36.7	22	.7
500	31	5,129	-35.6	-43.3	22	2.0
450	31	5,855	-40.1	-42.3	24	3.4
400	31	6,651	-44.8		24	4.9
350	31	7,537	-49.5		25	6.7
300	31	8,537	-52.7		25	8.9
250	31	9,715	-51.1		25	8.4
200	31	11,180	-48.2		25	8.4
175	31	12,061	-47.7		24	8.8
150	31	13,160	-47.3		24	9.0
125	31	14,285	-47.6		24	10.2
100	31	15,759	-48.1		24	9.7
80	31	17,227	-48.8		24	9.5
70	30	18,108	-49.3		23	8.7
60	29	19,117	-49.8		24	8.4
50	28	20,309	-50.6		22	7.1
40	28	21,762	-51.1		23	7.1
30	28	23,633	-51.1		23	6.4
25	28	24,817	-52.0		23	5.7
20	25	26,266	-52.9		23	4.6
15	21	28,105	-55.2		25	6.2
10	10	[illegible]	-57.0			
7						

NORTH PLATTE, NEBR.
913 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	847	.3	-2.2	03	1.2
1000						
950						
900	30	970	1.6	-1.3	02	2.3
850	31	1,423	1.2	-4.6	36	2.1
800	31	1,909	-.3	-7.1	32	2.0
750	31	2,424	-2.5	-9.6	30	1.7
700	31	2,968	-5.7	-13.3	29	2.2
650	31	3,546	-8.9	-18.6	27	2.4
600	31	4,162	-12.8	-23.6	26	3.2
550	31	4,820	-17.2	-29.8	25	4.4
500	31	5,527	-22.5	-35.0	25	5.[illegible]
450	31	6,293	-27.9	-39.8	24	6.4
400	31	7,127	-34.6	-44.2	24	8.7
350	31	8,049	-41.7	-47.1	23	10.7
300	31	9,073	-49.6		23	14.7
250	31	10,250	-55.8		23	16.6
200	31	11,672	-54.3		24	15.7
175	31	12,536	-52.6		25	14.9
150	31	13,532	-52.7		25	14.5
125	31	14,705	-54.6		25	12.7
100	29	16,124	-56.8		25	11.3
80	29	17,533	-58.4		25	9.6
70	29	18,371	-59.4		25	9.0
60	28	19,333	-59.9		26	7.8
50	28	20,470	-60.9		26	5.8
40	26	21,856	-61.4		26	4.1
30	24	23,652	-60.3		30	1.5
25	23	24,791	-59.9		30	1.7
20	22	26,185	-59.6		30	2.3
15	19	28,001	-56.9		28	3.4
10	8	30,606	-53.1			
7						

OAKLAND, CALIF.
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	6	8.3	5.5	30	.5
1000	31	132	8.6	4.4	30	1.0
950	31	554	6.4	.6	31	2.6
900	31	996	4.3	-3.4	33	4.1
850	31	1,460	1.8	-7.3	32	5.2
800	31	1,947	-.5	-11.8	31	6.3
750	31	2,461	-2.8	-16.5	31	6.9
700	31	3,004	-6.1	-20.5	32	8.2
650	31	3,581	-9.2	-24.4	32	9.4
600	31	4,195	-12.9	-29.7	32	10.8
550	31	4,853	-17.4	-33.2	31	12.2
500	31	5,560	-22.5	[illegible]	31	14.3
450	31	6,326	-27.6	-40.2	32	16.5
400	31	7,163	-33.8	-45.0	32	19.4
350	31	[illegible]	-40.9	-48.6	32	21.7
300	31	9,118	-47.6		32	24.7
250	31	10,305	-53.9		31	25.5
200	31	11,729	-55.2		30	23.5
175	29	12,579	-53.1		29	20.9
150	29	13,572	-53.7		29	18.5
125	29	14,739	-55.8		29	16.1
100	28	16,144	-58.6		29	12.8
80	27	17,544	-60.1		29	9.3
70	24	18,377	-60.5		28	7.5
60	23	19,333	-61.3		29	6.5
50	23	20,465	-61.0		30	3.8
40	21	21,853	-61.0		30	3.1
30	19	23,647	-60.1		30	1.4
25	17	24,777	-59.8		27	1.5
20	17	26,176	-58.5		27	3.8
15	9	27,976	-56.2			
10						
7						

OMAHA, NEBR.
964 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	[illegible]	3.3	.9	08	2.1
1000						
950	29	535	4.2	.5	08	2.1
900	31	961	3.7	-1.9	12	1.5
850	31	1,424	2.1	-4.5	17	.9
800	31	1,912	.3	-7.[illegible]	21	1.1
750	31	2,428	-2.6	-9.1	24	1.9
700	31	2,973	-5.4	-13.2	24	2.1
650	31	3,553	-8.4	-18.0	24	4.0
600	29	4,169	-11.9	-22.7	24	5.3
550	29	4,830	-16.3	-27.5	25	6.6
500	29	5,540	-21.4	-32.4	25	8.0
450	29	6,309	-26.9	[illegible]	25	10.5
400	29	7,147	-33.3	-42.0	25	12.5
350	29	8,074	-40.3	-47.2	25	14.6
300	29	9,105	-47.9		25	18.7
250	29	10,288	-54.9		24	21.1
200	29	[illegible]	-54.7		25	20.0
175	29	12,567	-53.5		25	18.1
150	29	13,560	-53.0		25	17.2
125	29	14,732	-54.5		26	15.3
100	29	16,156	-56.3		26	12.5
80	29	17,565	-58.6		26	10.3
70	29	18,402	-59.4		26	9.4
60	28	19,365	-60.1		27	7.6
50	27	20,504	-60.7		27	5.6
40	26	21,889	-60.8		27	3.9
30	25	23,681	-60.6		31	2.3
25	22	[illegible]	-59.4		29	1.9
20	20	26,238	-58.0		31	2.5
15	14	28,070	-55.9		28	4.1
10	9	30,663	-51.9			
7						

+ PAGO PAGO, AMERICAN SAMOA
1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	30.8	25.4	08	1.9
1000	31	97	28.4	23.2	08	2.3
950	31	552	24.9	20.7	07	3.1
900	31	1,025	21.7	17.4	06	3.1
850	31	1,520	18.8	13.7	06	3.2
800	31	2,040	16.3	10.6	05	3.1
750	31	2,588	13.8	6.5	06	3.3
700	31	3,167	10.8	1.5	06	2.9
650	31	3,782	7.5	-2.2	05	3.0
600	31	4,438	3.8	-5.6	05	3.3
550	31	5,140	.0	-10.7	04	2.9
500	31	5,898	-4.4	-16.5	02	2.6
450	31	6,721	-8.9	[illegible]	01	2.5
400	31	7,624	-14.4	-28.4	01	2.5
350	31	8,626	-21.2	-34.8	33	1.7
300	31	9,743	-29.5	-42.4	29	1.5
250	31	11,017	-39.6	-51.1	27	2.1
200	31	12,503	-51.9		23	4.4
175	31	13,355	-58.8		23	5.7
150	31	14,305	-66.5		22	5.7
125	31	15,368	-74.2		22	4.5
100	31	16,664	-80.4		18	3.3
80	30	17,924	-78.7		10	6.3
70	30	18,695	-74.3		09	9.7
60	30	19,599	-71.0		09	14.8
50	30	20,693	-65.8		09	19.1
40	29	22,064	-61.0		09	21.3
30	27	23,879	-53.9		09	19.3
25	27	25,058	-51.0		09	18.7
20	27	26,521	-47.8		09	17.6
15	27	28,438	-43.7		09	16.5
10	20	31,210	-38.3		09	19.0
7	[illegible]	33,674	-35.2			

* PEORIA, ILL.
989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	200	5.0	2.0	05	1.5
1000						
950	31	533	5.8	1.6	11	1.1
900	31	975	4.5	-1.9	19	1.1
850	31	1,439	2.8	-5.8	24	1.8
800	31	1,928	.9	-8.3	23	3.4
750	31	2,445	-1.3	-11.4	23	5.1
700	31	2,993	-4.0	-14.3	24	6.5
650	31	3,574	-7.3	-17.6	24	7.0
600	31	4,194	-10.7	-22.[illegible]	24	9.2
550	31	4,858	-15.0	-26.7	24	10.9
500	31	5,572	-20.1	-30.7	24	12.8
450	31	6,344	-25.6	-36.2	24	14.1
400	31	7,187	-32.2	-41.9	24	15.8
350	31	8,118	-39.3	-45.0	24	17.7
300	31	9,154	-47.2		25	19.9
250	31	10,339	-54.7		25	22.9
200	31	11,754	-57.0		25	23.5
175	31	12,602	-55.7		26	22.3
150	31	13,586	-55.0		26	19.9
125	31	14,750	-56.1		26	17.5
100	31	16,159	-58.1		26	15.1
80	30	17,560	-59.8		26	12.6
70	[illegible]	18,393	-60.4		27	10.8
60	29	19,352	-61.2		27	8.2
50	29	20,481	-62.3		28	5.9
40	28	21,859	-61.9		28	4.4
30	28	23,645	-60.5		30	3.7
25	26	24,782	-59.4		29	4.1
20	26	26,185	-57.9		28	4.8
15	24	27,997	-56.4		27	8.3
10	24	30,600	-50.9		27	17.0
7	21	32,952	-45.4		26	26.5
5	10	35,192	-40.8			

* PITTSBURGH, PA.
973 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	359	5.3	1.7	12	1.1
1000						
950	30	563	6.0	1.0	18	2.0
900	31	997	5.2	-.4	23	4.7
850	31	1,463	3.5	-3.0	25	5.9
800	31	1,954	1.4	-6.7	26	6.6
750	31	2,471	-1.1	-10.5	26	7.3
700	31	3,019	-3.8	-14.2	26	8.9
650	31	3,601	-6.8	-17.5	27	9.7
600	31	4,222	-10.5	-22.1	27	10.8
550	31	4,886	-14.7	-25.4	27	12.4
500	31	5,602	-19.5	-30.5	26	13.9
450	31	6,376	-25.0	-34.6	27	16.0
400	31	7,221	-31.5	-40.4	27	17.7
350	31	8,155	-38.7	-43.2	27	19.5
300	30	9,195	-46.3		26	21.5
250	31	10,365	-53.9		26	24.3
200	31	11,802	-58.5		27	27.7
175	30	12,643	-57.8		27	26.6
150	31	13,619	-56.4		27	24.3
125	[illegible]	14,775	-56.9		27	19.9
100	[illegible]	16,181	-58.8		27	17.1
80	[illegible]	17,576	-60.5		27	13.7
70	[illegible]	18,407	-61.3		28	11.6
60	[illegible]	19,362	-61.6		29	9.6
50	28	20,490	-62.0		29	6.6
40	28	21,869	-62.0		29	6.6
30	28	23,655	-60.5		31	5.1
25	28	24,794	-59.3		30	4.9
20	27	26,201	-57.7		28	6.8
15	24	28,025	-55.7		28	10.8
10	18	30,649	-49.6		27	19.3
7	7	33,038	-43.8			
5						

+ PONAPE, CAROLINE IS.
1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	28.6	23.9	06	4.8
1000	31	89	27.2	22.3	06	5.5
950	31	542	23.2	20.7	07	9.3
900	31	1,012	19.7	17.5	07	9.8
850	31	1,504	17.3	13.1	08	8.3
800	31	2,022	16.1	7.2	08	5.4
750	31	2,569	14.1	.3	10	4.0
700	31	3,148	10.8	-4.[illegible]	10	4.9
650	31	3,763	8.0	-8.2	09	6.5
600	31	4,420	4.8	-15.6	09	9.2
550	31	5,124	.8	-20.5	09	10.1
500	31	5,883	-3.7	-24.2	09	12.0
450	31	6,708	-8.1	-29.4	09	13.7
400	31	7,613	-13.7	-33.5	09	11.7
350	31	8,618	-20.3	-38.9	08	9.6
300	31	9,739	-28.3	-45.1	09	6.4
250	31	11,019	-38.8	-53.1	12	5.8
200	31	12,510	-51.3		11	5.9
175	31	13,364	-58.1		11	5.9
150	31	14,317	-66.1		10	7.0
125	31	15,402	-74.0		09	8.7
100	30	16,675	-82.5		08	10.3
80	29	17,906	-84.5		09	12.2
70	28	18,656	-78.4		09	10.1
60	28	19,548	-72.2		09	9.2
50	28	20,641	-64.5		12	5.0
40	28	22,021	-59.8		27	2.4
30	28	23,842	-54.7		28	10.3
25	28	25,016	-51.7		27	13.7
20	28	26,476	-48.2		27	15.6
15	28	28,388	-44.8		26	15.7
10	18	31,117	-40.3		25	12.3
7	5	33,536	-35.7			
5						

PORTLAND, MAINE
1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	20	.4	-4.9	36	1.3
1000	29	172	.8	-4.9	[illegible]	2.3
950	31	565	1.1	-6.5	34	1.3
900	31	999	.1	-8.8	28	1.6
850	31	1,457	-1.0	-10.4	29	2.7
800	31	[illegible]	-2.1	-11.9	28	4.8
750	31	2,451	-3.8	-13.1	28	7.6
700	31	2,993	-6.5	-16.0	28	10.0
650	31	3,570	-9.2	-19.8	28	11.4
600	31	4,185	-12.4	-22.9	29	12.4
550	31	4,845	-16.5	-26.9	28	14.1
500	31	5,565	-21.3	-31.0	28	15.3
450	31	6,324	-26.8	-37.3	28	17.2
400	31	7,163	-32.9	-42.8	28	20.2
350	31	8,092	-39.7	-46.2	28	22.8
300	31	9,127	-47.2		28	24.2
250	31	10,313	-54.7		28	27.1
200	31	11,726	-58.3		28	26.0
175	31	12,571	-56.0		28	22.2
150	31	13,555	-55.0		28	18.5
125	31	14,719	-55.6		28	17.1
100	31	16,137	-57.1		28	13.6
80	31	17,543	-58.9		29	12.2
70	31	18,380	-59.6		29	11.4
60	31	19,343	-60.1		29	9.8
50	31	20,479	-60.8		30	8.1
40	31	21,867	-60.7		31	5.9
30	28	23,667	-59.7		31	4.1
25	27	24,809	-59.0		31	4.7
20	24	26,221	-57.7		29	6.0
15	23	28,044	-55.9		28	9.2
10	13	30,661	-51.8		27	19.4
7						
5						

■ QUILLAYUTE, WASH.
1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	58	4.0	2.9	12	.8
1000	26	131	4.6	3.5	16	1.1
950	31	531	2.8	1.2	19	4.[illegible]
900	31	967	.1	-1.7	20	5.3
850	31	1,423	-2.7	-5.2	21	5.9
800	31	1,901	-5.3	-10.1	22	6.4
750	31	2,406	-7.6	-14.8	24	7.0
700	31	2,940	-10.6	-19.1	25	6.9
650	31	3,507	-13.6	-22.3	25	8.1
600	31	4,112	-17.2	-25.0	26	9.1
550	31	4,759	-21.4	-29.3	26	9.5
500	31	5,455	-26.2	-34.1	26	10.5
450	31	6,209	-31.6	-39.1	27	11.1
400	31	7,032	-37.7	-43.4	28	12.7
350	31	7,943	-44.0		28	14.3
300	31	8,961	-50.2		29	16.5
250	30	10,138	-54.1		29	16.8
200	30	11,570	-53.1		29	14.9
175	30	12,433	-51.8		28	13.5
150	29	13,434	-51.2		29	11.6
125	29	14,616	-52.4		29	9.5
100	27	16,046	-54.1		29	7.4
80	27	17,470	-55.9		29	5.8
70	27	18,319	-56.6		30	4.7
60	27	19,296	-56.9		31	3.2
50	27	20,449	-57.6		34	1.8
40	25	21,857	-58.0		01	2.5
30	20	23,674	-58.0		05	4.0
25	19	24,823	-57.9		06	4.4
20	16	26,231	-58.1		05	4.6
15	15	28,047	-57.7		06	6.4
10	14	30,608	-56.2		04	4.9
7	6	32,887	-53.8			
5						

RAPID CITY, S. DAK.
9[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	906	-.5	-4.4	34	1.8
1000						
950						
900	15	1,012	-.7	-4.7	35	1.8
850	30	1,427	1.1	-5.7	28	1.7
800	30	1,913	-1.2	-8.4	30	2.1
750	30	2,426	-3.8	-10.8	[illegible]	1.6
700	30	2,967	-7.1	-14.2	29	1.3
650	30	3,542	-10.4	-18.3	26	2.1
600	30	4,154	-13.8	-23.4	25	3.9
550	30	4,810	-18.1	-29.0	25	5.4
500	[illegible]	5,515	-23.2	-33.4	25	5.7
450	30	6,278	-28.9	-39.0	25	6.0
400	[illegible]	7,110	-35.5	-45.5	25	7.9
350	30	8,027	-43.0		24	8.5
300	30	9,045	-51.1		23	9.6
250	[illegible]	10,215	-56.8		23	10.1
200	30	11,633	-54.0		25	11.4
175	28	12,498	-52.4		25	10.3
150	28	13,496	-52.1		25	10.1
125	28	14,671	-54.0		25	9.4
100	28	16,097	-55.6		26	8.2
80	28	17,512	-57.6		26	6.9
70	27	18,349	-58.2		25	6.6
60	24	19,313	-58.8		[illegible]	5.6
50	23	20,455	-59.4		25	5.1
40	23	21,849	-60.2		27	3.4
30	21	23,638	-60.1		30	2.8
25	[illegible]	24,777	-59.8		32	2.1
20	[illegible]	26,174	59.0		32	2.5
15	13	[illegible]	-57.5		31	1.9
10						

ST CLOUD, MINN.
978 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	316	-.1	-2.3	05	1.0
1000						
950	31	[illegible]	1.0	-3.3	10	2.1
900	31	985	.2	-6.0	13	2.0
850	31	1,443	-.7	-10.4	14	1.2
800	31	1,926	-2.3	-12.0	18	1.1
750	31	2,437	-4.4	-14.4	23	1.8
700	31	2,978	-7.1	-18.2	24	2.6
650	31	3,553	-10.3	-21.9	25	3.1
600	31	4,165	-14.1	-26.2	25	3.6
550	31	4,820	-18.5	-30.3	25	4.6
500	31	5,524	-23.3	-34.4	24	6.4
450	31	6,287	-28.9	-39.7	24	7.9
400	31	7,119	-35.1	-44.4	24	9.3
350	31	8,039	-42.4	-44.9	24	10.0
300	31	[illegible]	-50.2		24	12.9
250	31	10,231	-56.7		24	16.0
200	31	11,642	-56.0		25	14.9
175	31	12,494	-54.1		25	13.3
150	31	13,486	-53.3		25	12.9
125	31	14,658	-54.6		26	11.1
100	31	16,083	-56.1		26	9.9
80	30	17,496	-58.0		26	8.8
70	30	18,337	-58.8		27	8.2
60	30	19,303	-59.4		27	7.3
50	30	20,443	-60.1		27	5.7
40	30	21,835	-60.3		29	4.6
30	30	23,629	-60.1		31	2.5
25	30	24,768	-59.7		31	2.2
20	29	26,164	-59.0		31	3.0
15	25	27,987	-58.1		32	3.6
10	13	30,544	-55.7			

* ST PAUL IS., ALASKA
10[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	-6.5	-8.2	05	4.2
1000	15	98	-10.1	-12.5	03	3.4
950	31	405	-9.0	-9.4	05	3.5
900	31	824	-9.6	-11.8	05	1.4
850	31	1,265	-10.1	-14.2	28	.7
800	31	1,731	-12.2	-16.8	27	2.2
750	31	2,223	-14.3	-19.5	26	3.7
700	31	2,743	-17.0	-22.7	26	4.4
650	31	3,297	-20.0	-26.1	26	5.7
600	31	3,887	-22.8	-30.3	26	6.9
550	31	4,521	-26.0	-33.7	26	9.0
500	31	5,205	-30.6	-38.3	26	9.5
450	31	5,946	-35.4	-42.1	26	10.1
400	31	6,757	-40.7	-44.2	26	10.0
350	31	7,656	-46.9		24	10.4
300	31	8,662	-52.1		24	12.3
250	31	9,839	-52.6		24	14.5
200	31	11,292	-50.0		24	13.3
175	31	12,169	-48.4		23	12.2
150	31	13,184	-48.3		23	12.5
125	31	14,385	-48.3		22	12.9
100	31	15,853	-48.8		22	11.9
80	31	17,314	-50.0		22	12.1
70	30	18,188	-50.6		21	11.1
60	30	19,192	-51.4		22	9.9
50	29	20,371	-52.1		21	8.4
40	28	21,814	-52.0		20	7.5
30	27	23,671	-52.5		19	5.3
25	24	24,844	-53.1		19	4.7
20	23	26,273	-54.0		17	3.6
15	21	28,127	-54.5		14	2.5
10	15	30,743	-54.6			

SALEM, ILL.
992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	174	7.4	5.4	09	1.0
1000						
950	31	529	8.2	3.6	17	2.7
900	31	975	6.8	-.7	21	4.4
850	31	1,443	5.0	-3.7	23	5.6
800	31	1,937	2.9	-7.1	23	6.9
750	31	2,457	.6	-10.8	24	7.9
700	31	3,008	-2.2	-13.8	25	8.6
650	31	3,594	-5.8	-17.4	24	10.0
600	31	4,217	-9.7	-21.9	25	11.1
550	31	4,884	-14.2	-26.6	25	12.0
500	31	5,602	-18.9	-30.1	24	14.8
450	31	6,378	-24.6	-34.4	25	15.4
400	31	7,224	-31.2	-40.6	24	17.1
350	31	8,160	-38.1	-45.9	25	16.1
300	31	9,202	-45.4		25	21.9
250	31	[illegible]	-53.2		25	28.5
200	29	11,810	-57.1		26	27.6
175	29	12,658	-56.1		26	25.2
150	29	13,639	-55.6		26	21.6
125	29	14,798	-57.0		26	19.5
100	28	16,200	-58.9		26	16.5
80	27	[illegible]	-60.8		26	12.0
70	27	18,427	-61.4		26	9.9
60	27	[illegible]	-62.1		27	7.6
50	27	20,508	-62.6		29	4.2
40	27	21,866	-61.9		28	3.9
30	27	23,674	-59.9		30	3.0
25	27	24,815	-59.1		30	3.9
20	27	26,221	-57.2		29	6.4
15	25	[illegible]	-54.2		27	9.8
10	[illegible]	30,669	-48.9		27	20.2

SALEM, OREG.
1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	61	4.2	1.6	18	2.4
1000	26	144	5.7	3.6	20	2.4
950	31	548	3.9	1.7	21	4.0
900	31	985	1.1	-1.0	23	4.8
850	31	1,443	-1.7	-4.2	24	5.6
800	31	1,923	-4.3	-9.2	24	5.9
750	31	2,430	-6.5	-14.8	26	6.5
700	31	2,967	-8.8	-17.6	27	7.2
650	31	3,538	-12.1	-20.6	27	6.9
600	31	4,146	-15.8	-25.1	27	7.5
550	31	[illegible]	-20.2	-28.5	27	8.2
500	31	5,496	-25.2	-35.6	27	9.8
450	31	6,254	-30.4	-40.2	28	11.1
400	31	7,081	-36.6	-44.3	28	13.1
350	31	7,996	-43.2	-44.4	29	15.0
300	31	9,016	-49.9		29	17.0
250	31	10,194	-54.3		30	19.3
200	31	11,620	-54.1		30	15.7
175	31	12,480	-52.3		29	14.0
150	31	13,478	-52.2		29	12.5
125	31	14,656	-53.3		29	10.6
100	31	16,086	-55.6		29	8.7
80	31	17,503	-57.0		30	6.3
70	29	18,347	-58.2		30	4.7
60	29	19,317	-58.7		30	4.[illegible]
50	28	20,462	-58.9		32	2.6
40	27	21,864	-59.2		01	2.3
30	25	23,670	-58.6		06	2.0
25	24	24,813	-58.6		06	3.0
20	21	26,221	-58.0		06	4.7
15	13	28,022	-57.5			
10						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SALT LAKE CITY, UTAH
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,288	2.4	-2.6	16	1.5
1000						
950						
900						
850	31	1,443	2.1	-4.5	17	1.7
800	30	1,931	-1.0	-6.5	19	2.2
750	30	[illegible]	-4.3	-8.9	20	2.0
700	30	[illegible]	-7.8	-12.7	25	1.8
650	30	[illegible]	-11.0	-16.7	26	3.5
600	30	[illegible]	-14.6	-22.4	26	3.3
550	30	4,821	-18.7	-27.1	27	3.4
500	30	5,525	-23.7	-32.1	28	3.9
450	30	6,286	-29.2	-37.8	27	4.1
400	30	7,116	-35.9	-42.9	27	4.6
350	30	8,033	-43.2		27	5.1
300	30	9,050	-51.2		27	5.8
250	30	10,221	-55.8		28	9.1
200	30	11,644	-53.9		28	11.7
175	30	12,505	[illegible]		27	11.6
150	30	13,503	-52.4		27	11.5
125	30	14,679	-53.5		27	10.5
100	30	16,105	-56.4		27	8.5
80	30	17,514	-58.4		26	7.7
70	30	18,353	-58.7		27	6.6
60	29	19,316	-59.5		27	5.6
50	28	20,455	-60.2		26	4.0
40	27	21,844	-60.5		27	3.3
30	[illegible]	23,644	-59.6		27	1.8
25	19	24,786	-59.6		29	1.9
20	17	26,182	-58.6		[illegible]	2.7
15	11	27,988	-57.2		[illegible]	3.3
10						
7						
5						
4						

SAN DIEGO, CALIF.
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	124	9.8	7.7	[illegible]	.6
1000	15	144	10.4	7.2	31	.2
950	31	550	8.8	5.4	26	2.5
900	31	995	[illegible]	.8	27	3.4
850	31	1,452	3.4	-3.5	28	4.3
800	31	1,952	1.1	-8.9	28	5.6
750	31	2,468	-1.3	-14.8	28	7.3
700	31	3,015	-3.5	-19.9	29	10.1
650	31	3,598	-6.2	-22.6	29	12.5
600	31	4,219	-9.5	-26.7	29	14.8
550	31	4,866	-13.9	-31.7	29	17.0
500	31	[illegible]	-18.8	-35.9	29	19.5
450	31	6,378	-24.8	-40.7	29	21.7
400	31	7,224	-31.2	-46.5	29	24.5
350	31	8,160	-38.0	-52.1	28	[illegible]
300	31	9,202	-45.3		28	29.8
250	31	10,399	-52.6		28	31.2
200	30	11,826	-55.8		28	32.6
175	29	12,632	-54.8		28	33.5
150	[illegible]	13,607	-55.8		27	[illegible]
125	[illegible]	14,824	-57.3		27	25.1
100	29	16,221	-61.3		27	17.5
80	28	[illegible]	-62.7		27	12.9
70	28	18,424	-63.1		27	8.7
60	28	19,372	-62.9		27	7.2
50	27	20,497	-62.1		26	6.3
40	27	21,883	-60.9		25	3.4
30	26	23,676	-60.0		28	2.6
25	[illegible]	24,821	-58.3		28	3.9
20	24	26,231	-56.1		27	6.5
15	[illegible]	28,078	-52.2		27	10.8
10	[illegible]	30,774	-45.4		27	17.8
7						
5						
4						

SAN JUAN, P. R.
1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	6	23.5	20.1	14	1.8
1000	31	142	23.3	19.6	10	3.8
950	31	568	20.0	17.4	10	6.0
900	31	1,054	17.0	14.3	09	5.8
850	31	1,540	14.1	9.6	09	5.2
800	31	2,051	12.4	2.8	08	3.8
750	31	2,591	10.5	-4.1	08	2.4
700	31	3,162	7.7	-9.4	35	.7
650	31	3,769	4.3	-13.4	29	2.0
600	31	4,416	.6	-17.9	28	2.9
550	31	5,108	-3.7	-23.5	29	3.7
500	31	5,854	-8.5	-27.1	29	5.9
450	31	6,664	-13.5	-31.6	30	8.4
400	31	[illegible]	-19.8	-37.3	29	12.0
350	31	8,530	-26.2	-43.6	[illegible]	15.5
300	31	9,625	-33.6	-50.1	28	20.2
250	31	10,882	-42.3		27	24.9
200	30	12,355	-52.8		27	[illegible]
175	30	13,206	-58.6		27	26.9
150	30	14,160	[illegible]		27	24.5
125	30	15,258	-70.4		28	20.5
100	29	16,569	-74.1		29	14.0
80	29	17,858	-76.7		29	7.4
70	[illegible]	18,629	-74.7		[illegible]	5.0
60	[illegible]	19,534	-70.9		[illegible]	4.0
50	28	20,624	-66.7		35	2.3
40	[illegible]	21,987	-62.9		03	2.7
30	[illegible]	23,783	-55.8		36	1.5
25	23	24,955	-51.6		28	.8
20	[illegible]	26,421	-46.9		25	1.6
15	16	28,345	-41.9		24	2.2
10	9	31,097	-39.8			
7						
5						
4						

* SAULT STE MARIE, MICH.
990 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	[illegible]	-.8	-3.7	07	1.8
1000						
950	31	[illegible]	-.9	-5.3	28	1.6
900	31	981	-.8	-6.8	30	1.1
850	31	1,437	-1.2	-9.8	29	2.3
800	31	1,920	-2.5	-11.8	29	3.1
750	31	2,431	-4.5	-15.2	27	4.2
700	31	[illegible]	-7.4	-18.0	28	5.4
650	31	3,546	-10.0	-21.6	28	6.2
600	31	[illegible]	-13.5	-24.6	28	7.6
550	31	4,816	-17.7	-29.7	28	8.8
500	31	5,522	-22.6	-33.6	28	11.1
450	31	6,287	-28.0	-35.9	27	13.5
400	31	7,123	-34.0	-42.0	27	16.1
350	31	8,047	-41.3	-46.1	27	18.8
300	31	[illegible]	-49.3		27	20.6
250	31	[illegible]	-56.0		26	22.5
200	31	11,664	-56.7		26	22.8
175	31	12,516	-54.2		27	20.0
150	29	13,507	-53.7		27	17.6
125	28	14,679	-54.1		27	15.3
100	28	16,106	-55.4		27	13.3
80	27	17,527	-57.1		27	11.6
70	27	18,370	-57.9		27	10.6
60	26	19,340	-58.8		28	9.2
50	26	[illegible]	-59.7		28	7.5
40	[illegible]	21,878	-59.6		30	6.0
30	26	23,677	-59.5		31	3.6
25	25	24,821	-59.0		31	3.6
20	24	26,222	-58.5		31	4.5
15	23	[illegible]	-57.3		30	4.9
10	21	[illegible]	-54.5		28	10.0
7	18	32,941	-49.6		28	17.9
5	[illegible]	35,152	-45.3			
4	5	36,600	-42.7			

* SHREVEPORT, LA.
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	12.0	8.4	16	1.2
1000	21	116	12.1	8.7	15	.9
950	31	[illegible]	12.7	7.7	20	5.4
900	31	980	11.2	3.6	[illegible]	6.6
850	31	1,456	9.7	-2.6	23	7.9
800	31	1,958	7.5	-5.7	24	8.5
750	31	2,487	5.1	-10.6	25	10.6
700	31	3,048	2.1	-15.5	25	12.6
650	31	3,643	-1.0	-20.8	25	15.1
600	31	4,276	-5.0	-24.3	25	17.7
550	31	4,954	-10.0	-26.9	25	19.9
500	31	5,680	-15.8	-30.5	25	21.8
450	31	6,466	-21.6	-35.7	25	23.5
400	31	7,322	-28.2	-41.6	25	25.5
350	31	8,270	-35.3	-48.1	25	29.9
300	31	9,323	-43.1	-48.8	25	33.8
250	31	10,528	-51.6		26	38.6
200	31	11,957	-56.2		26	45.0
175	31	[illegible]	-56.2		26	42.4
150	30	13,784	-57.4		26	39.0
125	[illegible]	14,927	-60.6		26	33.1
100	[illegible]	16,303	-64.2		26	25.1
80	29	17,660	-66.3		26	19.4
70	29	18,469	-66.7		25	13.4
60	29	19,401	-66.4		[illegible]	9.1
50	29	20,511	-64.6		26	5.3
40	[illegible]	21,880	-63.1		27	[illegible]
30	27	23,662	-60.1		29	3.1
25	26	24,808	-57.6		28	4.9
20	24	26,224	-54.5		27	9.7
15	22	28,081	-51.2		26	14.9
10	[illegible]	30,750	-44.8		26	25.8
7	9	33,173	-37.1			
5						
4						

SPOKANE, WASH.
[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	720	1.7	-1.7	19	1.9
1000						
950						
900	31	965	3.2	-2.0	[illegible]	3.2
850	31	1,426	[illegible]	-5.5	23	4.2
800	31	1,910	-2.7	-8.1	24	4.7
750	31	2,419	-6.6	-11.8	25	5.4
700	31	2,954	-10.2	-16.2	25	5.8
650	31	3,522	-13.6	-20.8	26	6.5
600	31	4,126	-17.2	[illegible]	26	7.2
550	31	4,774	-20.9	-32.5	26	7.2
500	31	5,472	-25.5	-35.1	27	7.6
450	31	6,228	-30.8	-39.8	27	8.5
400	31	[illegible]	[illegible]	-45.2	27	9.8
350	31	7,967	-43.8	-48.9	27	10.4
300	31	8,983	-51.0		27	11.7
250	31	10,153	-56.2		[illegible]	13.7
200	31	11,576	-53.1		28	11.1
175	31	12,441	-51.2		28	10.1
150	31	13,445	-51.0		28	9.5
125	31	14,629	-52.1		28	8.3
100	31	[illegible]	-54.3		28	6.1
80	31	17,489	-56.1		28	5.5
70	31	18,337	-56.7		29	4.1
60	31	19,314	-57.2		29	3.4
50	31	[illegible]	-58.2		[illegible]	2.2
40	30	21,873	-58.5		02	2.1
30	29	[illegible]	-57.9		03	2.8
25	26	24,834	-58.0		06	3.7
20	21	26,243	-57.5		04	3.3
15	17	28,070	-57.2		[illegible]	3.5
10	[illegible]	30,619	-56.9			
7						

* SWAN ISLAND, W. I.
1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	25.9	22.7	12	5.8
1000	31	112	25.5	21.6	12	6.6
950	31	562	21.8	19.6	12	8.2
900	31	1,031	18.9	14.6	12	7.8
850	31	1,521	16.7	8.2	12	6.4
800	31	2,036	14.4	3.3	12	5.0
750	31	2,579	12.3	-4.2	11	4.9
700	31	3,155	10.1	-10.5	10	3.4
650	31	3,768	7.6	-14.8	09	1.7
600	31	4,422	4.2	-18.1	01	2.0
550	31	5,124	-.2	-21.9	35	3.5
500	31	5,879	-5.4	-25.8	33	4.6
450	31	6,697	-11.1	-30.5	31	5.6
400	31	7,590	-17.7	-35.5	31	8.2
350	31	8,578	-25.0	-41.4	30	12.0
300	31	9,678	-33.2	-47.8	30	15.7
250	30	10,931	-42.9		29	18.9
200	30	12,400	-53.9		28	20.8
175	30	13,245	-60.0		29	19.4
150	30	14,194	-65.8		27	18.4
125	30	15,288	-70.6		28	14.7
100	30	16,594	-76.0		28	9.6
80	29	17,874	-78.2		31	2.1
70	29	18,637	-76.6		03	1.1
60	29	19,535	-72.5		35	.7
50	29	20,623	-66.9		33	1.0
40	29	21,987	-61.9		36	2.2
30	28	23,801	-53.8		36	1.9
25	28	24,983	-50.2		32	1.5
20	28	26,453	-46.2		27	2.5
15	[illegible]	28,371	-42.8		27	1.8
10	21	31,135	-38.5		[illegible]	1.9
7	5	33,600	-31.4			

TAMPA, FLA.
1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	16.8	14.7	12	1.7
1000	31	144	18.1	14.5	14	3.2
950	31	584	16.6	10.8	17	5.0
900	31	1,043	14.4	6.5	18	4.4
850	31	1,525	12.5	.6	21	4.2
800	31	2,032	10.9	-3.7	24	5.3
750	31	2,568	8.4	-7.7	25	6.7
700	31	3,135	5.5	-12.5	26	8.4
650	31	3,737	2.3	-16.8	26	10.7
600	31	4,379	-1.5	-20.1	27	13.2
550	31	5,066	-6.3	-23.0	27	16.6
500	31	5,804	-11.3	[illegible]	27	18.6
450	31	6,604	-17.0	-30.6	27	20.1
400	31	7,476	-23.5	-35.6	27	21.4
350	31	8,442	-30.8	-41.6	28	23.6
300	31	9,514	-39.0	-46.7	28	25.7
250	31	10,740	-48.3		28	32.8
200	31	12,162	-55.8		28	41.6
175	31	13,027	-58.4		28	38.8
150	31	13,990	-61.4		28	35.1
125	31	15,111	-65.1		28	30.2
100	31	16,456	-69.5		28	23.8
80	31	17,779	-71.7		27	16.5
70	31	18,567	-71.0		27	10.8
60	[illegible]	19,483	-68.8		28	6.3
50	29	20,580	-66.3		30	3.3
40	[illegible]	21,940	-63.6		31	3.9
30	[illegible]	23,731	-57.6		32	3.5
25	[illegible]	24,895	-53.9		31	3.4
20	[illegible]	26,340	-50.2		28	6.5
15	[illegible]	[illegible]	-45.8		27	13.4
10	[illegible]	[illegible]	-37.9		26	16.0
7						

TOPEKA, KANS.
979 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	268	5.9	[illegible]	07	1.4
1000						
950	31	515	6.8	2.8	12	2.6
900	31	[illegible]	5.3	1.5	16	2.8
850	31	[illegible]	3.9	-1.8	20	2.4
800	31	1,917	1.6	-5.5	23	2.1
750	31	2,435	-.9	-8.2	25	3.2
700	31	[illegible]	-3.7	-12.4	25	5.5
650	31	3,565	-6.9	-17.1	25	7.2
600	31	4,165	-10.7	-20.6	25	9.5
550	31	4,849	-15.1	-24.9	25	10.8
500	31	5,563	-20.1	-29.6	25	13.0
450	31	6,335	-25.5	-34.8	24	15.0
400	31	7,179	[illegible]	-40.4	24	15.8
350	31	8,110	-39.3	-44.7	24	18.2
300	31	9,145	-47.3		24	19.9
250	31	[illegible]	-53.7		24	25.4
200	31	11,758	-55.8		25	25.0
175	31	12,612	-53.5		25	23.1
150	31	13,604	-54.1		25	[illegible]
125	30	14,771	-55.5		25	19.2
100	29	16,188	-57.7		26	15.2
80	[illegible]	17,591	-59.4		25	11.4
70	29	18,424	-60.4		26	9.6
60	28	19,384	-61.5		26	7.5
50	27	20,518	-61.8		27	4.3
40	[illegible]	21,898	-61.6		27	3.6
30	25	[illegible]	-60.2		29	2.8
25	[illegible]	24,826	-59.0		30	2.6
20	[illegible]	26,231	-57.8		29	3.9
15	[illegible]	28,052	-55.6		27	7.8
10	15	[illegible]	-50.4			
7						

+ TRUK, CAROLINE IS.
1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	2	28.4	23.2	05	6.2
1000	31	105	27.0	22.5	05	7.5
950	31	556	23.3	20.6	06	8.6
900	31	1,028	20.2	16.7	07	8.5
850	31	1,521	17.0	12.0	08	6.9
800	31	2,038	16.1	[illegible]	09	5.6
750	31	2,586	13.9	3.4	10	5.3
700	31	3,166	11.5	-2.2	[illegible]	6.2
650	31	3,782	8.4	-7.2	09	7.4
600	31	4,439	4.8	-11.1	10	8.7
550	31	5,143	.8	-18.8	09	10.9
500	31	[illegible]	-3.3	-22.9	09	12.1
450	31	6,728	-8.2	-27.1	09	12.7
400	31	7,633	-13.7	-33.8	[illegible]	12.6
350	31	8,639	-20.0	-37.7	09	9.5
300	31	9,760	-28.5	-43.5	09	7.5
250	31	11,040	-38.8	-51.9	11	8.0
200	31	12,531	-51.3		12	8.7
175	31	13,365	-58.3		12	9.2
150	31	14,337	-65.9		11	8.3
125	30	15,421	-74.3		09	9.7
100	29	16,690	-82.9		09	11.5
80	29	17,925	-83.2		10	10.7
70	29	[illegible]	-77.9		[illegible]	9.2
60	29	19,571	-72.5		[illegible]	9.5
50	28	[illegible]	-65.0		10	5.5
40	27	22,041	-60.0		28	2.1
30	27	23,863	-54.7		27	9.2
25	[illegible]	[illegible]	-51.9		[illegible]	11.9
20	26	26,495	-48.3		27	13.4
15	21	28,401	-44.9		27	14.6
10	14	31,146	-40.1		26	13.3
7						

* TUCSON, ARIZ.
922 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	769	[illegible]	[illegible]	[illegible]	1.6
1000						
950						
900	31	966	8.5	1.2	[illegible]	2.2
850	31	1,456	5.9	-1.7	24	3.3
800	31	1,950	2.3	-4.8	24	5.8
750	31	2,468	-1.0	-9.9	24	6.2
700	31	[illegible]	-3.9	-17.2	25	8.1
650	31	[illegible]	-6.6	-21.5	[illegible]	10.7
600	31	4,219	-10.4	-26.2	26	13.3
550	31	4,883	-15.0	-31.8	26	15.3
500	31	5,596	-20.3	-36.3	26	18.3
450	31	6,368	-25.8	-40.9	27	21.9
400	31	7,211	-31.6	-47.0	27	25.1
350	31	8,145	-38.2	-50.2	27	27.3
300	31	[illegible]	-44.8		27	30.5
250	31	10,389	-51.6		27	35.6
200	31	11,828	-53.4		27	35.9
175	31	12,688	-53.3		[illegible]	[illegible]
150	31	13,681	-55.3		[illegible]	31.0
125	31	[illegible]	-58.0		[illegible]	26.6
100	30	16,231	-61.4		[illegible]	20.2
80	31	[illegible]	-62.9		[illegible]	14.1
70	30	18,431	-63.0		25	10.9
60	31	19,380	-63.0		[illegible]	8.4
50	[illegible]	[illegible]	-62.1		26	4.2
40	29	21,884	-62.2		[illegible]	[illegible]
30	28	23,667	-60.1		31	2.3
25	28	24,810	-58.2		30	3.7
20	28	26,224	-55.7		27	7.2
15	[illegible]	28,368	-52.4		26	13.8
10	[illegible]	30,733	-44.6		[illegible]	[illegible]
7	[illegible]	[illegible]	-36.9		26	33.2
5						

* VANDENBERG AFB, CALIF.
1004 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	100	8.1	5.7	33	1.2
1000	27	141	8.4	5.4	34	2.0
950	31	557	7.3	2.7	33	5.5
900	31	[illegible]	4.6	-1.3	32	5.5
850	31	1,464	2.2	-6.4	32	6.1
800	31	1,952	.6	-10.7	31	7.6
750	31	2,468	-1.5	-15.3	31	9.1
700	31	3,015	-4.1	-18.7	31	10.8
650	31	3,596	-7.3	-23.1	31	12.3
600	31	4,216	-10.8	-26.4	31	14.7
550	31	4,879	-15.0	-30.4	30	16.6
500	31	5,593	-20.4	-34.7	30	18.4
450	31	6,364	-26.2	-38.9	30	19.8
400	31	[illegible]	[illegible]	-43.8	30	21.8
350	31	8,134	-39.6	-47.7	[illegible]	24.7
300	31	9,170	-46.4		29	27.1
250	31	10,363	-53.1		29	29.7
200	31	11,789	-55.8		[illegible]	28.2
175	31	[illegible]	-54.4		29	27.7
150	31	[illegible]	-55.1		28	[illegible]
125	31	[illegible]	-57.1		29	21.8
100	31	16,191	-60.1		29	15.9
80	31	17,576	-62.0		28	10.5
70	31	18,401	-62.6		28	9.0
60	31	19,353	-62.3		[illegible]	7.0
50	30	20,479	-62.0		[illegible]	5.5
40	30	21,864	-60.6		27	4.6
30	26	[illegible]	-59.5		[illegible]	4.4
25	25	[illegible]	-59.3		27	4.0
20	[illegible]	26,208	-57.3		[illegible]	3.8
15	[illegible]	28,031	-54.1		[illegible]	10.2
10	[illegible]	30,676	-47.0		27	21.8
7	[illegible]	33,060	-38.9			
5						

VICTORIA, TEXAS
1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	33	15.3	13.6	13	1.6
1000	[illegible]	95	16.9	11.9	14	1.6
950	31	523	16.0	10.6	17	4.6
900	31	962	14.4	5.5	19	5.2
850	31	1,463	12.1	[illegible]	[illegible]	[illegible]
800	31	1,970	10.5	-5.0	23	7.6
750	31	2,506	8.8	-11.4	25	10.2
700	31	[illegible]	5.5	-16.2	25	12.2
650	31	3,675	1.8	-19.7	25	14.8
600	31	[illegible]	-3.0	-23.2	25	17.8
550	31	[illegible]	-8.4	-26.8	[illegible]	20.2
500	31	5,727	-13.8	-32.3	[illegible]	[illegible]
450	31	6,520	-19.3	-36.2	25	25.4
400	31	7,384	-25.7	-41.1	25	[illegible]
350	31	8,341	-32.6	-46.2	25	[illegible]
300	31	9,407	-40.5	-49.4	26	42.5
250	31	10,625	-49.1		26	48.3
200	31	12,066	-55.8		26	51.5
175	31	12,914	-57.5		[illegible]	49.7
150	31	[illegible]	-59.8		26	44.9
125	31	15,011	-63.5		26	37.6
100	31	16,371	-66.8		26	26.6
80	[illegible]	17,705	-69.5		26	[illegible]
70	[illegible]	18,502	-69.9		25	[illegible]
60	[illegible]	19,423	-68.0		[illegible]	7.5
50	[illegible]	[illegible]	-65.4		[illegible]	4.0
40	[illegible]	21,890	-63.5		26	[illegible]
30	[illegible]	23,681	-58.5		30	3.3
25	[illegible]	24,831	-55.8		[illegible]	5.8
20	[illegible]	26,262	-52.9		27	7.3
15	[illegible]	28,129	-48.9		[illegible]	16.0
10	[illegible]	30,821	-41.8		26	25.6
7						
5						

* WAKE IS., PACIFIC AREA
1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	25.1	21.6	08	3.9
1000	31	140	23.7	20.0	08	4.4
950	31	[illegible]	20.0	17.6	09	4.6
900	31	1,052	16.9	13.1	10	3.3
850	31	1,538	14.0	8.6	09	3.2
800	31	2,048	[illegible]	1.9	09	2.5
750	31	2,589	10.9	-5.7	09	1.4
700	31	3,162	10.2	-14.2	30	1.0
650	31	3,776	7.8	-17.5	[illegible]	3.2
600	31	4,431	4.7	-20.1	[illegible]	[illegible]
550	31	5,134	.5	-23.4	[illegible]	7.3
500	31	5,892	-4.5	-27.3	[illegible]	8.8
450	31	6,713	-10.0	-31.6	28	10.7
400	31	7,610	-16.2	-36.6	28	12.4
350	31	[illegible]	-22.9	-42.0	28	13.7
300	31	9,714	-31.0	-48.4	28	15.9
250	31	10,982	-40.3	-55.4	[illegible]	[illegible]
200	31	12,465	-52.3		[illegible]	16.9
175	31	[illegible]	-58.5		28	[illegible]
150	31	[illegible]	-65.8		[illegible]	16.7
125	[illegible]	15,357	-73.4		28	15.4
100	28	16,637	-81.1		27	[illegible]
80	28	17,886	-82.3		26	3.8
70	24	18,637	[illegible]		19	1.8
60	[illegible]	19,522	-74.3		[illegible]	2.1
50	23	20,605	-67.1		14	1.8
40	23	21,965	-63.4		14	1.1
30	[illegible]	23,755	-57.9		28	1.3
25	23	[illegible]	[illegible]		32	2.0
20	[illegible]	[illegible]	-49.9		[illegible]	2.9
15	22	28,262	-45.6		28	5.2
10	21	31,008	-38.4		[illegible]	7.9
7	18	33,471	-34.2		26	7.7
5	[illegible]	35,848	-29.6			

* [illegible]
1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	6.9	4.9	35	1.5
1000	[illegible]	158	[illegible]	4.2	[illegible]	1.7
950	31	566	8.6	2.5	27	2.6
900	31	1,011	6.5	-.3	27	3.9
850	31	1,479	4.7	-3.6	[illegible]	5.1
800	31	1,973	3.1	-5.6	26	5.7
750	31	2,494	.7	-9.0	27	7.0
700	31	3,045	-2.1	-11.8	27	7.9
650	31	3,632	-4.7	-16.8	27	9.7
600	31	4,257	-8.6	[illegible]	27	11.3
550	31	[illegible]	-12.9	-25.4	27	13.7
500	31	5,647	-17.7	-29.6	27	15.0
450	31	6,423	-23.5	-35.3	[illegible]	16.3
400	31	7,277	-29.8	-40.9	27	17.4
350	30	8,213	-37.3	-44.6	[illegible]	[illegible]
300	30	9,256	-45.6		27	21.0
250	[illegible]	10,452	-52.9		27	26.8
200	30	11,872	-58.4		[illegible]	28.5
175	[illegible]	12,711	-57.8		28	26.6
150	[illegible]	[illegible]	-57.4		28	25.3
125	28	14,836	-58.7		28	22.7
100	[illegible]	16,229	-61.4		[illegible]	20.3
80	26	17,605	-62.9		[illegible]	15.6
70	26	18,427	-62.8		29	13.5
60	[illegible]	19,376	-63.3		[illegible]	10.6
50	26	20,497	-63.2		[illegible]	7.8
40	25	21,871	-62.5		[illegible]	7.2
30	[illegible]	[illegible]	-60.2		30	7.2
25	[illegible]	[illegible]	-59.9		[illegible]	7.1
20	[illegible]	[illegible]	-56.6		[illegible]	10.8
15	19	28,047	-52.9		[illegible]	13.5
10	16	30,703	-45.2		[illegible]	[illegible]
7	10	33,117	[illegible]			
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

WASHINGTON DULLES INT. AP *
[illegible] MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	85	4.6	[illegible]	[illegible]	.8
1000	[illegible]	174	6.2	[illegible]	[illegible]	.5
950	31	566	[illegible]	1.5	25	1.4
900	31	1,010	5.8	.2	24	2.9
850	31	[illegible]	4.3	-1.3	[illegible]	4.2
800	31	[illegible]	2.6	-4.6	26	5.6
750	31	[illegible]	.6	-9.5	27	7.2
700	31	[illegible]	-2.0	-14.1	27	8.7
650	31	[illegible]	-4.6	[illegible]	27	10.0
600	31	4,253	-8.5	-21.5	27	11.6
550	31	[illegible]	-12.8	-25.4	27	12.7
500	31	5,642	-17.8	[illegible]	26	14.1
450	31	[illegible]	-23.3	[illegible]	27	15.9
400	31	[illegible]	[illegible]	-34.	27	18.2
350	31	8,223	-37.1	-44.	27	19.0
300	31	9,258	-45.3	-43.	27	21.5
250	31	10,454	-53.0		27	25.9
200	31	11,871	-58.1		27	28.4
175	[illegible]	12,714	-57.4		28	28.2
150	[illegible]	13,698	-56.3		28	23.0
125	[illegible]	14,847	-57.7		27	21.8
100	[illegible]	[illegible]	[illegible]		27	18.1
80	[illegible]	17,634	[illegible]		28	14.4
70	[illegible]	18,466	-62.0		28	10.9
60	[illegible]	19,419	-62.5		28	9.1
50	[illegible]	20,545	-62.1		29	6.7
40	30	21,924	-61.9		30	6.3
30	[illegible]	23,712	-60.1		31	4.9
25	[illegible]	24,853	-58.7		30	5.1
20	29	26,262	-56.5		28	7.8
15	28	28,098	-53.5		27	12.6
10	[illegible]	30,741	-47.4		27	24.9
7	[illegible]	33,140	-41.2			

WAYCROSS, GA.
1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	44	13.4	12.4	16	.7
1000	[illegible]	139	[illegible]	[illegible]	17	1.4
950	31	571	14.2	9.9	19	4.6
900	31	1,026	12.0	5.8	21	5.5
850	31	1,504	[illegible]	[illegible]	23	6.4
800	31	[illegible]	8.4	-4.5	24	7.0
750	31	2,538	[illegible]	[illegible]	25	7.9
700	31	[illegible]	3.1	-13.5	26	10.0
650	31	3,697	[illegible]	[illegible]	26	13.5
600	31	4,334	[illegible]	[illegible]	26	15.2
550	31	5,016	[illegible]	[illegible]	26	16.9
500	31	5,748	-13.4	[illegible]	26	19.3
450	31	6,542	-18.7	-33.5	26	20.5
400	31	7,409	-25.0	[illegible]	27	21.9
350	31	8,368	-32.5	-42.5	27	25.4
300	31	9,434	-40.6	-47.7	27	30.7
250	31	10,651	-49.9		27	35.1
200	31	12,082	-57.4		28	40.6
175	30	12,929	-57.8		28	39.6
150	30	13,898	-59.7		27	37.0
125	29	15,031	-62.9		27	31.3
100	[illegible]	16,395	-65.1		27	23.3
80	28	17,743	-68.3		27	16.8
70	28	18,544	-68.3		27	11.8
60	28	19,473	-66.5		28	8.1
50	28	20,582	-64.8		28	3.1
40	27	21,948	-63.4		30	3.9
30	25	23,737	-58.4		32	3.3
25	26	24,890	-56.0		30	5.6
20	25	26,323	-52.3		29	7.1
15	23	28,202	-47.8		27	15.5
10	15	30,911	-41.0		26	25.1
7	5	33,344	-35.9			

WINNEMUCCA, NEV.
856 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	[illegible]	-1.5	[illegible]	23	.3
1000						
950						
900						
850	31	1,460	1.3	-5.	28	.7
800	31	1,947	-1.4	-6.9	30	1.7
750	31	2,458	-4.8	-9.6	32	2.5
700	31	2,997	-8.4	-13.3	32	2.7
650	31	3,568	[illegible]	-17.4	29	4.0
600	31	4,177	-15.3	-22.8	28	4.7
550	31	4,830	-19.5	-27.6	28	5.4
500	31	5,531	-24.5	[illegible]	28	5.9
450	31	6,290	-29.9	[illegible]	28	6.2
400	31	7,118	-36.4	-42.9	29	7.3
350	31	8,033	-43.1	-46.8	29	9.6
300	31	9,053	-50.1		29	11.2
250	31	10,229	-54.8		30	11.8
200	[illegible]	11,658	-54.5		29	12.8
175	[illegible]	12,518	-52.2		29	13.1
150	[illegible]	13,517	-52.5		29	11.4
125	[illegible]	14,691	-54.4		28	10.2
100	[illegible]	16,112	-57.0		28	8.4
80	[illegible]	17,520	-58.5		28	6.6
70	[illegible]	18,358	-59.4		27	5.2
60	30	19,324	-59.8		28	4.0
50	30	20,461	-60.3		28	2.7
40	29	21,853	-60.2		27	1.4
30	28	23,651	-59.7		30	1.4
25	27	24,792	-59.1		32	1.1
20	23	26,190	-59.0		35	.9
15	[illegible]	[illegible]	-56.9		30	2.1
10						
7						

WINSLOW, ARIZ.
846 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	[illegible]	2.3	[illegible]	21	1.5
1000						
950						
900						
850	[illegible]	1,509	2.0	-2.8		
800	29	1,935	1.2	-4.4	25	4.0
750	29	2,451	-2.4	[illegible]	24	5.9
700	29	2,996	-5.7	-12.0	24	7.4
650	29	3,574	-8.7	[illegible]	25	7.6
600	[illegible]	4,190	-12.5	[illegible]	25	8.0
550	29	4,848	-17.2	-28.7	26	9.3
500	29	[illegible]	-22.4	-33.7	27	11.9
450	29	6,321	-28.0	-39.3	26	14.0
400	28	7,156	-34.3	-44.6	26	17.7
350	28	8,080	-40.7	-50.6	27	19.9
300	29	9,111	-47.5		27	24.3
250	28	10,302	[illegible]		27	28.0
200	28	11,737	-52.6		27	27.0
175	28	12,600	-52.4		27	23.9
150	28	13,595	-53.6		27	23.2
125	27	[illegible]	-55.6		27	20.6
100	27	16,171	-58.6		26	16.6
80	27	17,566	-60.9		26	11.4
70	27	18,396	-61.0		26	9.7
60	27	19,353	-61.6		25	7.7
50	27	20,483	-61.1		26	6.4
40	25	21,867	-61.6		27	3.3
30	24	23,652	-60.6		30	2.2
25	24	24,791	-59.1		28	3.9
20	22	26,194	-57.7		26	5.0
15	16	28,026	-54.5		26	10.6
10						
7						

YAKUTAT, ALASKA
1004 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	-1.2	-2.8	09	[illegible]
1000	21	71	.4	[illegible]	11	2.6
950	31	450	-1.4	[illegible]	13	4.8
900	31	879	-4.3	-6.4	16	5.2
850	31	1,327	-7.5	-9.7	16	5.3
800	31	1,797	-10.5	[illegible]	17	5.9
750	31	2,291	-13.7	[illegible]	18	5.4
700	31	2,812	-17.1	-20.3	19	5.4
650	31	3,304	-20.9	-24.6	20	6.1
600	31	3,951	-24.8	-29.6	21	6.4
550	31	4,579	-26.6	-34.2	23	7.1
500	31	5,256	-32.8	[illegible]	24	9.1
450	31	5,990	-37.6	-40.6	24	10.5
400	[illegible]	6,794	-42.5	-42.6	25	11.6
350	31	7,690	-47.2		25	13.5
300	31	8,698	-50.8		26	15.4
250	31	9,885	-50.6		26	14.0
200	31	11,346	-48.1		26	13.6
175	31	12,227	-47.9		26	14.1
150	31	13,246	-47.0		26	13.4
125	29	14,449	-47.8		26	12.1
100	29	15,917	-49.4		26	11.3
80	28	17,376	-50.5		27	9.9
70	28	18,245	-51.4		27	8.3
60	28	19,245	-52.1		27	7.0
50	28	20,424	-52.6		27	5.3
40	28	21,864	-52.8		28	4.1
30	24	23,709	-53.4		30	3.4
25	23	24,886	-54.2		01	2.4
20	19	26,336	-55.4		03	3.2
15	13	28,162	-56.1		02	5.6
10						
7						

YAP, CAROLINE IS. +
1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	14	27.9	22.4	07	5.3
1000	31	104	25.8	21.6	07	6.7
950	31	555	22.1	19.7	07	9.5
900	31	1,023	18.9	15.1	07	10.1
850	31	1,513	16.0	10.3	07	9.0
800	31	2,028	15.2	2.1	08	7.4
750	31	2,574	14.4	-5.4	09	7.1
700	31	[illegible]	11.5	-8.6	09	7.2
650	31	[illegible]	8.2	-12.0	09	8.3
600	31	4,425	4.5	-16.1	09	10.1
550	31	5,128	.6	-19.6	09	11.2
500	31	5,866	-4.0	-23.1	10	11.6
450	31	6,710	-8.7	-27.1	10	11.7
400	31	7,613	-14.4	-32.4	10	11.3
350	31	8,615	-21.1	-38.2	09	10.5
300	31	9,732	-29.5	-44.1	10	8.9
250	31	11,006	-39.8	-51.3	11	9.4
200	31	[illegible]	-52.1		13	10.7
175	31	13,342	-59.0		12	12.1
150	31	14,291	-66.8		12	11.5
125	31	15,371	-75.1		11	11.8
100	31	16,640	-82.4		10	13.1
80	31	[illegible]	-81.5		09	10.9
70	31	18,637	-78.2		09	8.2
60	31	19,526	-73.6		08	7.3
50	31	20,611	-66.5		08	6.2
40	31	[illegible]	-60.2		12	1.8
30	[illegible]	[illegible]	-55.7		27	6.1
25	[illegible]	24,969	-52.2		28	7.8
20	26	26,429	-49.1		28	10.8
15	25	28,334	-45.3		27	10.0
10	[illegible]	31,058	-40.7		27	13.5
7	10	33,527	-35.4			

YUCCA FLAT, NEV.
876 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,198	1.4	-1.8	27	.8
1000						
950						
900						
850	31	1,443	3.6	-4.3	31	1.0
800	31	1,933	.5	-6.9	32	.8
750	31	2,448	-3.0	-9.7	35	1.2
700	31	2,991	-6.3	-14.1	32	1.8
650	31	3,567	-9.2	-18.9	30	3.3
600	31	4,182	-13.4	-23.4	29	4.7
550	31	4,838	-18.0	-27.9	29	5.4
500	31	5,544	-23.0	-33.7	[illegible]	7.0
450	31	6,308	-28.5	-38.4	30	8.5
400	31	7,141	-34.9	-44.2	29	10.2
350	31	8,062	-41.5	-47.7	29	12.5
300	31	9,090	-48.0		29	15.9
250	31	10,280	-52.7		29	19.6
200	31	11,714	-54.0		28	19.9
175	31	12,576	-52.4		28	19.8
150	31	13,572	-52.9		28	17.0
125	31	14,744	-55.0		28	16.2
100	31	16,159	-57.9		28	12.0
80	30	17,561	-59.8		27	9.2
70	30	18,394	-60.4		27	7.4
60	30	19,354	-61.0		27	5.6
50	29	20,468	-61.0		27	4.5
40	28	21,877	-60.6		25	3.8
30	25	23,669	-60.4		27	3.1
25	23	24,808	-59.8		28	3.2
20	22	26,213	-58.3		29	3.9
15	16	28,030	-55.8		29	8.4
10						
7						

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon. The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes [illegible] carried aloft by special high altitude balloons, [illegible] an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G. C. T.

† Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun. MARCH 1973

Date	Sun's zenith distance								
	A M				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
ALBUQUERQUE, N.MEX.									
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
March									
1-----	----	SC(1.03)	----	SC(1.28)	SC(1.43)	----	(0.92)	(0.77)	(0.68)
2-----	(0.92)	(1.03)	----	1.26	(1.40)	(1.23)	----	----	----
4-----	.89	1.02	1.16	----	----	----	----	----	----
11----	.86	.96	1.10	1.25	----	----	----	----	----
12----	.67	.84	1.06	1.24	1.45	(1.23)	----	(1.10)	----
14----	.90	1.02	1.11	----	----	----	----	----	----
15----	----	----	1.11	----	----	----	1.06	.96	.86
16----	.94	1.06	1.18	1.33	1.46	1.31	1.17	1.05	.97
17----	1.02	1.12	1.22	1.34	----	----	----	----	----
18----	----	----	----	1.28	1.40	----	.95	----	----
19----	----	----	----	1.10	1.34	1.18	1.06	.93	.84
20----	.77	.87	.99	1.12	----	----	----	----	----
22----	----	----	----	----	(1.35)	----	----	----	----
24----	----	----	----	----	----	1.24	----	----	.69
25----	.92	1.04	1.14	1.27	1.43	1.28	1.16	1.05	.96
26----	.93	1.01	1.12	1.27	1.43	1.26	.98	.88	.77
27----	----	----	----	----	----	----	1.00	----	----
30----	----	----	----	----	----	----	----	.89	----
31----	----	----	1.10	----	----	----	1.13	1.00	.92
Averages	0.88	0.99	1.12	1.25	1.42	1.25	1.06	0.97	0.86
OMAHA, NEBR.									
	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
				NO DATA RECEIVED					

Date	Sun's zenith distance								
	A M				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
TUCSON, ARIZ.									
	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
March									
1----	0.88	1.02	1.12	1.31	----	----	----	----	----
2----	----	.94	1.09	1.27	1.40	1.26	1.08	0.98	0.86
3----	.86	.97	1.10	1.30	1.43	1.30	1.14	1.03	.92
4----	.93	1.04	1.17	1.32	----	----	----	----	----
6----	.89	1.00	1.11	1.28	1.47	1.32	1.17	1.06	.97
10---	----	----	----	----	----	1.20	----	.88	.77
11---	.93	1.03	----	1.29	----	----	1.12	1.00	.88
15---	.82	.92	1.02	1.21	----	1.18	1.05	.92	.81
16---	.92	1.00	1.12	1.31	1.50	1.32	1.11	1.01	.89
17---	.95	1.04	----	1.33	----	----	----	----	----
18---	.96	1.05	1.13	1.31	1.47	1.22	1.01	.87	.75
19---	.81	.94	1.06	1.24	----	----	----	.83	.71
20---	.80	.92	1.04	----	1.40	----	----	----	----
21---	----	----	----	----	----	----	1.16	.96	.82
22---	.95	1.06	----	----	----	----	----	----	----
23---	----	----	----	----	----	----	----	.81	----
24---	.84	.97	1.08	1.26	1.41	1.23	----	.90	----
25---	----	.92	1.06	1.23	1.41	1.22	1.09	.96	.84
26---	.93	1.04	1.15	1.31	1.46	1.21	.96	.77	.66
27---	.81	.92	1.00	----	----	----	----	.90	----
28---	----	----	----	----	----	----	1.07	.94	----
29---	----	----	----	----	----	1.22	----	----	----
30---	.80	.92	1.06	1.24	1.43	1.24	1.06	.93	.81
31---	.81	.93	1.06	1.23	1.42	1.17	.97	.82	.71
Averages	0.88	0.98	1.08	1.28	1.44	1.24	1.07	0.92	0.81
MADISON, WIS.									
	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
March									
12----	----	----	----	----	----	----	0.99	0.86	0.77
18----	0.99	1.08	1.23	1.34	1.44	1.33	----	----	----
21----	.85	.95	1.08	S 1.18	S 1.37	S 1.28	S 1.12	----	----
22----	H .85	H .97	1.13	S 1.28	----	----	----	----	----
26----	.65	.79	S .94	S 1.15	----	S 1.20	----	----	S 0.81
27----	.86	.96	1.05	----	----	----	----	----	----
Averages	0.84	0.95	1.09	1.24	1.41	1.27	1.06	0.86	0.79

( )	Clouds Present
*	Values corresponding to true solar noon
BD	Blowing Dust
BN	Blowing Sand
D	Dust
DI	Intense Dust
DM	Moderate Dust
DS	Slight Dust
F	Fog
GF	Ground Fog
H	Haze
HI	Intense Haze
HM	Moderate Haze
HS	Slight
I	Intense Haze-indeterminable
K	Smoke
KI	Intense Smoke
KM	Moderate Smoke
KS	Slight Smoke
M	Moderate Haze-indeterminable
N	Sand
S	Slight Haze-indeterminable

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	0	- 16	50	0	- 26	- 16	10	14	8	- 19	- 9	- 6	- 1	- 7	- 22	- 63	- 51	- 54	- 71	- 63	- 24	- 14	- 11	- 7	- 17	- 9	16	35	75	58	128	- 2

The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (< 3900 Å) at Ames, Iowa.

Date. . . .	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	1.70	1.95	2.80	1.58	2.68	1.58	9.02	7.43	1.34	1.34	2.68	9.75	3.90	6.70	3.90	3.16	7.92	7.07	4.75	7.43	10.48	4.87	6.82	1.95	4.14	8.65	8.89	3.16	6.33	7.80	1.09	4.93

These data are from an U-V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder.

This instrument has not been checked by the NOAA, National Weather Service.

TOTAL OZONE DATA

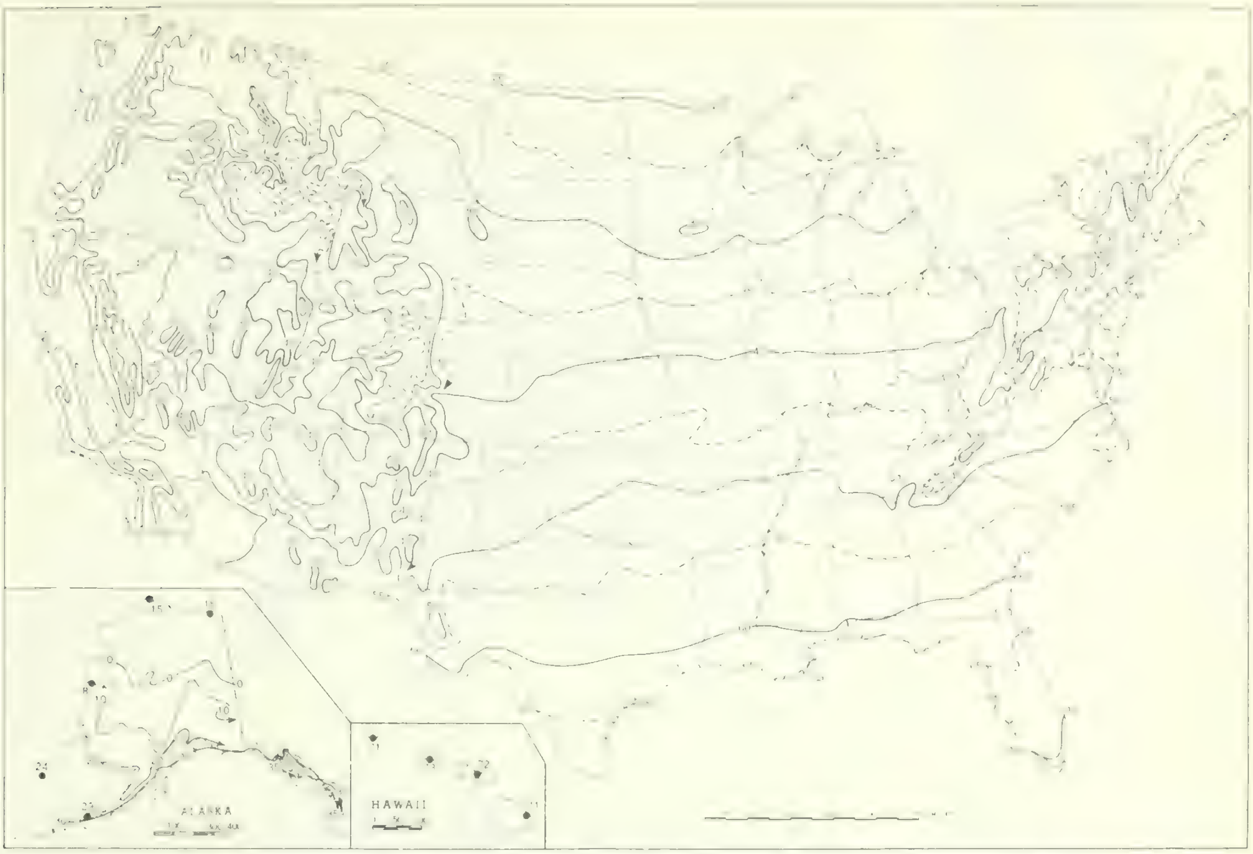
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λS ΩΩΩ defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units Milli-atmo-cms.

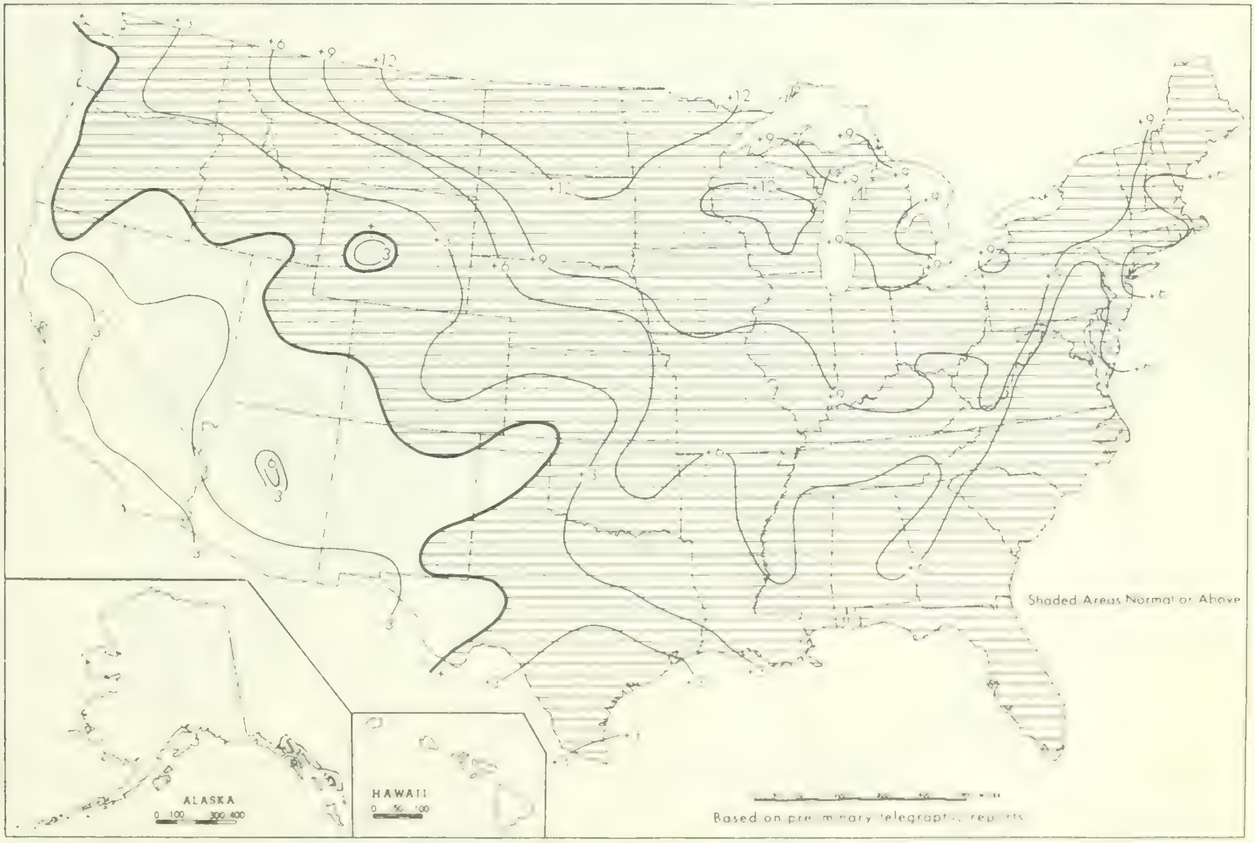
Station	Day of month																														Mean O_3
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
	DATA NOT RECEIVED IN TIME FOR PUBLICATION																														

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λS designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), March


ALASKA
HAWAII

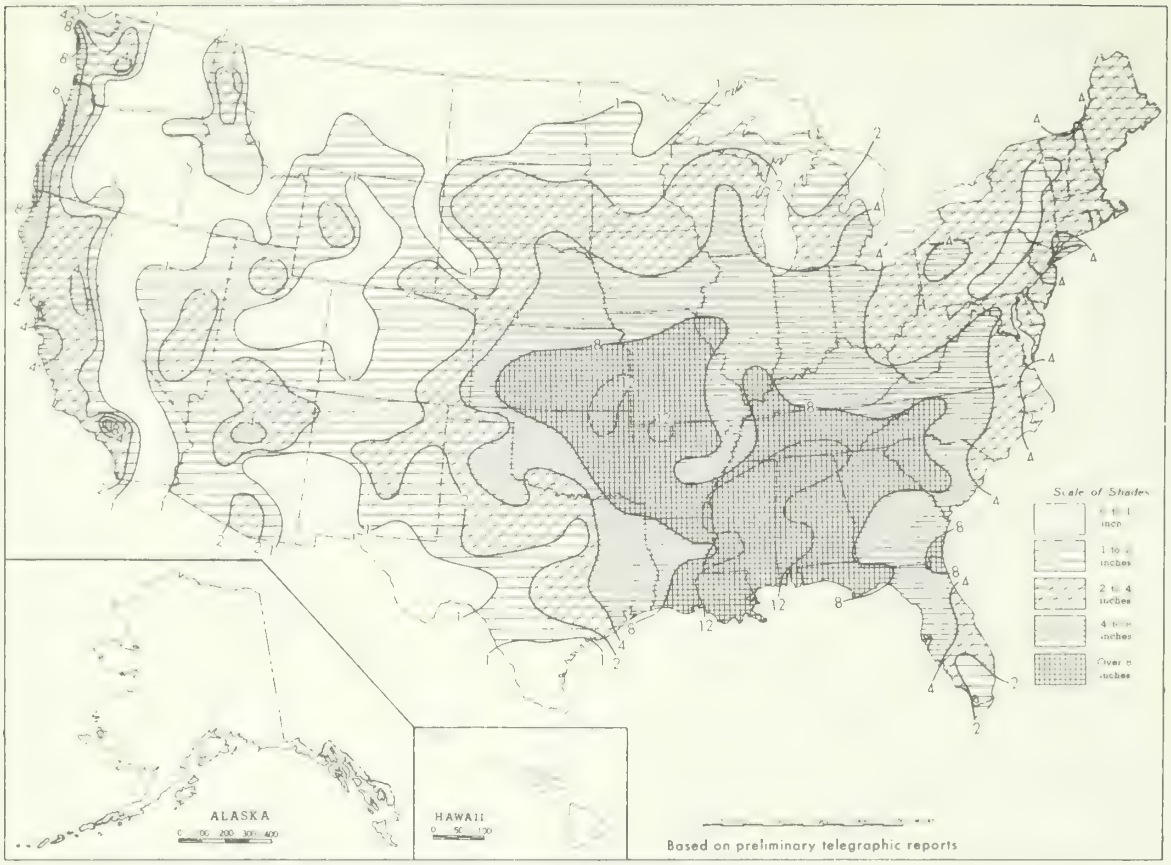
B. Temperature Departure from 30 - Year Mean (F 1931-60), March 1973


+6
+9
+12
+3
ALASKA
0 100 300 400
HAWAII
0 50 100

Shaded Areas Normal or Above

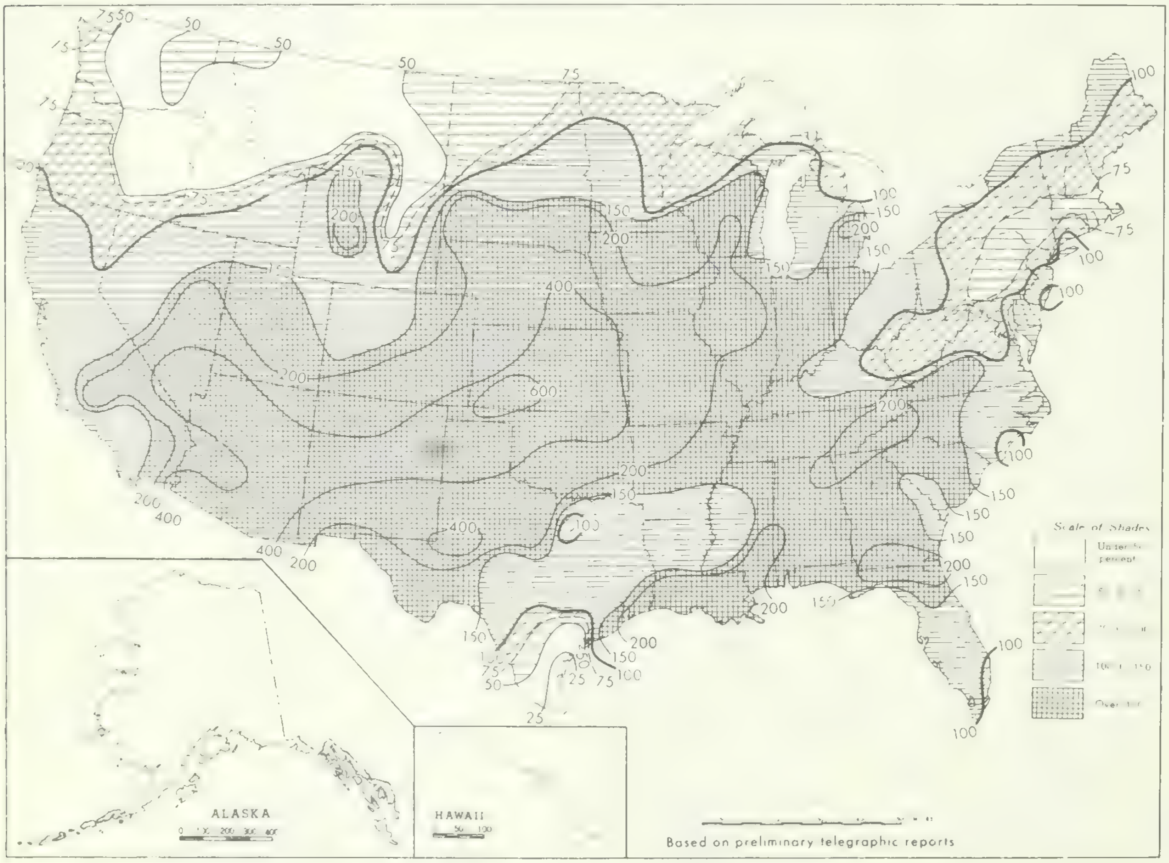
Based on preliminary telegraphic reports

Chart II. A. Total Precipitation (Inches), March 1973


Scale of Shades
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 8 inches
Over 8 inches
ALASKA
0 100 200 300 400
HAWAII
0 50 100

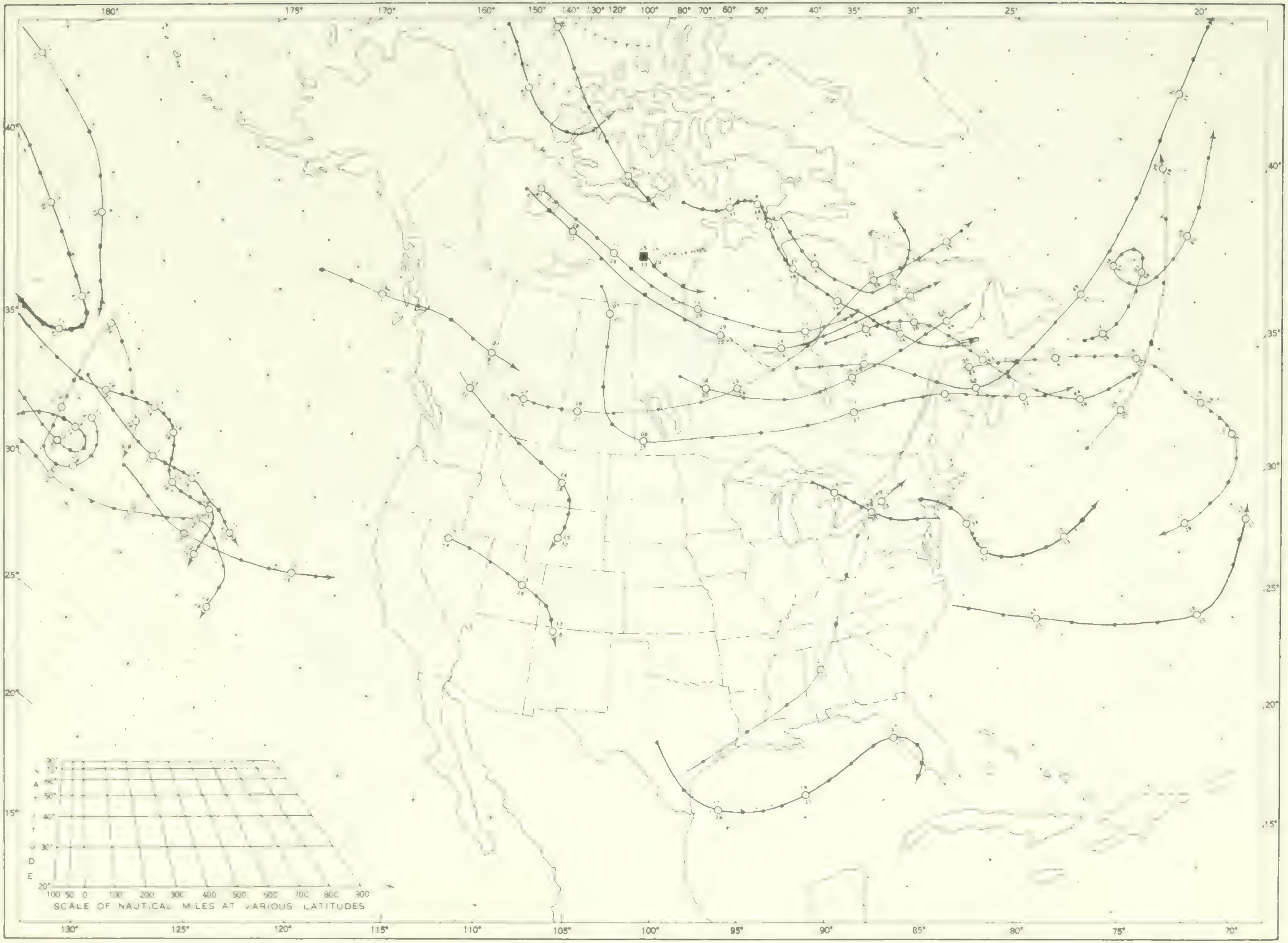
Based on preliminary telegraphic reports

B. Percentage of Normal Precipitation, March 1973


Scale of Shades
Under 50 percent
50 to 75
75 to 100
100 to 150
Over 150
ALASKA
0 100 200 300 400
HAWAII
0 50 100

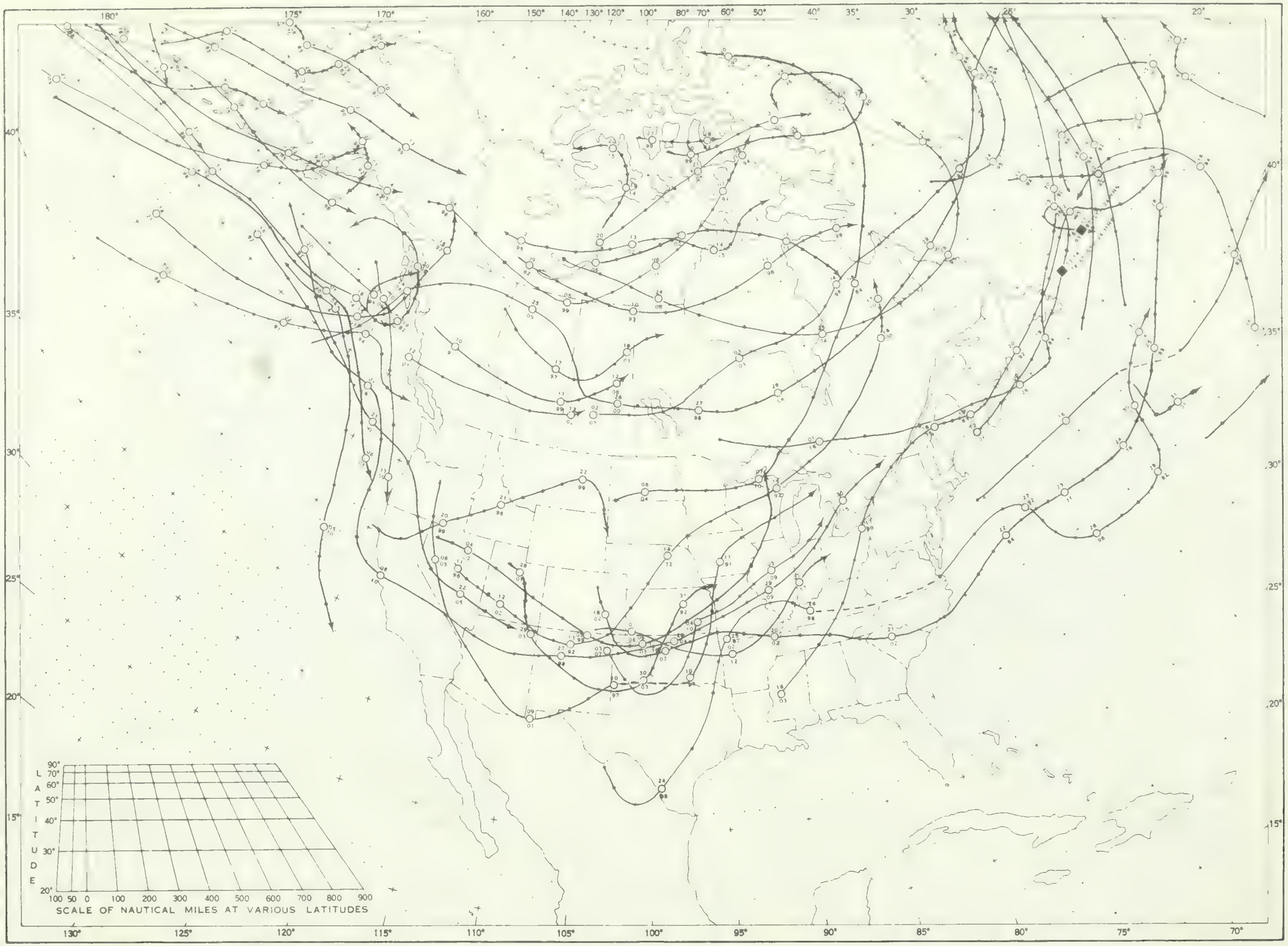
Based on preliminary telegraphic reports

Chart III. Tracks of Centers of Anticyclones at Sea Level, March 1973


SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES
LATITUDE
100 50 0 100 200 300 400 500 600 700 800 900
180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, March 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
40°
35°
30°
25°
20°
15°
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

OCT 11 1973
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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

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I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina 28801.

William H. Haggard

Director, National Climatic Center

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

APRIL 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

Dr. Richard E. Felch, Climatologist

HIGHLIGHTS:

1. Precipitation continued heavy for the second month in the Mississippi River Valley, contributing to record flooding.
2. Temperatures were below normal over much of the Nation.

PRECIPITATION--The monthly precipitation pattern varied greatly, particularly in the Nation's western half. While parts of Minnesota, the Dakotas, and Nebraska received well below normal precipitation, areas to the east and west received well above normal amounts. Parts of Iowa, Wisconsin, and Illinois again received more than twice the normal precipitation: LaCrosse, Wis., 261 percent; Moline, Ill., 353 percent; and Rockford, Ill., 319 percent.

Nearly all of Montana and Wyoming received from 150 to 450 percent of normal precipitation. Most of the moisture came from a snowstorm which dumped several feet of snow, starting on the 19th. This storm broke many existing records for a single snowstorm at any time of the season.

Snow was the word in Iowa. Nearly 20 inches fell in parts of the State on the 8th-10th and destroyed over $19 million in livestock and poultry.

Heavy rains continued to fall over the Lower Mississippi Valley, adding 8 inches or more to already swollen rivers during the month. Record flood crests occurred, breaking records established nearly 200 years ago. On the 28th, at St. Louis, Mo., the Mississippi River crested at 43.3 feet, breaking the old record of 42.0 feet established in 1785.

The Mississippi River Valley received its greatest precipitation during the week of the 16th-22d. A sprawling low pressure system which extended from the Texas Gulf Coast to the Great Lakes drew moisture-laden tropical air up the length of the Mississippi River Valley and dumped 2 to 4 inches of rain over parts or all of 11 States. Although not as heavy the rest of the month, rain persisted almost daily in some areas, with only intermittent periods of sunshine.

The west coast was dry the entire month, with little or no precipitation. Drought conditions in the Pacific Northwest continued to worsen as precipitation was from 0 to 50 percent of normal. Less than 0.50 inch fell during April in much of this area.

TEMPERATURE--With the exception of the third week, April temperatures were generally below normal over most of the Nation. Temperatures were below normal except along the Pacific Coast, over the north-central States and New England, and southeastern Florida. Much of New Mexico and the Texas Panhandle were 6° to 8° below normal. A mean temperature of 59.7° at Tucson, Ariz., was the coolest April since 1920. At Yuma, an 80° temperature was recorded on the 5th for the first time this year, a new record. The previous record for the latest first 80° occurrence was March 14, 1891.

The month started with temperatures far below normal, particularly in the Southwest where temperatures were 6° to 12° below normal. During the week of the 9th-15th, winter-like conditions struck much of the Nation. The eastern half of the Nation was 6° to 12° below normal, with freezing temperatures reaching down almost to the Gulf. On the 11th, McComb, Miss., reported 30°, Birmingham, Ala., and Atlanta, Ga., 26°. A 24° reading at El Paso on the 9th marked the coldest April morning low since readings began in 1879.

A large high followed the cold air passage and brought very mild temperatures to the Nation during the third week. Temperatures were 6° to 18° above normal in much of the Northeast. Temperatures again cooled as the month ended.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

APRIL 1973

STATE	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	2 Stations	87	24+	Valley Head	21	11	Dayton 1 N	11.48	Atmore 1 SW	3.82
Alaska	6 Stations	65	30	Kotzebue WSO AP	-30	3	Little Port Walter	15.95	Gilmore Creek	.00
Arizona	Chandler	104	27	Hawley Lake	- 6	3	2 Stations	2.69	61 Stations	.00
Arkansas	2 Stations	85	30+	3 Stations	21	11	Gurdon	16.82	Berryman 4 NW	5.28
California	El Centro 2 SSW	103	28	Bodie	- 7	2	Idlewild Hwy MNTNC Sta	2.80	83 Stations	00
Colorado	Lamar	86	28	Taylor Park	-27	8	Hawthorne	6.20	Center 4 SSW	.17
Connecticut	Hartford WSO AP	90	22	Falls Village	18	15+	Stevenson Dam	9.15	2 Stations	5.05
Delaware	2 Stations	86	23	Georgetown 5 SW	26	15	Wilmgton Porter Resvr	7.16	Georgetown 5 SW	3.24
Florida	La Belle	95	26	Fountain 3 SSE	28	11	Jasper	17.75	Key West WSO AP	.16
Georgia	Bainbridge	90	24	Cornelia	19	11	Valdosta 3 E	14.89	Hartwell	3.50
Hawaii	Lualualei 804, Oahu	92	24	Mauna Loa Slope Obs, Hawaii	29	3	Pauoa Flats 784, Oahu	17.77	8 Stations	.00
Idaho	Riggins Ranger Station	82	25	Henry	- 3	8	Reynolds	3.22	Lewiston WSO AP	.12
Illinois	Lacon 2 E	82	20	Freeport	14	11	Golconda Dam 51	11.52	Paris Waterworks	3.28
Indiana	Charlestown Ord Plant	85	22	5 Stations	21	14+	Cypress Dam 48	7.54	Monroeville 3 ENE	1.92
Iowa	4 Stations	80	29+	Elkader 5 SSW	3	11	Keosauqua	12.44	Herrill 5 W	.88
Kansas	Johnson 11 ESE	87	18	3 Stations	10	10	Pittsburg	7.60	Tribune 1 W	.41
Kentucky	2 Stations	90	22+	Falmouth 5 WNW	19	14	Hickman 1 E	14.33	London FAA AP	2.89
Louisiana	4 Stations	88	26+	Ashland 2 S	27	10	Diamond 4 NW	15.56	Ashland 2 S	4.99
Maine	Waterville Pump Sta	87	22	Squa Pan Dam	- 5	14	Woodland	10.03	Rangeley	D 2.75
Maryland	La Plata 1 W	89	22	2 Stations	14	14+	Oakland 1 SE	8.70	Vienna	2.87
Massachusetts	Chester 2	91	22	Chester 2	14	14	Newburyport	9.97	Lanesboro	3.10
Michigan	4 Stations	81	22+	Vandebilt Trout Sta	0	11	Dowagiac 1 W	5.36	Milford GM Proving Grn	1.01
Minnesota	Beardsley	82	18	Wannaska 8 SE	3	10	Caledonia	7.57	Mahnomen 1 W	.35
Mississippi	2 Stations	86	22+	Tupelo 2 WNW	23	11	Sarah	14.05	Beaumont	4.91
Missouri	3 Stations	84	22+	2 Stations	15	11	Doniphan	17.06	Edgerton	D 1.77
Montana	3 Stations	77	13	Cooke City	- 8	8	Red Lodge	7.32	Eureka Ranger Station	.13
Nebraska	Ellsmere 9 ENE	85	28	3 Stations	3	10	Table Rock 5 N	3.90	Winside	.91
Nevada	Sunrise Manr Las Vegas	96	27	Ruth	8	9	McDermitt 4 S	3.28	4 Stations	.00
New Hampshire	Keene	88+	22	First Conn Lake	- 7	14	Durham	13.35	Lancaster	2.45
New Jersey	2 Stations	88	23	Lambertville	22	13	Paterson	8.24	Cape May 1 NW	3.34
New Mexico	Jal	91	30	Eagle Nest	-12	9	Sandia Crest	2.96	24 Stations	.00
New York	Catskill 1 N	90	22	Old Forge	7	14	New York Laurel Hill	9.33	Portageville	2.10
North Carolina	2 Stations	89	24+	Grandfather Mountain	11	11	Lake Toxaway 2 SW	9.43	Charlotte WSO AP	2.13
North Dakota	Lisbon	81	19	Beach	2	9	Bowman 11 SE	3.61	Larimore	.23
Ohio	Portsmouth	87	22	Warren 3 S	15	14	Hillsboro	D 7.40	Stryker	1.44
Oklahoma	Hollis	91	29	Goodwell	17	10	Poteau	12.32	Goodwell	.39
Oregon	Pelton Dam	85	26	Hart Mountain Refuge	- 4	18	Government Camp	5.30	Dufur	.07
Pennsylvania	Perkasie	88	22	2 Stations	13	14+	Marcus Hook	10.91	Greenville	2.52
Puerto Rico & VI	Fajardo, P.R.	98	9	Adjuntas Substation, P.R.	50	12+	Toa Baja 1 SSW, P.R.	18.62	Mona Island, P.R.	.31
Rhode Island	North Scituate 4 W	84	22	North Scituate 4 W	23	14	Block Island WSO AP	7.78	Woonsocket	6.53
South Carolina	Manning 2 WNW	88	24	Ninety Nine Island	23	12	Caesars Head 1 NE	8.87	Sullivans Island	1.98
South Dakota	Winner	81	14	Pactola Dam	0	10	Lead 1 E	6.69	Bryant 1 NE	.66
Tennessee	2 Stations	86	22+	Mountain City No 2	15	14	Jackson Exp Sta	11.44	Newcomb	3.32
Texas	Laredo No 2	104	20	2 Stations	11	9+	Port Arthur WSO AP	15.30	13 Stations	.00
Utah	2 Stations	86	27	Scofield Dam	-10	4	Blowhard Mtn Radar	D 4.92	Monument Valley Miss	D .08
Vermont	Vernon	88	23	Mount Mansfield	4	13	Mays Mill	8.02	Canaan	D 2.40
Virginia	5 Stations	88	23+	2 Stations	15	12	Wash. Dulles WSO AP	7.35	Glen Lyn	3.30
Washington	Priest Rapids Dam	83	26	Republic	16	7	Cedar Lake	6.28	4 Stations	.00
West Virginia	2 Stations	90	22	Bayard	7	13	Hacker Valley	10.53	Renick No 2	2.61
Wisconsin	Lake Mills	80	21	Madeline Island	4	10	Clinton 2 N	10.33	Grantsburg	.78
Wyoming	Clark 7 NE	78	27	Foxpark	-20	9	Bates Creek No 2	5.87	Kendall	.10

+ And also on an earlier date or dates.

Note: Dates in the above table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

METRIC UNITS

APRIL 1973

State and Station	Elevation ground	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M	Mb	Mb	C.	C	C	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	993.2	1015.8	20.3	8.6	14.5	- 2.8	28.3	30	- 3.3	11	0	2	8.3	68	135	22	44	8	4	0	0	1.3	21	15.6	E	7	7	8	15	6.4	53
HUNTSVILLE	190	992.6	1015.5	20.1	9.4	14.8	- 1.7	27.2	19	- 1.1	11	0	1	8.3	69	98	- 3	29	12	3	T	0	1.3	21	11.6	25	9	8	7	15	6.6	
MOBILE	64	1007.8	1015.8	23.9	13.4	18.7	- 1.2	28.3	24	2.2	11	0	0	13.3	75	252	90	97	8	5	0	0	1.5	18	11.6	12	18	11	5	14	5.9	
MONTGOMERY	56	1008.8	1016.1	22.7	11.6	17.2	- 0.7	28.3	24	0.6	11	0	0	9.4	64	197	72	88	9	6	0	0	1.1	21	11.6	W	10+	9	6	15	6.0	53
ALASKA												B																		•		
ANCHORAGE	35	1006.8	1011.7	5.2	- 0.9	2.1	- 0.6	9.4	21	- 4.4	27+	0	18	- 3.3	67	8	- 2	4	4	0	33	279	0.5	19	9.4	15	7	4	7	19	7.4	62
ANNETTE	34	1015.6	1019.5	9.1	2.5	5.8	- 0.5	13.3	29	- 1.7	6	0	3	0.0	70	225	- 7	52	21	0	T	0	2.2	15	15.6	14	2	1	10	19	8.0	
BARROW	9	1023.4	1024.2	-15.2	-23.4	-19.3	- 1.6	- 9.4	3	-28.9	19	0	30	-21.7	79	13	10	4	8	0	224	279	3.3	5	11.6	3	30	10	11	9	5.2	
BARTER ISLAND	12	1020.7	1022.7	-14.8	-22.8	-18.8	- 1.6	- 8.9	30+	-31.7	17	0	30	-21.7	74	5	1	2	7	0	122	305	0.2	36	8.9	27	27	5	10	15	6.9	
BETHEL	38	1006.4	1012.3	0.6	- 8.1	- 3.7	- 0.3	7.2	12	-20.6	2	0	29	- 7.2	77	3	- 12	3	2	0	46	279	2.3	35	11.2	33	30+	8	3	19	7.1	
BETTLES	196			1.2	-11.0	- 4.9		6.7	30	-20.6	4	0	29			8		5	7	0	97	889			10.3	21	28+	11	6	13	5.2	
BIG DELTA	386			6.1	- 3.3	1.4		16.1	30	- 9.4	2	0	24			1			2	0	20											
COLD BAY	29	1005.4	1009.3	2.2	- 2.7	- 0.3	- 1.0	6.7	28	- 8.9	2	0	28	- 2.2	88	33	- 4	13	16	0	257	127	0.6	2	19.7	15	7	0	3	27	9.2	
FAIRBANKS	133	995.9	1013.2	6.8	- 3.1	1.8	3.3	18.3	30	- 7.8	5+	0	28	- 7.2	52	1	- 5	1	2	0	25	356	1.1	35	9.4	25	9	6	7	17	6.9	
GULKANA	479			5.6	- 2.7	1.5		12.2	30	- 8.3	1	0	28			7		2	6	0	48	152			10.3	17	30+	1	7	22	8.4	
HOMER	20																															
JUNEAU	4	1016.6	1017.4	8.1	0.4	4.2	0.9	11.1	29+	- 3.9	6	0	13	0.6	80	61	- 12	10	21	0	13	T	2.8	12	13.4	12	2	0	4	26	9.1	26
KING SALMON	15	1007.1	1009.3	5.8	- 1.5	2.2	1.7	8.9	28+	- 7.8	4	0	21	- 3.9	66	11	- 5	5	9	0	56	51	0.8	7	14.8	15	12	2	6	22	8.0	
KODIAK	34	1005.4	1009.6	6.2	0.5	3.3	0.6	10.0	21	- 3.9	4	0	14	- 0.6	77	134	37	35	15	0	236	25	0.6	4	13.0	8	6	4	8	18	7.7	
KOTZEBUE	3			- 6.3	-18.7	-12.5	- 2.1	3.9	14	-34.4	3	0	30			3	- 5	5	3	0	48	1346			10.7	10	7+					
MC GRATH	105	999.0	1011.8	4.8	- 6.4	- 0.8	1.7	9.4	15+	-15.6	4	0	28	- 7.8	60	9	- 3	7	6	0	56	432	1.2	35	9.4	11	13	6	10	14	6.5	
NOME	4	1013.5	1014.5	- 3.9	-11.3	- 7.6	- 1.6	4.4	14	-30.6	2	0	29	-10.6	78	3	- 18	1	4	0	28	229	1.9	6	14.8	4	8	12	6	12	5.4	77
ST. PAUL ISLAND	7	1011.2	1012.0	- 0.7	- 5.7	- 3.2	- 1.2	3.3	4	-13.9	1	0	30	- 5.0	86	15	- 9	5	11	0	160	483	4.4	3	22.8	17	3	2	8	20	8.1	
SHEMYA	37																															
SUMMIT	732			1.4	- 7.7	- 3.1		5.6	16+	-15.6	10	0	30			5		2	5	0	147	559										
TALKEETNA	105			6.5	- 3.9	1.3	0.3	9.4	30+	- 9.4	4	0	29			10	- 9	3	9	0	69	686			9.8	5	3					
UNALAKLEET	5			- 0.8	- 8.7	- 4.7		7.2	14	-22.2	4+	0	28			4		2	4	0	38	635			14.8	12	12					
YAKUTAT	9	1014.6	1015.6	6.0	- 0.1	3.0	0.2	8.9	22	- 4.4	19	0	15	0.0	83	277	93	60	20	0	254	762	1.6	9	15.6	8	3	1	3	26	9.1	
ARIZONA																																
FLAGSTAFF	2135	784.0	1013.1	10.3	- 3.7	3.3	- 2.9	21.1	27	-10.0	21	0	29	- 5.0	57	31	1	16	7	2	277	787	1.4	23	14.8	SW	1	13	11	6	4.1	75
PHOENIX	340	972.6	1011.1	27.6	11.5	19.6	0.0	36.7	27	5.6	9	4	0	- 0.6	28	2	- 6	2	1	0	0	0	0.4	21	19.2Y	11	7	24	4	2	1.7	94
TUCSON	788	923.5	1011.0	23.2	7.6	15.4	- 3.4	31.7	27	1.7	9	0	0	- 2.2	32	1	- 6	1	1	0	0	0	1.3	22	15.2	NW	7	25	3	2	1.7	94
WINSLOW	1492	848.6	1012.6	18.4	2.0	10.2	- 2.9	26.7	28+	- 3.3	22	0	9	- 3.3	45	3	- 9	2	4	0	13	T	2.4	24	17.9	25	18	16	9	5	4.0	
YUMA	59	1004.4	1011.8	28.5	12.4	20.5	- 0.9	37.2	27	7.2	21	5	0	1.1	30	T	- 2	T	0	0	0	0	1.3	26	13.9		1	27	2	1	1.0	95
ARKANSAS																																
FORT SMITH	136	996.6	1013.2	20.0	8.4	14.2	- 2.3	28.9	19	- 2.2	11	0	3	7.8	70	173	65	56	16	8	T	0	0.6	28	17.9	NW	9	7	6	17	6.8	40
LITTLE ROCK	78	1004.4	1013.8	20.4	10.6	15.5	- 1.4	26.7	23	0.0	11	0	1	10.6	75	361	235	109	17	6	T	0	1.0	24	25.9	N	24	7	5	18	6.9	69
CALIFORNIA																																
BAKERSFIELD	145	998.3	1016.0	25.5	10.6	18.1	0.8	34.4	27+	3.9	2	3	0	6.1	51	5	- 16	5	1	0	0	0	1.5	1	10.7	14	8+	20	4	6	2.8	
BISHOP	1252	873.0		20.3	2.2	11.2	- 1.6	28.3	27+	- 2.8	20+	0	9			0	- 12	0	0		0	0										
BLUE CANYON	1609			12.0	2.5	7.3	- 0.3	21.1	26	- 6.7	1	0	9			39	- 83	11	6		132	1168			7.6	5	20+	16	3	11	4.3	
EUREKA U	13			13.2	6.9	10.1	- 0.2	20.6	4	2.8	2	0	0			9	- 59	8	6		0	0			14.8	N	20	13	6	11	5.0	76
FRESNO	100	1004.1	1015.7	24.2	8.2	16.2	- 0.1	33.9	26	2.8	2	2	0	7.2	62	2	- 26	2	1	0	0	0	1.8	32	16.1	NW	1	22	4	4	2.7	92
LONG BEACH	8	1014.6	1016.0	22.7	10.9	16.8	1.3	30.0	22	5.6	3	0	0	5.6	54	T	- 20	T	0	0	0	0	1.3	25	16.1	32	1	16	6	8	4.2	
LOS ANGELES	30	1011.9	1015.4	19.9	11.3	15.6	0.4	26.7	4	8.9	21+	0	0	7.8	67	T	- 27	T	0	0	0	0	2.1	25	19.2Y	44	4	14	6	10	4.6	
LOS ANGELES U	82			22.2	12.3	17.3	0.7	29.4	22	10.6	21+	0	0			0	- 30	0	0		0	0			14.8	NW	1					
MT SHASTA R	1080	894.0	1018.9	16.8	1.6	9.2	0.6	27.8	26	- 3.3	3	0	10	- 2.2	50	9	- 61	5	5		33	T										
OAKLAND	2	1018.0	1018.2	18.5	9.9	14.2	0.6	23.9	22+	6.7	18	0	0	7.8	69	1	- 34	1	3	0	0	0	3.2	29	11.2	3	3	19	6	5	3.0	
RED BLUFF	104	1004.1	1016.9	23.8	8.4	16.2	0.4	32.2	25	2.2	1	1	0	3.3	49	3	- 44	2	2	0	0	0	2.0	34	12.5	N	7	16	7	7	3.8	96
SACRAMENTO	5	1015.6	1016.3	23.8	8.2	16.0	1.3	31.1	26	3.3	1	0	0	3.9	50	1	- 34	1	2	1	0	0	1.4	29	13.0	N	7	20	6	4	2.9	92
SANDBERG R	1377	861.2		14.1	4.2	9.1	- 1.3	24.4	27+	- 2.8	1	0	7	0.0	61	1	- 23	1	2		8	T	4.2	34	24.1	32	14	16	4	10	4.5	
SAN DIEGO	4	1014.9	1015.8	19.9	12.8	16.4	0.0	27.2	9	9.4	3+	0	0	6.7	58	1	- 19	1	3	0	0	0	1.9	28	11.6	N	4	13	8	9	5.0	63
SAN FRANCISCO	2	1017.6	1018.3	18.8	8.6	13.7	0.6	24.4	25+	6.7	30+	0	0	6.7	68	3	- 30	3	1	0	0	0	4.0	29	17.4	29	17	19	5	6	3.1	
SAN FRANCISCO J	16			17.8	10.2	14.0	0.8	25.0	10+	7.2	1	0	0			1	- 36	1	1		0	0										84
SANTA MARIA	72			18.8	5.7	12.3	- 0.8	25.6	22	0.6	2	0	0			T	- 30	T	0		0	0						14	11	5	3.9	
STOCKTON	7	1015.6	1016.4	24.7	8.3	16.6	1.2	32.8	26	4.4	3+	1	0	5.0	52	6	- 23	6	1	1	0	0	2.9	30	13.0	28	17	18	7	5	3.3	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station ⊙	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm. or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb.	Mb	C.	C	C	C	C.		C.				C	%	Mm.	Mm.	Mm.			Mm	Mm	M.p.s.		M.p.s							%
COLORADO																																
ALAMOSA	2297	767.0		10.9	- 6.2	2.3	- 3.0	19.4	28	-21.1	8	0	29			10	- 7	9	5		175	51						9	12	9	5.5	
COLORADO SPRINGS	1873	807.0	1013.3	11.2	- 1.3	4.9	- 2.6	23.3	28	- 9.4	9+	0	16	- 6.1	50	44	10	21	9	2	284	76	2.1	1	16.5	36	3	8	10	12	6.0	
DENVER	1610	832.7	1011.6	12.8	- 0.3	6.2	- 1.8	25.6	28	-15.0	8	0	13	- 4.4	51	95	41	25	13	1	630	229	0.7	35	12.5	NE	19+	7	10	13	6.5	52
GRAND JUNCTION	1476	848.6	1011.5	15.6	2.3	8.9	- 2.3	24.4	28	- 7.2	8	0	6	- 3.9	45	22	3	7	7	2	51	T	0.4	5	17.0	NE	2	7	9	14	6.1	64
PUEBLO	1428	851.7	1011.4	16.1	0.6	8.3	- 2.1	27.2	29	- 6.1	8	0	12	- 1.7	56	42	12	13	9	3	117	51	1.5	2	20.6	N	7	10	8	12	5.6	76
CONNECTICUT																																
BRIDGEPORT	2	1013.2	1013.8	13.9	5.1	9.5	0.6	25.6	19	- 1.7	14	0	5	2.8	68	207	110	57	10	3	T	0	1.9	28	22.4	8	4	7	8	15	6.4	
HARTFORD	52	1006.1	1012.6	16.1	4.3	10.2	1.1	32.2	22	- 3.9	9	1	5	1.7	59	167	73	42	13	3	8	T	1.4	29	13.9	NW	11	7	6	17	7.0	54
DELAWARE																																
WILMINGTON	23	1010.8	1014.0	17.7	7.5	12.6	1.4	30.0	23	- 0.6	13	0	2	5.0	62	167	82	44	12	2	T	0	1.2	27	12.5	17	10	8	4	1[illegible]	6.7	
DIST.OF COLUMBIA																																
WASHINGTON DULLES	88	1002.7	1014.3	17.6	5.8	11.7		30.6	22	- 4.4	14	0	6	5.0	66	187		44	15	2	25	T	1.1	26	13.0	27	10	6	5	19	7.2	
WASHINGTON NATIONAL	3	1012.2	1014.5	18.5	8.1	13.3	0.2	30.0	22	0.0	14	0	1	5.6	63	106	26	27	10	3	T	0	0.9	27	17.0		10	6	6	18	7.0	50
FLORIDA																																
APALACHICOLA U	4			22.9	15.3	19.1	- 0.6	26.7	1	7.2	11	0	0			200	91	88	6	4	0	0			12.5	NW	10	12	9	9	4.6	88
DAYTONA BEACH	9	1016.3	1017.6	25.8	15.0	20.4	- 0.1	31.1	7	5.6	12	0	0	12.8	63	78	3	36	6	5	0	0	1.3	15	13.4	26	27	11	11	8	4.8	
FORT MYERS	5	1016.9	1017.1	28.1	16.4	22.2	- 0.4	31.1	7	8.9	12	0	0	15.6	70	43	- 24	21	4	1	0	0	1.1	9	13.4	30	26	12	8	10	5.1	
JACKSONVILLE	8	1016.3	1017.4	25.2	12.1	18.6	- 1.8	30.6	7	5.0	11	0	0	11.7	69	295	205	210	9	5	0	0	0.7	19	21.5		25	10	12	8	5.0	66
KEY WEST	1	1015.6	1016.2	27.1	22.7	24.9	0.6	29.4	4+	18.3	11	0	0	18.3	69	4	- 59	3	2	0	0	0	3.4	10	15.6	SW	27	10	12	9	5.2	86
LAKELAND U	65			25.7	15.3	20.5	- 1.4	30.0	7	8.3	11	0	0			64	- 25	22	6		0	0						11	12	7	4.5	81
MIAMI	2	1016.6	1016.8	27.5	20.9	24.2	0.8	31.7	9	12.2	12+	0	0	17.2	66	57	- 42	43	5	1	0	0	2.5	9	11.2	10	22+	6	16	8	5.5	
ORLANDO	33	1013.2	1017.4	27.7	15.7	21.7	- 0.1	31.7	26+	8.9	12+	0	0	13.3	63	72	- 15	37	5	4	0	0	0.7	17	15.6	19	1	12	11	7	4.8	
PENSACOLA	34	1011.9	1016.3	23.1	14.4	18.7	- 1.2	27.2	24	2.8	11	0	0	13.3	72	200	67	116	7	5	0	0	1.4	17	15.6	20	7	11	8	11	5.2	
TALLAHASSEE	17	1014.6	1016.8	25.1	10.6	17.8	- 1.9	30.0	21+	1.1	11	0	0	11.7	71	334	216	120	7	5	0	0	0.8	21	10.3	19	25	11	8	11	5.3	
TAMPA	6	1016.9	1017.2	26.3	15.1	20.7	- 1.2	30.0	20	7.8	12+	0	0	13.3	66	61	- 11	22	7	5	0	0	0.8	12	10.7	29	26	11	9	10	5.3	76
WEST PALM BEACH	5	1016.3	1016.9	28.2	19.0	23.6	0.3	32.8	27+	8.9	11	3	0	15.0	59	37	- 73	17	6	1	0	0	2.6	10	13.4	29	26	6	15	9	5.7	
GEORGIA																																
ATHENS	244	986.8	1015.9	20.2	8.5	14.4	- 1.8	27.2	21+	- 1.7	11	0	1	7.8	70	91	- 21	56	8	2	0	0	1.4	25	12.5	30	12	11	4	15	6.2	
ATLANTA	308	979.0	1015.7	19.8	8.6	14.2	- 1.4	26.1	21+	- 3.3	11	0	1	6.7	65	102	- 11	60	8	2	0	0	1.4	23	12.5	E	7	8	7	15	6.2	55
AUGUSTA	41	1010.5	1015.9	22.6	8.5	15.6	- 1.8	28.3	22	1.1	12	0	0	6.7	60	94	4	68	7	3	0	0	1.3	24	11.2	25	10	11	6	13	5.8	
COLUMBUS	117	1002.0		22.2	10.7	16.4	- 1.2	28.3	21+	- 0.6	11	0	1	9.4	68	151	35	70	7	3	0	0	0.7	23	11.2	27	10	10	7	13	5.9	
MACON	108	1003.4	1016.4	23.2	10.2	16.7	- 1.9	29.4	21+	0.0	11	0	1	9.4	67	161	66	65	6	3	0	0	1.1	21	11.6		10	10	5	15	6.2	61
ROME	194			20.6	7.8	14.2	- 1.2	28.3	21	- 3.9	11	0	5			186	70	90	10		T	0										
SAVANNAH	14	1015.2	1017.1	23.8	11.7	17.8	- 0.9	29.4	23	3.3	11	0	0	10.0	66	113	19	60	6	4	0	0	1.3	22	13.4		10	10	9	11	5.3	70
HAWAII																																
LIHUE	31	1014.6	1019.6	26.8	20.4	23.7	1.2	27.8	29+	15.6	7	0	0	18.9	76	186	-116	62	26	0	0	0	0.1	16	8.0	E	14	0	7	23	8.3	44
HONOLULU	2	1017.6	1017.9	28.2	20.1	24.2	0.7	30.0	14+	15.0	7	0	0	16.1	64	18	- 15	9	9	0	0	0	5.1	5	14.3	NE	16	1	18	11	6.8	51
KAHULUI	15	1014.9	1017.3	27.7	18.1	22.9	- 0.1	29.4	21+	13.9	7	0	0	15.6	65	11	- 25	4	10	0	0	0	5.5	5	14.8	E	17	9	10	11	5.6	70
HILO	8	1017.3	1018.5	26.4	18.2	22.3	0.3	28.3	18	15.6	6	0	0	18.3	83	25	- 59	5	15	0	0	0	5.2	5	11.2	NE	26+	0	16	14	7.1	52
IDAHO																																
BOISE	865	915.3	1016.2	16.2	2.8	9.5	- 0.7	23.9	26	- 4.4	3	0	6	- 2.2	47	38	8	29	4	1	T	0	2.6	31	18.8	S	13	10	11	9	5.3	79
LEWISTON	431			17.3	3.2	10.3	- 0.2	25.0	26	- 3.3	7	0	7			3	- 26	2	2		T	T			20.1Y		5	6	8	16	6.6	
POCATELLO	1358	861.2	1014.8	12.7	- 0.1	6.3	- 1.7	22.8	27	- 7.2	8	0	17	- 6.1	43	18	- 9	7	8	0	104	76	2.3	26	16.5	SW	6	5	11	14	6.9	64
ILLINOIS																																
CAIRO U	96			17.5	10.0	13.8	- 1.4	25.6	20	0.6	11	0	0			187	84	52	14		T	0			16.1	SE	19+	5	5	20	7.3	48
CHICAGO O HARE	201	987.8	1012.4	13.6	4.2	8.9	0.5	25.0	20	- 3.9	11	0	7	3.3	72	127	52	36	13	4	5	T	0.3	10	14.8	8	9+	5	7	18	7.5	
CHICAGO MIDWAY	185	990.2	1012.9	13.8	4.6	9.2	- 0.2	24.4	20+	- 3.9	11	0	8	3.3	70	139	61	42	15	4	71	51	0.6	13	18.8	SE	19	5	7	18	7.4	44
MOLINE	177	990.5	1012.1	14.6	5.1	9.8	- 0.2	23.9	15	- 4.4	11	0	6	3.9	70	287	207	148	15	4	23	T	0.4	21	14.3	SE	21	7	6	17	7.2	49
PEORIA	199	988.5	1012.4	15.8	5.2	10.5	0.1	25.6	20	- 5.6	11	0	5	4.4	70	108	7	43	16	5	18	T	1.1	19	15.2	S	20	5	5	20	7.7	35
ROCKFORD	221	985.1	1012.4	13.2	4.2	8.7	- 0.1	26.1	20	- 7.2	11	0	7	3.9	76	252	174	141	18	4	132	76	0.6	7	16.1	7	9	6	6	18	7.3	
SPRINGFIELD	179	990.2	1012.4	16.2	5.9	11.1	- 0.8	26.1	15	- 4.4	11	0	5	5.0	69	134	43	74	11	3	23	25	1.5	20	20.1	SE	20	5	4	21	7.9	56
INDIANA																																
EVANSVILLE	116	999.7	1013.7	17.3	8.3	12.8	- 1.4	26.7	20	- 3.3	11	0	3	7.8	73	139	38	38	16	4	8	T	1.3	23	13.9	SW	10	4	3	23	8.1	37

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

APRIL 1973

State and Station		Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
	Elevation ground	Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
INDIANA																																
FORT WAYNE	241	983.4	1013.5	14.6	4.5	9.6	- 0.1	25.0	20	- 5.0	11	0	6	3.9	69	55	- 25	12	15	4	102	76	1.1	23	17.4	S	16	4	5	21	7.8	51
INDIANAPOLIS	241	984.1	1013.4	15.8	5.6	10.7	0.3	25.0	21+	- 4.4	11	0	6	4.4	67	70	- 25	13	18	5	28	25	1.0	20	17.0	Sw	9	3	4	23	8.3	28
SOUTH BEND	236	984.4	1012.5	14.8	5.3	10.1	1.4	25.0	20	- 5.0	11	0	4	4.4	70	99	8	51	16	5	43	25	0.8	20	14.3	18	16	4	7	19	7.9	
IOWA																																
BURLINGTON	211			14.9	5.2	10.1	- 0.4	22.8	15	- 5.6	11+	0	5	5.0	69	170	82	81	11	5	5	T	0.5	24	13.0	34	9	5	8	17	7.2	
DES MOINES	286	977.3	1012.2	14.6	4.5	9.6	0.3	25.0	20	- 6.1	11+	0	7	3.3	69	119	54	35	11	5	384	305	0.6	1	19.2	Nw	9	7	7	16	6.7	55
DUBUQUE	322			11.6	3.1	7.3	- 0.9	20.0	18	-11.7	11	0	7			160	82	40	17		503	432						3	8	19	7.6	
SIOUX CITY	334	972.6	1012.6	16.8	3.4	10.2	0.8	26.1	18	- 5.0	10	0	8	0.0	54	34	- 23	11	10	4	10	T	0.9	36	21.9	SE	19	8	6	16	6.1	63
WATERLOO	265	980.4	1012.3	12.5	2.2	7.3	- 1.2	21.7	21+	- 8.3	11	0	10	0.6	65	88	19	36	13	4	262	254	1.0	5	15.6	36	9	4	8	18	7.6	
KANSAS																																
CONCORDIA	448	959.0	1012.0	16.7	4.4	10.6	- 1.0	25.6	29	- 5.0	10	0	6	3.3	66	61	7	26	10	5	46	25	0.4	29	20.6	S	19	15	3	12	5.1	69
DODGE CITY	787	921.1	1012.3	15.0	1.5	8.3	- 3.7	24.4	29	- 8.9	10	0	14	0.6	65	82	36	30	12	6	61	51	1.0	27	18.8	S	15+	10	10	10	4.9	74
GOODLAND	1114	884.2	1011.9	14.8	- 0.7	7.1	- 1.9	26.7	28	-11.1	10+	0	21	0.6	70	48	8	20	10	3	257	102	1.6	29	14.8	14	18+	10	11	9	5.4	
TOPEKA	267	980.7	1012.6	17.6	5.2	11.4	- 1.0	27.2	21+	- 3.3	11	0	7	5.0	68	102	19	45	8	6	T	T	0.6	27	18.8	Nw	9	11	7	12	5.5	54
WICHITA	403	964.4	1012.4	17.1	5.3	11.2	- 2.5	25.6	29	- 3.3	10	0	5	5.6	70	96	38	31	7	6	58	51	1.1	25	18.8	SW	19	10	10	10	5.4	63
KENTUCKY																																
COVINGTON	265	982.1	1013.9	15.1	6.1	10.6	- 0.6	26.7	21	- 2.8	14+	0	4	6.1	77	148	66	26	16	3	46	T	1.3	22	12.5	24	9	4	3	23	8.4	
LEXINGTON	294	979.0	1014.5	16.3	6.9	11.6	- 0.8	27.2	21	- 1.7	13	0	4	6.1	73	144	41	27	18	0	5	T	1.7	21	12.1	21	9	4	3	23	8.2	
LOUISVILLE	145	996.3	1013.9	16.8	8.0	12.4	- 0.2	28.3	21	- 1.7	11	0	4	6.7	71	147	50	36	17	2	41	25	1.4	22	15.2	Sw	16	4	3	23	8.1	33
LOUISIANA																																
ALEXANDRIA	28	1010.8	1015.1	22.2	10.7	16.4	- 2.3	27.8	25	0.0	10	0	1	11.7	76	222	77	72	12	3	0	0	1.1	18	10.3	19	30+	8	7	15	6.3	
BATON ROUGE	20	1012.5	1015.2	24.1	13.1	18.6	- 1.5	30.6	25	2.8	11	0	0	12.8	72	257	135	120	10	5	0	0	1.1	17	14.3	14	17	11	5	14	5.5	
LAKE CHARLES	3	1013.9	1014.8	22.6	13.6	18.1	- 1.9	30.6	25	4.4	10	0	0	13.3	76	278	167	140	11	5	0	0	1.9	14	19.7	6	17	9	8	13	5.9	
NEW ORLEANS	1	1014.6	1015.3	23.0	12.8	17.9	- 2.1	28.3	25	1.7	11	0	0	13.9	78	266	150	107	10	6	0	0	1.5	16	13.9	14	17	11	9	10	5.1	69
SHREVEPORT	77	1004.7	1014.0	22.4	10.9	16.7	- 1.8	28.3	22	0.6	11	0	0	10.0	69	164	47	52	14	5	0	0	1.0	19	12.5	27	15	6	7	17	6.8	42
MAINE																																
CARIBOU	190			7.9	- 1.4	3.3	0.8	18.9	23	-12.2	10	0	17			134	67	47	15		564	483						4	5	21	7.7	
PORTLAND	13	1009.8	1012.2	12.1	2.9	7.5	1.7	25.0	23	- 4.4	14	0	8	0.0	64	251	157	134	14	1	58	51	0.9	34	15.2	Nw	6+	7	5	18	7.0	48
MARYLAND																																
BALTIMORE	45	1008.8	1014.6	17.1	6.3	11.7	- 0.6	30.0	23+	- 3.3	13	0	5	4.4	64	163	71	46	13	3	T	0	1.4	26	15.6		10+	7	5	18	6.8	47
MASSACHUSETTS																																
BLUE HILL OBS R	192			14.1	4.2	9.1	1.5	27.8	22	- 3.9	14	0	5			165	63	51	11		T	T			20.1	Nw	6					53
BOSTON	5	1011.2	1012.3	14.3	5.5	9.9	1.1	28.9	22	- 0.6	14+	0	3	1.7	61	144	48	59	12	0	T	0	1.4	29	17.9	W	6	7	7	16	6.5	59
WORCESTER	301	975.3	1012.5	13.0	2.9	7.9	0.9	28.9	22	- 5.6	12	0	8	- 1.7	55	161	61	55	11	1	10	T	2.4	30	13.4	27	11+	5	11	14	6.5	
MICHIGAN																																
ALPENA	210	988.5	1013.9	10.8	- 0.6	5.1	1.2	24.4	21	-10.6	12+	0	19	- 1.7	64	59	- 8	20	9	0	224	178	0.8	4	14.8	Sw	16	6	9	15	6.5	54
DETROIT	189			13.7	5.0	9.3	0.7	24.4	21	- 3.3	11	0	7	1.1	58	35	- 41	22	10	1	T		0.4	28	13.4	18	16					
DETROIT METRO	193	989.2	1013.1	14.2	4.5	9.3	1.3	25.0	21	- 3.9	11	0	6	2.2	65	36	- 41	19	7	1	T	T	0.6	29	20.1	Sw	16	3	8	19	7.8	49
FLINT	235	984.8	1012.9	13.2	3.2	8.2	0.8	25.0	20	- 5.6	11	0	8	2.2	69	72	5	31	13	2	79	76	0.7	26	13.9	22	16	3	10	17	7.2	
GRAND RAPIDS	239	983.7	1013.2	13.5	2.9	8.2	0.6	25.6	20	-10.0	11	0	9	1.7	66	88	13	40	10	4	127	127	0.3	14	17.4	S	16	5	6	19	7.4	49
HOUGHTON LAKE	350	971.2	1013.7	11.1	1.2	6.2	1.3	23.9	20	- 7.8	13	0	15	0.0	67	42	- 17	14	12	0	[illegible]	178	0.6	36	13.4	22	16	8	6	16	6.7	
LANSING	256	981.0	1013.1	13.0	2.8	7.9	0.3	26.7	20	- 9.4	11	0	9	1.7	67	56	- 17	19	12	2	140	127	0.5	24	16.5	S	16	4	10	16	7.3	50
MARQUETTE J	206			8.2	0.5	4.3	0.3	24.4	21	- 5.6	13	0	15			76	8	22	10		64	25			16.5	Sw	15	5	8	17	7.4	46
MUSKEGON	191	990.2	1013.4	11.8	2.5	7.2	- 0.2	25.0	20	-11.1	11	0	8	1.7	71	93	27	27	13	5	211	152	0.4	12	13.4	19	16+	5	7	18	7.1	
SAULT STE MARIE	220	987.1	1014.0	9.2	- 0.6	4.3	1.0	19.4	18	- 7.8	13	0	18	- 1.1	69	71	16	41	10	1	51	25	1.0	36	13.0	Nw	28+	6	11	13	6.5	61
MINNESOTA																																
DULUTH	435	962.1	1014.4	8.6	- 1.6	3.5	0.7	20.6	14	- 8.3	10	0	25	- 3.3	65	34	- 26	14	10	3	71	25	0.8	7	15.6	S	14+	4	7	19	7.6	41
INTERNATIONAL FALLS	359	970.9	1015.0	9.6	- 2.8	3.4	0.4	23.3	14	-12.2	10	0	25	- 4.4	59	33	- 7	23	7	2	51	25	1.2	1	12.5	11	19+	4	8	18	7.3	
MINNEAPOLIS	254	982.7	1013.5	12.0	1.7	6.9	0.1	23.9	20	- 5.0	10	0	13	- 0.6	62	59	12	17	12	2	51	51	1.1	2	19.7	NE	9	4	12	14	6.7	53
ROCHESTER	395	965.1	1013.2	11.3	0.2	5.8	- 0.9	22.8	20	-11.1	11	0	18	1.1	74	108	53	35	15	2	264	254	1.2	4	17.9	18	20	5	10	15	6.9	
ST CLOUD	313	976.3	1014.3	11.8	- 0.2	5.8	- 0.2	23.9	18	- 7.8	10	0	19			42	- 9	18	6		T	T						7	7	16	6.9	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No of days: Max 32.2 °C or above	No of days: Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	No of days: .25 mm. or more	No of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile (1.6 kilometers): Direction	Fastest mile (1.6 kilometers): Date	Clear, 0-3	Partly cloudy 4-7	Cloudy, 8-10		
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
MISSISSIPPI																																
JACKSON	94	1003.4	1015.2	22.8	11.0	16.9	- 1.3	28.3	21	- 0.6	11	0	1	10.0	67	240	115	126	10	5	0	0	1.3	18	17.0	SE	18	8	8	14	6.0	49
MERIDIAN	88	1004.4	1015.7	23.2	10.4	16.8	- 1.2	28.9	24+	- 0.6	11	0	1	8.9	63	228	92	72	9	5	0	0	1.2	19	10.3	13	18+	7	7	16	6.1	
MISSOURI																																
COLUMBIA REGIONAL	270	980.4	1012.6	15.6	6.7	11.2	- 1.6	25.0	21	- 3.3	11+	0	4	5.0	68	91	7	25	11	4	114	102	0.9	23	16.1		9	5	6	19	7.3	45
KANSAS CITY	309	975.3	1012.3	16.1	5.9	11.0	- 1.3	25.0	21	- 3.9	10	0	5	3.9	64	74	- 15	30	10	6	33	25	0.6	26	17.9	NW	9	10	6	14	5.9	55
ST JOSEPH	247			17.4	5.9	11.7	- 0.3	26.7	21	- 3.3	10	0	5	3.3	60	64	- 16		9				0.6	28	13.4	21	9	11	4	15	5.7	
ST LOUIS	163	992.6	1012.8	17.3	6.8	12.1	- 0.7	26.1	21	- 4.4	11	0	4	7.2	73	108	14	27	14	4	5	T	1.4	22	18.8	SE	20	5	4	21	7.6	37
SPRINGFIELD	386	967.5	1012.9	17.3	6.2	11.8	- 1.3	25.6	21	- 3.9	11	0	4	6.1	72	164	60	52	17	5	23	25	1.0	21	16.5	NW	9	7	6	17	6.4	48
MONTANA																																
BILLINGS	1087	890.6	1016.2	10.4	0.1	5.2	- 2.6	20.0	27+	- 8.9	9	0	15	- 3.9	56	76	43	26	15	0	363	178	2.3	30	15.2	NE	8	1	10	19	8.0	40
GLASGOW	696	932.6	1015.4	11.6	- 0.9	5.3	- 1.0	21.7	12	- 8.9	9	0	18	- 2.2	62	31	6	12	11	1	102	51	2.0	36	14.3	2	19	1	10	19	7.7	
GREAT FALLS	1116	888.3	1017.8	9.9	- 0.9	4.6	- 1.9	20.0	11	- 9.4	7	0	18	- 5.0	53	73	49	43	14	0	630	305	3.3	26	18.8	SW	27	0	8	22	8.4	38
HAVRE	788	923.1	1016.4	11.8	- 1.8	5.0	- 1.2	21.1	12+	- 9.4	15	0	20	- 3.3	60	60	35	41	13	1	490	279	1.7	30	15.6	SW	16	2	10	18	7.5	77
HELENA	1167	880.8	1017.9	10.9	- 1.7	4.6	- 1.7	18.3	27+	- 8.3	15	0	20	- 5.6	52	17	- 4	6	7	0	165	51	2.8	30	15.6		12	2	8	20	7.9	72
KALISPELL	904	912.3	1017.9	13.1	- 1.4	5.8	- 0.7	20.0	26	- 9.4	7	0	19	- 3.3	55	12	- 14	5	10	1	46	51	0.6	16	13.9	3	13	6	6	18	7.1	
MILES CITY	801	920.4	1014.4	12.0	- 0.4	5.8	- 1.8	23.3	13	- 8.9	9	0	15	- 0.6	67	107	80		15	0	130		2.7	33								
MISSOULA	972	905.2	1018.5	13.5	- 1.2	6.2	- 0.7	21.7	26	- 8.3	8+	0	16	- 3.3	55	8	- 16	3	9	0	5	T	1.3	31	15.2		5	3	11	16	7.2	49
NEBRASKA																																
GRAND ISLAND	561	945.8	1012.5	14.5	2.6	8.6	- 1.2	22.8	28	- 7.2	10	0	9	1.1	66	41	- 17	17	12	3	97	76	1.0	32	20.6	17	19	12	3	15	5.9	
LINCOLN	360	969.5	1012.3	16.3	3.2	9.8	- 0.9	26.1	29	- 3.9	10	0	9	1.7	62	66	2	24	13	3	56	T	1.0	34	18.3	S	19	12	4	14	5.8	61
NORFOLK	471			15.3	2.7	9.0	- 0.1	23.9	28+	- 5.6	10	0	11			40	- 15	18	8		13	T						11	4	15	5.9	
NORTH PLATTE	846	914.3	1012.8	15.3	0.0	7.7	- 1.1	26.7	28+	-11.1	10	0	15	- 0.6	61	37	- 14	13	10	4	43	25	1.5	35	17.9	SE	18	8	8	14	6.2	59
OMAHA	298	976.6	1012.1	16.5	3.9	10.2	- 0.7	26.1	29	- 4.4	10	0	8	2.8	64	91	26	51	12	4	58	51	1.0	33	21.9	SE	19	12	4	14	5.8	57
SCOTTSBLUFF	1206	876.4	1013.5	12.6	- 1.7	5.5	- 2.6	23.9	14	-13.9	8	0	20	- 2.8	63	57	11	19	14	2	132	25	2.8	33	13.4	30	20+	6	9	15	7.0	
VALENTINE	789			14.1	0.3	7.2	- 0.4	27.2	14	-12.2	10	0	14			53	3	24	7		10	T			21.0	SE	19+	7	7	16	6.4	59
NEVADA																																
ELKO	1539	843.6	1015.5	13.1	- 0.8	6.1	- 0.7	22.8	27	- 9.4	8	0	19	- 5.0	48	22	2	16	6	2	25	T	1.0	28	10.3	28	28+	7	8	15	6.4	
ELY	1906	806.3	1014.0	11.8	- 3.9	3.9	- 1.9	22.2	27	-10.0	8	0	26	- 7.2	50	5	- 19	2	6	1	43	T	1.5	33	16.1	SW	13	7	11	12	6.5	72
LAS VEGAS	659	936.0	1012.1	23.6	9.9	16.8	- 1.3	33.3	27	3.9	5	2	0	- 4.4	25	9	3	9	1	1	0	0	1.9	29	21.0	NW	17	19	9	2	2.6	87
RENO	1342	866.2	1016.9	16.3	- 3.2	6.6	- 2.3	25.6	26	- 8.9	3	0	27	- 5.0	47	3	- 10	1	5	1	18	T	1.6	34	15.6	NW	17	14	9	7	4.6	95
WINNEMUCCA	1311	868.9	1017.0	15.8	- 2.3	6.8	- 0.9	25.0	27	-12.8	8	0	25	- 3.9	51	19	- 2	14	8	2	86	25	1.7	33	17.0	NW	6	7	12	11	5.9	76
NEW HAMPSHIRE																																
CONCORD	104	999.7	1012.4	13.1	1.3	7.2	0.7	30.0	22	-10.0	14	0	15	0.0	67	116	31	41	13	1	86	51	1.7	31	14.3	NW	6	8	6	16	6.7	54
MT WASHINGTON OBS	1909			- 1.3	- 8.2	- 4.7	0.3	8.9	22	-21.1	13	0	29			339	189	82	15	0	1826	584			58.1		5+	3	5	22	8.3	35
NEW JERSEY																																
ATLANTIC CITY	20	1011.5	1013.9	15.8	5.6	10.7	0.2	27.8	23+	- 1.1	14+	0	5	5.6	74	112	25	28	11	2	T	0	1.7	26	14.3	7	8+	6	8	16	6.8	58
ATLANTIC CITY U	3			15.3	9.1	12.2	2.3	24.4	23	1.7	13	0	0			102	17	26	11						21.5	NE	8					
NEWARK	2	1012.2	1013.1	16.9	7.7	12.3	1.6	30.0	22	1.7	14+	0	0	3.9	61	147	57	39	10	3	T	T	1.8	26	13.4	28	5	6	7	17	7.0	
TRENTON U	17			16.2	7.1	11.7	0.7	27.8	23+	0.0	14	0	1			168	86	44	12		T	T			17.0	S	10	7	8	15	6.4	53
NEW MEXICO																																
ALBUQUERQUE	1619	834.4	1010.7	18.3	1.9	10.1	- 3.1	26.7	28	- 5.6	8	0	8	- 3.9	44	23	11	18	5	2	206	152	1.1	25	24.1	NW	18	11	12	7	4.6	67
CLAYTON	1515			14.2	- 0.4	6.9	- 3.5	26.1	28	- 8.9	8	0	18			67	37	42	7		142	152						11	9	10	5.1	
ROSWELL	1112	886.2	1010.1	21.4	3.6	12.5	- 3.7	27.4	28	- 5.0	8	0	7	- 2.2	42	4	- 9	2	3	1	28	25	0.8	29	19.2	NE	7	18	10	2	3.4	78
NEW YORK																																
ALBANY	84	1002.7	1013.3	15.2	3.4	9.3	1.4	30.0	22	- 7.2	14	0	7	1.1	61	114	43	42	12	1	T	T	1.4	30	15.2	NW	5	6	6	18	7.1	54
BINGHAMTON	485	953.9	1013.1	11.9	3.0	7.4	1.1	26.7	22	- 6.1	11	0	10	1.1	70	95	20	29	16	1	117	51	1.6	26	13.9		22+	3	8	19	8.0	51
BUFFALO	215	987.8	1013.8	12.7	3.8	8.3	1.9	26.7	21+	- 4.4	11	0	8	1.1	65	90	14	27	14	3	61	25	1.7	27	14.3		22+	2	7	21	8.1	47
NEW YORK U	40	1009.8	1013.3	16.6	7.2	11.9	1.1	30.0	22	0.6	14+	0	0	3.3	61	204	117	41	13	0	T	T	0.9	28	14.8	NE	26					47
NEW YORK KENNEDY	4	1012.5	1013.3	16.4	8.2	12.3	2.9	30.6	23	2.2	14+	0	0	3.9	60	177	89	41	11	2	T	0	1.4	27	17.4	8	4	8	8	14	6.4	
NEW YORK LA GUARDIA	3	1012.5	1013.4	15.6	7.7	11.7	1.0	28.3	22	1.7	14+	0	0	3.3	61	182	91	44	12	3	T	0	1.5	28	15.2	NE	26+	8	6	16	6.7	
ROCHESTER	167	993.2	1013.8	13.9	3.8	8.9	1.6	30.6	21	- 6.7	14	0	8	2.2	66	82	14	20	14	2	38	25	1.6	29	15.2		22	3	8	19	7.6	57
SYRACUSE	125	998.0	1012.9	13.3	3.1	8.2	0.4	28.9	22	- 5.6	13+	0	9	2.8	72	176	97	46	13	1	135	25	1.1	27	14.8		11	3	8	19	7.4	43

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No of days			Average relative humidity	Precipitation			No of days		Snow, Ice pellets		Wind		Fastest mile (1.6 kilometers)			No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Q	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb	Mb	C	C	C	C	C.		C				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M p.s.		M p.s							%
NORTH CAROLINA																																
ASHEVILLE	652	939.0	1015.4	17.6	5.5	11.6	-1.0	25.6	22	-4.4	12	0	7	5.6	71	145	43	78	12	3	T	T	0.6	26	13.4	31	28	7	10	13	6.5	46
CAPE HATTERAS R	2	1015.9	1016.2	20.2	11.5	15.8	0.7	25.6	26	4.4	14+	0	0	10.0	70	85	9	46	7	1	0	0	2.0	25	13.9	27	10	11	9	10	5.3	69
CHARLOTTE	224	987.8	1015.4	20.5	7.9	14.2	-1.5	27.2	22	-1.7	12	0	3	5.6	59	54	-35	44	7	2	0	0	1.8	22	14.3	SW	12	9	8	13	6.2	76
GREENSBORO	273	983.7	1015.3	18.9	7.1	13.0	-1.1	26.7	22	-2.8	12	0	5	6.1	66	109	22	43	7	4	0	0	1.7	22	18.8	SW	9	6	8	16	6.7	58
RALEIGH	132	999.3	1015.3	21.4	7.3	14.4	-0.8	28.9	22	-3.3	12	0	2	6.1	63	112	22	53	8	3	0	0	1.4	23	9.4	28	10+	7	10	13	6.3	58
WILMINGTON	9	1014.9	1016.2	22.1	9.9	16.0	-0.9	28.3	24	1.1	14+	0	0	9.4	68	135	62	62	8	3	0	0	1.8	22	14.3		10	12	7	11	5.4	77
NORTH DAKOTA																																
BISMARCK	502	953.9	1014.6	11.5	-1.6	4.9	-1.4	22.8	13	-12.8	10	0	19	-2.8	62	22	-9	10	10	0	13	T	1.4	1	15.6	NE	19	6	6	18	7.3	63
FARGO	273	981.0	1014.4	12.1	-1.7	5.2	-0.3	25.6	18	-12.8	10	0	20	-3.9	57	18	-26	9	5	1	61	25	1.8	3	16.5	SE	20+	4	10	16	7.1	66
WILLISTON	579	945.5	1015.1	11.8	-1.6	5.1	-0.6	23.3	13	-12.2	9	0	20	-2.2	64	45	22	15	8	1	41	25	1.9	35	13.0	N	19	4	6	20	7.7	57
OHIO																																
AKRON	368	968.8	1013.7	14.8	5.1	9.9	0.7	26.7	21	-3.3	11	0	7	2.8	63	88	3	25	17	3	66	25	1.2	24	15.6	21	16	1	10	19	7.9	
CINCINNATI ABBE OB	232			15.3	7.1	11.2	-1.1	27.2	21	-1.7	11	0	4			159	67	34	19		10	T			13.0	SW	9					22
CLEVELAND	237	984.4	1013.7	14.7	5.4	10.1	1.8	27.8	21	-3.3	14	0	6	3.9	70	86	0	39	15	3	23	T	1.1	23	15.2	S	16+	2	9	19	7.8	48
COLUMBUS	247	984.1	1014.1	15.0	6.2	10.6	0.2	27.2	21	-2.8	14	0	6	4.4	69	94	6	19	16	3	180	152	1.1	23	17.9	SW	9	3	3	24	8.2	30
DAYTON	305	977.3	1013.7	14.9	5.6	10.3	-0.1	27.2	21+	-2.8	11	0	5	4.4	72	88	3	18	15	1	91	51	1.3	21	14.8	S	16+	4	2	24	8.1	44
MANSFIELD	395			14.8	5.1	10.0	0.2	26.7	20	-4.4	11	0	7	3.9	69	85	1	33	16	2	33	25	1.8	22	17.4	20	16	4	6	20	7.7	
TOLEDO	204	988.2	1013.4	14.6	3.6	9.1	0.8	25.6	20	-6.7	14	0	9	1.1	60	45	-25	17	12	3	T	T	0.9	24	16.1	SW	16	2	11	17	7.7	38
YOUNGSTOWN	359	970.9	1013.7	13.3	4.2	8.8	0.4	25.0	21	-5.0	14	0	10	3.9	75	112	18	30	16	1	46	25	1.2	24	11.6	25	22	3	7	20	8.0	
OKLAHOMA																																
OKLAHOMA CITY	392	966.5	1012.8	18.6	8.1	13.3	-2.2	27.2	21	-2.2	10	0	2	7.8	72	59	-20	18	8	5	T	T	0.6	24	18.8	SW	19+	10	10	10	5.6	57
TULSA	198	988.5	1012.9	20.0	9.1	14.6	-0.4	29.4	20	-0.6	10	0	1	7.2	67	183	81	65	13	7	8	0	0.9	22	21.9	SW	19	6	12	12	6.3	58
OREGON																																
ASTORIA	2	1022.0	1022.8	14.2	4.6	9.4	-0.1	19.4	10	0.0	2	0	1	4.4	75	60	-71	33	11	0	T	0	1.8	28	12.5	27	16	2	10	18	7.7	
BURNS U	1265			14.4	-1.1	6.7	-1.1	23.9	26	-6.7	2	0	20			4	-15	2	3		18	25						8	10	12	5.5	
EUGENE	109	1008.1	1021.9	16.4	3.5	9.9	-0.5	21.7	11+	-1.1	2	0	3	5.0	77	42	-18	17	6	0	T	0	1.0	31	8.0	17	18	4	12	14	6.8	
MEACHAM	1234	878.1		9.1	-1.0	4.1	-0.8	19.4	26	-5.6	7+	0	21	-2.2	67	49	-22	18	8		196	152			8.0	33	27	7	3	20	7.2	
MEDFORD	396	973.2	1021.2	19.8	2.5	11.2	0.8	27.8	26	-2.2	2	0	5	1.7	57	19	-8	15	7	1	T	T	1.0	34	10.7	14	7	12	4	14	5.6	
PENDLETON	452	965.5	1019.2	17.1	3.2	10.2	-0.9	24.4	26	-3.3	7	0	6	-2.2	44	7	-21	4	4	0	T	T	2.4	26	15.6	27	5	10	8	12	5.8	
PORTLAND	6	1020.7	1021.8	17.4	5.1	11.3	0.3	23.3	11+	0.6	7	0	0	3.9	66	34	-19	12	7	1	T	0	1.1	31	11.6	E	7	3	12	15	7.1	67
SALEM	60	1014.6	1021.9	16.4	2.6	9.5	-1.1	21.7	11+	-2.8	2	0	7	2.2	63	43	-16	16	8	1	T	0	0.8	30	9.4	17	18	5	10	15	6.7	
SEXTON SUMMIT R	1169	886.9	1020.4	12.7	1.5	7.1	0.1	20.6	8	-3.9	18	0	11			26	-21	9	8		109	102	2.5	35	14.8	12	7	12	6	12	5.1	
PACIFIC AREA																																
JOHNSTON	2	1014.6	1015.0	26.4	23.2	24.8	-0.7	27.8	19	22.0	7+	0	0	20.0	76	48	-29	9	19		0	0			13.0	E	21					62
PAGO PAGO	4	1009.8	1010.1	31.3	24.5	27.9		32.2	17+	22.8	20	3	0	24.4	83	22	-36	15	9	0	0	0	8.4	7	15.2	NE	4	4	17	9	6.0	69
GUAM TAGUAC R	110			30.1	22.7	26.4	-0.2	30.6	29+	21.7	28+	0	0			287	23	68	24	2	0	0			11.6	E	19	0	2	28	9.0	60
WAKE	3	1016.3	1016.6	29.1	22.4	25.8	0.0	30.6	7	20.6	25+	0	0	20.0	72	115	-12	33	21	0	0	0	7.5	6	14.3	8	13	0	7	23	8.7	
KOROR R	29			31.1	24.7	27.9	0.6	32.2	25+	23.3	11+	3	0			371	58	168	21		0	0			14.3	E	6	0	10	20	8.4	63
KWAJALEIN	2	1009.5	1010.1	30.9	25.3	28.2	1.1	31.7	24+	23.3	17+	0	0	23.3	77	247		77	21	7	0	0	2.3	9	13.0	NW	28	1	7	22	8.5	38
MAJURO	3			29.6	25.2	27.4	0.4	31.1	3	22.8	4	0	0			619	110	100	25	0	0	0			11.6	NE	7	0	2	28	9.3	61
PONAPE R	37			29.9	24.6	27.2	0.3	32.2	5	22.2	27	1	0			224	-89	75	20	1	0	0			9.4	E	30	0	3	27	9.3	53
TRUK MOEN ISLAND	2			30.0	25.3	27.7	0.6	31.7	2	23.3	21+	0	0			23	-25	6	17	0	0	0	8.7	7	13.9	E	5	11	18	1	4.3	83
YAP R	13			31.1	25.1	28.1	0.4	32.2	15+	22.8	28	5	0			143	-19	51	15	0	0	0			10.3	NE	18	0	11	19	7.7	71
PENNSYLVANIA																																
ALLENTOWN	118	999.7	1013.7	15.2	4.8	10.0	0.4	28.9	22	-2.8	12	0	5	2.8	64	151	55	36	13	3	T	0	1.8	27	14.3	27	10	5	8	17	6.8	
ERIE	223	986.8	1013.7	12.3	3.3	7.8	1.0	25.6	21	-5.6	14	0	11	2.8	74	69	-22	27	15	1	46	25	1.4	26	12.5	28	10	5	6	19	7.6	
HARRISBURG	103	1001.4	1014.0	15.4	5.6	10.5	-0.5	30.0	22	-1.7	13+	0	6	3.3	65	158	82	28	13	1	T	T	1.3	27	16.5	NW	11	7	8	15	6.6	53
PHILADELPHIA	2	1012.5	1013.7	16.9	6.8	11.9	0.8	30.0	22	-1.7	13	0	1	6.1	72	170	83	51	12	4	T	T	1.7	27	14.3	NW	11	8	9	13	6.4	49
PITTSBURGH	347	969.9	1013.9	14.1	5.1	9.6	0.2	26.7	21	-5.0	14	0	7	3.3	69	119	41	35	19	1	36	25	1.4	25	13.0	28	22+	3	4	23	8.0	32
SCRANTON	283	978.7	1013.1	13.5	3.7	8.6	-0.5	28.3	22	-4.4	14	0	8	1.7	65	111	28	23	15	1	5	T	1.3	24	13.0	E	27	2	9	19	7.8	45
WILLIAMSPORT	160	994.6	1013.7	14.5	4.3	9.4	-0.3	28.3	22	-3.9	12	0	6	2.8	66	141	51	30	15	1	T	0	1.4	26	12.1	18	16	4	5	21	7.5	
RHODE ISLAND																																
BLOCK ISLAND	34			11.4	4.9	8.2	1.2	22.8	23	0.0	21+	0	2			198	106	68	9		51	25						9	8	13	6.1	
PROVIDENCE	16	1010.2	1012.5	15.4	4.6	10.0	1.6	28.3	23+	-1.7	14	0	5	3.3	67	182	87	67	12	0	10	T	1.4	29	13.0	29	11+	9	4	17	6.5	53

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation, ground	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M	Mb	Mb	C.	C.	C	C	C.		C.				C	%	Mm.	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s							%
SOUTH CAROLINA																																
CHARLESTON	12	1014.9	1016.8	22.4	10.3	16.4	- 1.8	27.8	24	1.7	11	0	0	10.0	68	65	- 8	30	7	3	0	0	1.7	21	19.7Y	W	10	12	5	13	5.4	74
CHARLESTON U	3			21.3	13.9	17.7	- 1.0	27.2	24	4.4	11	0	0			56	- 8	21	5		0	0			17.0	S	7					
COLUMBIA	65	1008.1	1016.2	22.6	8.5	15.6	- 2.0	28.9	23+	- 1.1	12	0	3	7.2	61	114	12	63	6	2	0	0	1.6	24	13.4	28	10	12	6	12	5.6	70
GRNVLLE-SPRTNBRG	292	981.0	1015.5	20.8	7.9	14.3	- 1.7	27.2	23+	- 3.9	11	0	3	6.1	61	103	3	63	8	2	0	0	1.6	24	16.1		12	8	12	10	5.8	54
SOUTH DAKOTA																																
ABERDEEN	395	966.1	1013.6	14.5	0.6	7.6	0.4	26.7	18	- 7.8	10	0	18	- 0.6	61	26	- 26	12	6	2	69	51	1.7	2	15.6	9	19	6	8	16	7.1	
HURON	390	966.1	1012.9	14.0	0.9	7.5	0.3	24.4	18	- 8.9	10	0	13	- 0.6	60	30	- 17	9	6	3	T	T	1.2	2	20.1	SE	19	6	9	15	6.6	59
RAPID CITY	964	902.1	1013.8	12.4	- 0.4	6.1	- 0.9	23.3	13	- 9.4	10	0	16	- 2.2	60	68	26	33	13	2	48	25	3.5	34	18.8	NW	28	4	11	15	7.1	55
SIOUX FALLS	432	961.1	1013.0	14.7	1.3	8.0	0.3	24.4	18	- 6.7	10	0	13	0.0	62	54	- 5	25	6	3	T	T	1.5	1	18.3	11	19	9	4	17	6.5	
TENNESSEE																																
BRISTOL	459	960.7	1014.8	17.3	7.0	12.2	- 1.5	28.3	21	- 2.8	14	0	4	5.6	67	91	11	43	12	4	T	T	1.8	25	14.8	25	10	3	8	19	7.7	
CHATTANOOGA	203	990.9	1015.5	20.1	8.1	14.1	- 2.0	27.8	21+	- 3.3	11	0	4	7.2	66	131	22	64	11	2	T	0	1.7	21	12.5		9	7	6	17	6.9	44
KNOXVILLE	299	980.0	1015.2	18.3	8.7	13.6	- 1.4	28.3	21	- 2.2	11	0	2	6.7	67	131	37	47	14	4	T	0	2.0	27	15.6	SW	9	5	6	19	7.4	47
MEMPHIS	79	1004.1	1014.3	20.5	10.3	15.4	- 0.9	28.3	20	- 1.1	11	0	1	9.4	69	240	122	72	15	4	0	0	1.7	20	16.1	11	19	5	8	17	7.0	49
NASHVILLE	180	992.6	1014.4	18.4	8.7	13.6	- 1.8	27.2	20	- 4.4	11	0	3	7.8	71	178	83	46	16	4	T	T	1.8	21	14.3	SW	9	8	3	19	7.0	43
OAK RIDGE R	276			18.2	7.7	13.0	- 1.3	28.3	21	- 1.7	14+	0	4			144	37	63	13		5	T			17.4Y		9	6	4	20	7.5	
TEXAS																																
ABILENE	544	949.5	1012.2	21.0	8.6	14.8	- 3.2	29.4	20	- 3.9	9	0	4	8.9	73	28	- 30	11	7	5	0	0	1.4	17	18.8	S	18	11	7	12	5.2	72
AMARILLO	1098	887.6	1011.2	17.1	3.3	10.2	- 4.0	28.9	29	- 7.8	9	0	6	2.2	64	48	14	21	11	9	145	152	1.5	24	25.9	SW	19	10	9	11	5.2	75
AUSTIN	182	991.2	1013.2	21.9	12.6	17.3	- 2.6	30.0	19	1.7	10+	0	0	12.2	75	78	- 12	30	10	5	0	0	1.0	14	13.4	NW	25	8	6	16	6.4	45
BROWNSVILLE	6	1011.5	1012.0	26.6	17.8	22.2	- 1.1	31.7	17	6.7	5	0	0	16.7	74	18	- 22	15	4	2	0	0	4.0	14	17.4	S	15	6	6	18	7.0	56
CORPUS CHRISTI	12	1011.2	1012.6	25.5	15.9	20.7	- 1.3	32.8	19	4.4	9	1	0	16.1	77	44	- 10	31	7	1	0	0	3.8	12	19.2	SE	15	8	5	17	6.6	46
DALLAS	147			22.1	12.2	17.2	- 1.2	30.0	20+	0.6	10	0	0	10.0	67	139	38	66	13	8	0	0	1.3	19	12.5	16	15	8	7	15	6.0	
DEL RIO	313	975.6	1011.4	26.4	13.6	20.1	- 1.9	35.0	20	0.6	9	5	0	10.0	60	53	18	37	7	5	0	0	2.5	10	13.9	33	8	15	3	12	4.8	
EL PASO	1194	879.1	1010.4	23.4	5.1	14.3	- 3.2	30.6	28	- 4.4	9	0	5	- 5.0	28	0	- 7	0	0	0	0	0	2.2	28	24.1	SW	18	25	3	2	1.8	95
FORT WORTH	164	993.2	1013.6	20.9	10.9	15.9	- 2.3	28.3	19	- 1.1	10	0	1	10.6	74	154	62	72	12	9	0	0	1.1	20	14.3	17	15	7	11	12	6.0	
GALVESTON U	2			21.1	16.1	18.6	- 1.7	28.3	25	6.7	9	0	0			264	199	128	8		0	0			17.4	NE	17					47
HOUSTON INTERCON	29	1010.5	1014.3	23.6	12.6	18.1	- 1.6	31.7	25	- 0.6	10	0	1	13.9	80	182	97	65	11	7	0	0	1.7	11	14.8	30	25	6	6	18	7.0	45
LUBBOCK	992	900.8	1011.5	20.2	5.4	12.8	- 2.4	29.4	29	- 5.0	9	0	5	2.8	58	36	6	12	9	9	6	T	0.5	19	20.1	22	19	13	12	5	4.1	85
MIDLAND	869	913.0	1010.9	21.7	6.2	13.9	- 4.3	28.3	30+	- 6.7	9	0	4	2.2	51	35	14	15	4	4	T	0	0.4	15	15.6	29	15+	18	8	4	3.5	
PORT ARTHUR	5	1014.2		22.5	12.7	17.6	- 2.5	30.6	25	2.8	10	0	0			389	289	256	8	5	0	0	1.6	15	14.3	SE	20+	7	10	13	6.3	54
SAN ANGELO	580	945.5	1011.8	23.2	8.5	15.9	- 3.6	31.7	20	- 3.9	9	0	3	8.3	67	42	- 9	23	4	4	0	0	1.1	19	14.3	29	15	12	9	9	4.8	
SAN ANTONIO	240	985.1	1013.0	24.3	13.4	18.9	- 1.2	31.1	20	1.7	9	0	0	12.8	72	137	66	66	15	5	0	0	1.8	9	14.8	NW	8	8	8	14	6.2	47
VICTORIA	32	1009.1	1013.2	24.4	14.7	19.6	- 1.6	31.7	25	3.3	9	0	0	14.4	76	120	54	37	7	4	0	0	2.3	12	17.4	N	26+	8	2	20	7.1	
WACO	153	995.3	1013.4	20.6	11.8	16.2	- 3.1	28.9	19	- 2.2	10	0	1	11.7	76	137	39	54	12	7	0	0	1.3	18	11.2	16	30+	9	6	15	6.2	
WICHITA FALLS	303	976.3	1013.0	20.4	8.1	14.3	- 3.5	28.3	29	- 1.7	9	0	2	10.0	78	89	25	29	11	8	20	0	0.4	21	13.4	33	8	11	7	12	5.2	
UTAH																																
MILFORD	1533	843.9		13.8	- 1.9	5.9	- 2.8	24.4	27	- 9.4	8	0	23			58	40	27	10		620	102			22.8	SW	13	9	11	10	5.7	60
SALT LAKE CITY	1286	870.0	1014.1	14.6	2.8	8.7	- 1.3	25.0	27	- 3.9	8	0	5	- 1.7	52	42	- 3	16	11	4	66	T	0.3	32	17.0		29	5	10	15	6.7	60
WENDOVER	1291	869.3	1014.6	15.0	3.7	9.3	- 1.6	20.6	27	- 3.9	8	0	6	- 4.4	39	16	3	5	5		20	T						8	8	14	6.4	
VERMONT																																
BURLINGTON	101	1000.0	1012.7	12.3	1.7	7.0	1.9	26.7	22	- 8.3	14	0	13	- 0.6	64	97	30	35	10	2	160	76	0.5	30	13.4	S	16+	4	6	20	7.4	48
VIRGINIA																																
LYNCHBURG	279			18.2	6.2	12.2	- 1.2	29.4	22	- 3.9	12	0	5			116	36	32	10		5	T			12.5		10	6	8	16	6.8	50
NORFOLK	7	1013.9	1015.1	20.2	9.2	14.7	0.3	29.4	23	0.0	12	0	1	7.2	62	87	7	35	8	2	0	0	1.5	23	14.8	22	27	6	12	12	6.1	59
RICHMOND	50	1008.5	1014.7	20.7	8.1	14.4	- 0.1	30.6	22	- 2.2	12	0	3	6.1	63	116	36	35	8	3	0	0	1.1	24	14.8	SW	10	5	7	18	6.6	66
ROANOKE	350	972.6	1014.8	17.4	6.8	12.1	- 1.4	27.8	22	- 4.4	12	0	5	3.9	61	137	58	44	11	2	5	T	1.5	28	14.3	30	10	7	3	20	7.1	
WALLOPS ISLAND	3			15.9	7.7	11.8		26.1	23	0.0	13	0	1			112		41	11		T	0			21.0Y	SW	10+					
WASHINGTON																																
OLYMPIA	59	1014.2	1021.7	15.9	0.9	8.4	- 1.6	21.7	4	- 4.4	7	0	13	3.3	75	57	- 19	27	6	0	0	0	1.3	22	10.7	26	27+	1	13	16	7.5	
QUILLAYUTE	55	1014.6	1022.2	13.7	2.6	8.2	- 0.3	19.4	8	- 1.7	7	0	5	3.3	77	75	-113	23	13	0	T	0	1.0	27	8.9	NE	6	2	8	20	8.1	37
SEATTLE	6			15.2	5.4	10.3	- 0.1	19.4	9	1.7	7	0	0			24	- 28	8	6		0	0			11.2Y	SSW	17+					
SEATTLE-TACOMA	122	1004.7	1021.3	14.1	4.4	9.2	- 0.3	18.3	12	1.1	2	0	0	2.2	66	34	- 27	14	9	0	T	0	0.7	24	11.6	SW	16+	4	9	17	7.1	67
SPOKANE	718	933.0	1017.3	14.9	0.8	7.9	- 0.6	21.7	26	- 3.3	20+	0	15	- 2.2	51	11	- 12	10	4	0	T	0	2.1	23	16.1		5	8	13	9	5.9	70

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation, ground	Pressure		Temperature								No of days				Precipitation			No of days		Snow, Ice pellets		Wind		Fastest mile (1.6 kilometers)			No of days (sunrise to sunset)				
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb.	Mb	°C.	°C.	°C.	C.	C.		°C.				C	%	Mm.	Mm.	Mm.			Mm	Mm	M.p.s.		M.p.s.							%
WASHINGTON																																
STAMPEDE PASS R	1206	881.5		5.5	- 1.1	2.2	- 0.3	12.8	25	- 4.4	28+	0	22			94	- 49	31	14		663	1676						1	9	20	7.9	
WALLA WALLA U	289			18.0	5.5	11.8	- 0.3	25.6	26	- 1.1	7	0	1			10	- 25	7	3		T	T			12.5	NW	5	8	7	15	6.2	71
YAKIMA	321	980.4	1019.0	20.1	1.8	10.9	0.7	26.1	26	- 5.0	8+	0	8	- 3.3	40	1	- 11	1	1	0	0	0	2.3	31	14.8	31	5	5	16	9	5.7	
WEST INDIES																																
SAN JUAN P.R.	4	1012.9	1015.2	30.2	23.2	26.7	1.9	33.9	29	21.1	24+	4	0	19.4	67	215	121	162	7	4	0	0	2.8	9	12.5	E	12+	17	8	5	4.2	68
WEST VIRGINIA																																
BECKLEY	763	925.5	1014.3	14.1	4.9	9.5	- 0.9	25.6	21	- 5.0	11	0	5	3.9	71	130	38	23	20	3	36	25	2.1	22	14.8	27	10	3	5	22	8.2	
CHARLESTON	286	980.0	1014.3	17.2	7.0	12.1	- 0.8	30.6	21	- 3.9	14	0	5	5.0		138	45	40	18	2	23	25	1.4	24	15.6	26	10	3	5	22	8.2	
ELKINS	594	943.4		14.5	3.2	8.8	- 1.3	28.3	20	- 9.4	13	0	9			149	61	20	18		188	127						2	6	22	8.3	
HUNTINGTON	252	983.7	1014.1	16.1	6.7	11.4	- 1.8	27.8	21	- 3.9	14	0	7	5.6	73	125	31	28	18	3	18	T	1.3	22	13.9	24	9	2	5	23	8.5	
PARKERSBURG U	187			15.6	6.7	11.2	- 1.1	30.6	21	- 3.3	13	0	6			145	62	40	20		130	102			15.2	SE	9					36
WISCONSIN																																
GREEN BAY	208	987.8	1013.8	11.2	1.9	6.6	0.3	22.2	21	- 7.8	11	0	11	2.2	77	82	20	22	16	1	142	127	1.2	4	21.5	NE	9	5	7	18	7.4	47
LA CROSSE	198	988.8	1013.7	11.9	1.9	6.9	- 1.4	22.8	21	- 5.6	11	0	12	2.2	77	186	116		14	1	432		0.5	2								
MADISON	262	981.0	1012.6	12.3	2.1	7.2	0.3	22.8	15	-11.1	11	0	12	2.8	76	181	115	46	16	3	442	356	1.1	5	15.2	NE	9	4	7	19	7.4	41
MILWAUKEE	205	987.5	1013.1	9.8	2.0	5.9	- 0.5	20.6	15	- 8.3	11	0	7	1.7	77	186	121	77	17	5	401	330	1.3	1	17.9	SW	22	6	6	18	7.4	50
WYOMING																																
CASPER	1627	834.7	1014.7	8.1	- 3.6	2.3	- 3.9	18.9	28+	-15.6	9	0	25	- 3.3	72	98	55	31	14	1	1430	533	2.2	26	16.1	29	20	6	9	15	6.9	
CHEYENNE	1867	808.3	1013.6	7.9	- 2.1	2.9	- 2.9	18.3	28+	-12.8	9	0	24	- 5.6	58	44	- 3	11	13	2	325	102	4.5	32	22.4	NW	19	9	4	17	6.5	56
LANDER	1696	826.6	1015.8	6.6	- 4.3	1.2	- 5.1	17.2	27	-18.9	8	0	27	- 4.4	69	102	40	29	14	0	1676	686	0.6	28	16.1	SW	28	3	10	17	7.4	64
SHERIDAN	1208	876.4	1015.9	10.5	- 2.4	4.1	- 2.4	21.1	27+	-17.2	9	0	20	- 3.3	64	103	48	29	14	0	953	25	3.1	31	17.9	NW	28	5	5	20	7.4	45

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

B Number of days maximum 21.1 C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	228	2987	2542
HUNTSVILLE	213	3127	3051
MOBILE	75	1596	1693
MONTGOMERY	119	2173	2291
ALASKA			
ANCHORAGE	866	10602	9820
ANNETTE	668	6364	6258
BARROW	[illegible]	17136	17772
BARTER ISLAND	[illegible]	17487	17565
BETHEL	1182	11938	11988
BETTLES	1246	14782	
BIG DELTA	[illegible]	12759	
COLD BAY	998	8574	8498
FAIRBANKS	883	12958	13502
GULKANA	902	13225	
JUNEAU	752	8314	8093
KING SALMON	864	10271	10262
KODIAK	803	6891	7726
KOTZEBUE	1663	13791	14412
MC GRATH	1024	13117	13377
NOME	1398	12431	12668
ST. PAUL ISLAND	1156	9700	9537
SUMMIT	1150	13101	
TALKEETNA	914	11210	10633
UNALAKLEET	1236	12150	
YAKUTAT	822	8443	8025
ARIZONA			
FLAGSTAFF	801	[illegible]	6535
PHOENIX	39	1553	1765
TUCSON	174	[illegible]	1794
WINSLOW	[illegible]	4636	[illegible]
YUMA	17	1190	1217
ARKANSAS			
FORT SMITH	258	[illegible]	3270
LITTLE ROCK	186	3232	3210
CALIFORNIA			
BAKERSFIELD	87	2215	2103
BISHOP	376	4725	4048
BLUE CANYON	590	5843	4915
EUREKA U	437	[illegible]	3986
FRESNO	140	[illegible]	2436
LONG BEACH	77	1461	1603
LOS ANGELES	146	1325	1624
LOS ANGELES U	77	1034	1263
MT SHASTA R	488	5707	5216
OAKLAND	212	2645	[illegible]
RED BLUFF	139	3067	2468
SACRAMENTO	141	2847	2665
SANDBERG R	493	4895	[illegible]
SAN DIEGO	107	[illegible]	1319
SAN FRANCISCO	241	2787	[illegible]
SAN FRANCISCO U	225	2689	2582
SANTA MARIA	320	2914	2569
STOCKTON	119	2747	2642
COLORADO			
ALAMOSA	859	9145	7921
COLORADO SPRINGS	715	6742	[illegible]
DENVER	646	6159	5929
GRAND JUNCTION	499	6355	5474
PUEBLO	532	5839	5273
CONNECTICUT			
BRIDGEPORT	472	5319	5382
HARTFORD	444	5684	5971
DELAWARE			
WILMINGTON	322	4199	4812
DIST.OF COLUMBIA			
WASHINGTON DULLES	371	[illegible]	
WASHINGTON NATIONAL	284	3812	4150
FLORIDA			
APALACHICOLA U	44	1172	1308
DAYTONA BEACH	29	745	879
FORT MYERS	4	349	447
JACKSONVILLE	52	1182	1239
KEY WEST	0	[illegible]	108
LAKELAND U	20	626	661
MIAMI	[illegible]	138	214
ORLANDO	9	[illegible]	766
PENSACOLA	63	1428	1463
TALLAHASSEE	[illegible]	1513	1485
TAMPA	21	623	683
WEST PALM BEACH	5	188	253
GEORGIA			
ATHENS	224	2732	2907
ATLANTA	230	[illegible]	2958
AUGUSTA	166	[illegible]	2397
COLUMBUS	146	2118	2383
MACON	128	2058	2136
ROME	242	3165	3292
SAVANNAH	45	1593	1819
IDAHO			
BOISE	470	5643	5483
LEWISTON	427	5171	5213
POCATELLO	643	7141	6573
ILLINOIS			
CAIRO U	259	3882	3774
CHICAGO O HARE	503	5991	[illegible]
CHICAGO MIDWAY	489	5799	5894
MOLINE	452	5930	6180
PEORIA	421	5857	5809
ROCKFORD	520	6285	6534
SPRINGFIELD	398	5379	5275
INDIANA			
EVANSVILLE	312	4527	4367
FORT WAYNE	473	5726	5977
INDIANAPOLIS	416	5114	5483
SOUTH BEND	446	5619	6140
IOWA			
BURLINGTON	444	5886	5904
DES MOINES	470	6448	6558
DUBUQUE	588	6890	7038
SIOUX CITY	434	6480	6698
WATERLOO	589	7093	7037
KANSAS			
CONCORDIA	414	5630	5312
DODGE CITY	537	5614	4853
GOODLAND	607	6388	5862
TOPEKA	378	5259	5046
WICHITA	386	5107	4527
KENTUCKY			
COVINGTON	425	4840	5092
LEXINGTON	371	4219	4578
LOUISVILLE	343	4150	4546
LOUISIANA			
ALEXANDRIA	162	[illegible]	1921
BATON ROUGE	91	1640	1560
LAKE CHARLES	99	1794	1459
NEW ORLEANS	114	1619	1385
SHREVEPORT	145	2444	2184
MAINE			
CARIBOU	807	9323	9116
PORTLAND	575	6900	7028
MARYLAND			
BALTIMORE	365	4448	4564
MASSACHUSETTS			
BLUE HILL OBS R	491	5904	6032
BOSTON	450	5241	5390
WORCESTER	555	6512	6587
MICHIGAN			
ALPENA	709	7630	7904
DETROIT	484	5774	5970
DETROIT METRO	481	5987	6195
FLINT	542	6259	6524
GRAND RAPIDS	[illegible]	[illegible]	[illegible]
HOUGHTON LAKE	654	7494	7805
LANSING	564	6685	6567
MARQUETTE U	752	[illegible]	7748
MUSKEGON	602	6293	6308
SAULT STE MARIE	748	8192	8370
MINNESOTA			
DULUTH	793	9377	9312
INTERNATIONAL FALLS	800	9474	9989
MINNEAPOLIS	611	7647	[illegible]
ROCHESTER	674	7914	[illegible]
ST CLOUD	671	8438	8448
MISSISSIPPI			
JACKSON	146	2359	2203
MERIDIAN	147	2260	2283
MISSOURI			
COLUMBIA REGIONAL	387	5151	4986
KANSAS CITY	394	5250	[illegible]
ST JOSEPH	362	5297	5336
ST LOUIS	348	4792	4764
SPRINGFIELD	359	4628	4450
MONTANA			
BILLINGS	699	7246	6662
GLASGOW	691	7992	8511
GREAT FALLS	739	7192	7180
HAVRE	713	7717	8200
HELENA	732	8262	7553
KALISPELL	668	7671	7587
MILES CITY	671	7404	
MISSOULA	651	7300	7515
NEBRASKA			
GRAND ISLAND	520	6415	6274
LINCOLN	458	[illegible]	[illegible]
NORFOLK	497	6734	6698
NORTH PLATTE	567	6934	6379
OMAHA	437	6189	6024
SCOTTSBLUFF	684	6850	6313
VALENTINE	592	7108	7053
NEVADA			
ELKO	652	7175	6832
ELY	769	7648	7052
LAS VEGAS	132	[illegible]	2703
RENO	633	6169	5786
WINNEMUCCA	616	6451	6245
NEW HAMPSHIRE			
CONCORD	596	7426	7010
MT WASHINGTON OBS	1239	12036	12284
NEW JERSEY			
ATLANTIC CITY	414	4418	4664
ATLANTIC CITY U	330	3936	4528
NEWARK	339	4384	4931
TRENTON U	368	4571	4847
NEW MEXICO			
ALBUQUERQUE	440	4804	4267
CLAYTON	612	5622	4954
ROSWELL	310	3764	3232
NEW YORK			
ALBANY	486	6362	6591
BINGHAMTON	594	6776	6874
BUFFALO	542	[illegible]	[illegible]
NEW YORK U	362	4549	4744
NEW YORK KENNEDY	325	4185	5040
NEW YORK LA GUARDIA	371	4704	4681
ROCHESTER	519	5988	6421
SYRACUSE	547	6162	6463
NORTH CAROLINA			
ASHEVILLE	[illegible]	3817	4346
CAPE HATTERAS R	151	2281	2587
CHARLOTTE	241	3307	3169
GREENSBORO	292	3879	3758
RALEIGH	231	3374	3359
WILMINGTON	154	2263	2347
NORTH DAKOTA			
BISMARCK	714	8168	8405
FARGO	701	8651	8795
WILLISTON	708	8427	8745
OHIO			
AKRON	455	5373	5796
CINCINNATI ABBE OB	397	4581	4679
CLEVELAND	450	5447	5886
COLUMBUS	427	5052	5462
DAYTON	444	5190	5425
MANSFIELD	453	5417	5559
TOLEDO	499	6003	6192
YOUNGSTOWN	512	6053	[illegible]
OKLAHOMA			
OKLAHOMA CITY	283	4167	3691
TULSA	233	4008	3813
OREGON			
ASTORIA	473	4555	4592
BURNS U	624	6808	6414
EUGENE	444	4608	4312
MEACHAM	763	7464	7008
MEDFORD	379	4555	4688
PENDLETON	434	5225	4859
PORTLAND	378	4139	4285
SALEM	468	4723	4337
SEXTON SUMMIT R	600	5948	5510
PENNSYLVANIA			
ALLENTOWN	446	[illegible]	5619
ERIE	568	6089	6508
HARRISBURG	422	4891	5119
PHILADELPHIA	359	4530	4974
PITTSBURGH	474	5297	[illegible]
SCRANTON	521	6097	6026
WILLIAMSPORT	479	5796	[illegible]
RHODE ISLAND			
BLOCK ISLAND	542	5082	5361
PROVIDENCE	451	5347	[illegible]
SOUTH CAROLINA			
CHARLESTON	141	1955	2033
CHARLESTON U	98	1698	1794
COLUMBIA	179	2470	2484
GRNVLLE-SPRTNBRG	229	3115	[illegible]
SOUTH DAKOTA			
ABERDEEN	580	7571	8088
HURON	578	7309	7848
RAPID CITY	659	7100	6893
SIOUX FALLS	549	7266	7491
TENNESSEE			
BRISTOL	333	3854	4075
CHATTANOOGA	246	3701	3229
KNOXVILLE	272	3484	3451
MEMPHIS	203	3458	3210
NASHVILLE	275	3461	3538
OAK RIDGE R	301	3627	3761
TEXAS			
ABILENE	228	3309	2624
AMARILLO	438	4821	3929
AUSTIN	128	2125	1711
BROWNSVILLE	27	921	600
CORPUS CHRISTI	44	1235	914
DALLAS	140	2591	2357
DEL RIO	72	1748	1504
EL PASO	218	2913	[illegible]
FORT WORTH	182	2691	2405
GALVESTON U	73	1402	1235
HOUSTON INTERCON	117	1893	1676
LUBBOCK	312	4092	3547
MIDLAND	249	3348	2591
PORT ARTHUR	118	1903	1447
SAN ANGELO	191	2741	2255
SAN ANTONIO	94	1856	1546
VICTORIA	64	1515	1173
WACO	170	2664	2030
WICHITA FALLS	234	3406	2826
UTAH			
MILFORD	660	7157	6131
SALT LAKE CITY	515	6060	5735
WENDOVER	476	6044	5550
VERMONT			
BURLINGTON	608	7510	7826
VIRGINIA			
LYNCHBURG	339	4072	4088
NORFOLK	217	3168	3384
RICHMOND	247	3622	3812
ROANOKE	344	4081	4085
WALLOPS ISLAND	352	3857	
WASHINGTON			
OLYMPIA	528	5321	4752
QUILLAYUTE	543	5287	5066
SEATTLE	429	4376	4110
SEATTLE-TACOMA	484	4715	4691
SPOKANE	558	6206	6232
STAMPEDE PASS R	862	8232	8146
WALLA WALLA U	346	4756	4583
YAKIMA	390	5590	5652
WEST VIRGINIA			
BECKLEY	477	5062	5195
CHARLESTON	351	4275	4371
ELKINS	509	5226	5429
HUNTINGTON	385	4438	4335
PARKERSBURG U	395	4438	4633
WISCONSIN			
GREEN BAY	632	7180	7595
LA CROSSE	608	7065	7275
MADISON	596	6979	7451
MILWAUKEE	659	6750	7128
WYOMING			
CASPER	861	7871	6900
CHEYENNE	824	7517	6795
LANDER	918	8978	7336
SHERIDAN	766	7574	7167

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

COOLING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals January through this month
	This month	Period January through this month	
ALABAMA			
BIRMINGHAM	28	52	
HUNTSVILLE	29	37	
MOBILE	98	179	
MONTGOMERY	64	118	
ALASKA			
ANCHORAGE	0	0	
ANNETTE	0	0	
BARROW	0	0	
BARTER ISLAND	0	0	
BETHEL	0	0	
BETTLES	0	0	
BIG DELTA	0	0	
COLD BAY	0	0	
FAIRBANKS	0	0	
GULKANA	0	0	
HOMER			
JUNEAU	0	0	
KING SALMON	0	0	
KODIAK	0	0	
KOTZEBUE	0	0	
MC GRATH	0	0	
NOME	0	0	
ST. PAUL ISLAND	0	0	
SHEMYA			
SUMMIT	0	0	
TALKEETNA	0	0	
UNALAKLEET	0	[illegible]	
YAKUTAT	0	0	
ARIZONA			
FLAGSTAFF	0	0	
PHOENIX	109	109	
TUCSON	21	21	
WINSLOW	0	0	
YUMA	140	140	
ARKANSAS			
FORT SMITH	42	42	
LITTLE ROCK	41	55	
CALIFORNIA			
BAKERSFIELD	79	79	
BISHOP	1	1	
BLUE CANYON	0	0	
EUREKA U	0	0	
FRESNO	32	32	
LONG BEACH	3	3	
LOS ANGELES	4	5	
LOS ANGELES U	25	36	
MT SHASTA R	0	0	
OAKLAND	0	0	
RED BLUFF	29	29	
SACRAMENTO	19	19	
SANDBERG R	3	3	
SAN DIEGO	10	10	
SAN FRANCISCO	0	0	
SAN FRANCISCO U	2	2	
SANTA MARIA	0	0	
STOCKTON	28	28	
COLORADO			
ALAMOSA	0	0	
COLORADO SPRINGS	0	0	
DENVER	0	0	
GRAND JUNCTION	0	0	
PUEBLO	0	0	
CONNECTICUT			
BRIDGEPORT	0	0	
HARTFORD	11	11	
DELAWARE			
WILMINGTON	19	19	
DIST.OF COLUMBIA			
WASHINGTON DULLES	20	20	
WASHINGTON NATIONAL	21	23	
FLORIDA			
APALACHICOLA U	93	146	
DAYTONA BEACH	148	355	
FORT MYERS	220	599	
JACKSONVILLE	73	201	
KEY WEST	364	1045	
LAKELAND U	145	397	
MIAMI	324	918	
ORLANDO	198	521	
PENSACOLA	91	156	
TALLAHASSEE	69	185	
TAMPA	158	436	
WEST PALM BEACH	296	812	
GEORGIA			
ATHENS	15	28	
ATLANTA	15	26	
AUGUSTA	23	51	
COLUMBUS	51	92	
MACON	47	100	
ROME	27	40	
SAVANNAH	63	126	
HAWAII			
LIHUE	292	1010	
HONOLULU	322	1146	
KAHULUI	253	854	
HILO	222	874	
IDAHO			
BOISE	0	0	
LEWISTON	0	0	
POCATELLO	0	0	
ILLINOIS			
CAIRO U	20	23	
CHICAGO O HARE	5	5	
CHICAGO MIDWAY	5	5	
MOLINE	2	2	
PEORIA	7	7	
ROCKFORD	5	5	
SPRINGFIELD	12	12	
INDIANA			
EVANSVILLE	23	23	
FORT WAYNE	8	8	
INDIANAPOLIS	11	11	
SOUTH BEND	7	7	
IOWA			
BURLINGTON	0	0	
DES MOINES	2	2	
DUBUQUE	0	0	
SIOUX CITY	0	0	
WATERLOO	0	0	
KANSAS			
CONCORDIA	1	1	
DODGE CITY	0	0	
GOODLAND	0	0	
TOPEKA	13	13	
WICHITA	7	7	
KENTUCKY			
COVINGTON	13	17	
LEXINGTON	18	30	
LOUISVILLE	29	36	
LOUISIANA			
ALEXANDRIA	68	109	
BATON ROUGE	113	207	
LAKE CHARLES	92	158	
NEW ORLEANS	99	204	
SHREVEPORT	64	82	
MAINE			
CARIBOU	0	0	
PORTLAND	0	0	
MARYLAND			
BALTIMORE	15	15	
MASSACHUSETTS			
BLUE HILL OBS R	1	1	
BOSTON	7	7	
WORCESTER	1	1	
MICHIGAN			
ALPENA	0	0	
DETROIT	4	4	
DETROIT METRO	3	3	
FLINT	4	4	
GRAND RAPIDS	10	10	
HOUGHTON LAKE	1	1	
LANSING	7	7	
MARQUETTE U	0	0	
MUSKEGON	4	4	
SAULT STE MARIE	0	0	
MINNESOTA			
DULUTH	0	0	
INTERNATIONAL FALLS	0	0	
MINNEAPOLIS	1	1	
ROCHESTER	0	0	
ST CLOUD	0	0	
MISSISSIPPI			
JACKSON	77	129	
MERIDIAN	73	122	
MISSOURI			
COLUMBIA REGIONAL	8	8	
KANSAS CITY	4	4	
ST JOSEPH	11	11	
ST LOUIS	17	18	
SPRINGFIELD	11	11	
MONTANA			
BILLINGS	0	0	
GLASGOW	0	0	
GREAT FALLS	0	0	
HAVRE	0	0	
HELENA	0	0	
KALISPELL	0	0	
MILES CITY	0	0	
MISSOULA	0	0	
NEBRASKA			
GRAND ISLAND	0	0	
LINCOLN	2	2	
NORFOLK	0	0	
NORTH PLATTE	0	0	
OMAHA	3	3	
SCOTTSBLUFF	0		
VALENTINE	0	0	
NEVADA			
ELKO	0	0	
ELY	0	0	
LAS VEGAS	54	54	
RENO	0	0	
WINNEMUCCA	0	0	
NEW HAMPSHIRE			
CONCORD	3	3	
MT WASHINGTON OBS	0	0	
NEW JERSEY			
ATLANTIC CITY	10	10	
ATLANTIC CITY U	3	3	
NEWARK	20	20	
TRENTON U	14	14	
NEW MEXICO			
ALBUQUERQUE	0	0	
CLAYTON	0	0	
ROSWELL	2	2	
NEW YORK			
ALBANY	7	7	
BINGHAMTON	4	4	
BUFFALO	6	6	
NEW YORK U	20	20	
NEW YORK KENNEDY	9	9	
NEW YORK LA GUARDIA	14	14	
ROCHESTER	15	15	
SYRACUSE	7	7	
NORTH CAROLINA			
ASHEVILLE	1	1	
CAPE HATTERAS R	25	31	
CHARLOTTE	25	36	
GREENSBORO	11	17	
RALEIGH	26	50	
WILMINGTON	34	66	
NORTH DAKOTA			
BISMARCK	0	0	
FARGO	0	0	
WILLISTON	0	0	
OHIO			
AKRON	9	9	
CINCINNATI ABBE OB	19	24	
CLEVELAND	13	13	
COLUMBUS	14	17	
DAYTON	15	15	
MANSFIELD	11	11	
TOLEDO	5	5	
YOUNGSTOWN	4	4	
OKLAHOMA			
OKLAHOMA CITY	19	19	
TULSA	35	35	
OREGON			
ASTORIA	0	0	
BURNS U	0	0	
EUGENE	0	0	
MEACHAM	0	0	
MEDFORD	0	0	
PENDLETON	0	0	
PORTLAND	0	0	
SALEM	0	0	
SEXTON SUMMIT R	0	0	
PACIFIC AREA			
JOHNSTON	358	1331	
PAGO PAGO	522	2108	
GUAM TAGUAC R	444	1533	
WAKE	407	1504	
KOROR R	525	2031	
KWAJALEIN	538	2098	
MAJURO	494	1991	
PONAPE R	486	1978	
TRUK MOEN ISLAND	509	2032	
YAP R	535	1978	
PENNSYLVANIA			
ALLENTOWN	3	3	
ERIE	6	6	
HARRISBURG	8	8	
PHILADELPHIA	16	16	
PITTSBURGH	10	10	
SCRANTON	4	4	
WILLIAMSPORT	4	4	
RHODE ISLAND			
BLOCK ISLAND	0	0	
PROVIDENCE	8	8	
SOUTH CAROLINA			
CHARLESTON	42	93	
CHARLESTON U	58	83	
COLUMBIA	33	61	
GRNVLLE-SPRTNBRG	21	27	
SOUTH DAKOTA			
ABERDEEN	2	2	
HURON	[illegible]	[illegible]	
RAPID CITY	0	[illegible]	
SIOUX FALLS	0	0	
TENNESSEE			
BRISTOL	5	5	
CHATTANOOGA	22	23	
KNOXVILLE	19	23	
MEMPHIS	48	52	
NASHVILLE	25	39	
OAK RIDGE R	16	18	
TEXAS			
ABILENE	44	44	
AMARILLO	3	3	
AUSTIN	78	113	
BROWNSVILLE	242	460	
CORPUS CHRISTI	179	355	
DALLAS	81	106	
DEL RIO	170	238	
EL PASO	7	7	
FORT WORTH	60	67	
GALVESTON U	93	135	
HOUSTON INTERCON	111	157	
LUBBOCK	19	19	
MIDLAND	18	18	
PORT ARTHUR	84	124	
SAN ANGELO	67	73	
SAN ANTONIO	129	206	
VICTORIA	138	260	
WACO	60	72	
WICHITA FALLS	21	24	
UTAH			
MILFORD	0	0	
SALT LAKE CITY	0	0	
WENDOVER	0	0	
VERMONT			
BURLINGTON	3	3	
VIRGINIA			
LYNCHBURG	16	19	
NORFOLK	27	43	
RICHMOND	42	55	
ROANOKE	15	18	
WALLOPS ISLAND	4	4	
WASHINGTON			
OLYMPIA	0	0	
QUILLAYUTE	0	0	
SEATTLE	0	0	
SEATTLE-TACOMA	0	0	
SPOKANE	0	0	
STAMPEDE PASS R	0	0	
WALLA WALLA U	0	0	
YAKIMA	0	0	
WEST INDIES			
SAN JUAN P.R.	458	1703	
WEST VIRGINIA			
BECKLEY	6	7	
CHARLESTON	22	26	
ELKINS	3	3	
HUNTINGTON	14	18	
PARKERSBURG U	17	26	
WISCONSIN			
GREEN BAY	2	2	
LA CROSSE	0	0	
MADISON	0	0	
MILWAUKEE	0	0	
WYOMING			
CASPER	0	0	
CHEYENNE	0	0	
LANDER	0	0	
SHERIDAN	0	0	

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

APRIL 1973

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				Ø ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE	
								PROPERTY	CROPS			PROPERTY	CROPS			PROPERTY	CROPS			PROPERTY	CROPS			PROPERTY	CROPS			PROPERTY	CROPS
Alabama	2	2		14	6							5				4												5	7
Alaska*																													
Arizona	1	1																											
Arkansas	19	4	1	27	7				3	1		4	3													1	2	7	5
California	Report Incomplete																												
Colorado*																													
Connecticut*																													
Delaware	No Storm Data Report Received for this State																												
Florida	12	6		10	6				3			3	3																
Georgia	3	2			5			1	3			5	1													1		°5	C
Hawaii*																													
Idaho*																													
Illinois	6	2		2	6					2		6	5			4				4	5								
Indiana												4																	6
Iowa	10	3		1	6			4			5	6								8									
Kansas	5	3			4			4			2	5			1	4													
Kentucky	4	1			5						3	4				5													
Louisiana	5	2		1	5			3			2	3															2	3	
Maine	No Storm Data Report Received for this State																												
Maryland	No Storm Data Report Received for this State																												
Massachusetts	No Storm Data Report Received for this State																												
Michigan	1	1			2							5				5													
Minnesota											4	6		1		4				4									
Mississippi	5	2		42	5						4	6																5	°C
Missouri	23	4	2	115	6					1		1		2				1		5						1		8	7
Montana																				6									
Nebraska	3	2			6			4				6																	
Nevada*																													
New Hampshire	No Storm Data Report Received for this State																												
New Jersey*																													
New Mexico	1	1			2			4										1		7									
New York	No Storm Data Report Received for this State																												
North Carolina	No Storm Data Report Received for this State																												
North Dakota	1	1			4																								
Ohio	No Storm Data Report Received for this State																												
Oklahoma	9	5		33	6			3				5		2														4	
Oregon*																													
Pacific	No Storm Data Report Received for this State																												
Pennsylvania	No Storm Data Report Received for this State																												
Puerto Rico																										2		°5	C
Rhode Island																												4	
South Carolina	No Storm Data Report Received for this State																												
South Dakota	5	1			4			4				4																	
Tennessee	4	2			4			1				3																6	
Texas	24	11	7	51	7			7	6		2	6			1	3										2		7	
Utah												1	5																
Vermont	No Storm Data Report Received for this State																												
U.S. Virgin Is.*																													
Virginia	No Storm Data Report Received for this State																												
Washington																											?	?	?
West Virginia	No Storm Data Report Received for this State																												
Wisconsin												5								6								7	
Wyoming*																													

° Includes crop damage.
C Crop damage.
* No occurrence of storms or unusual weather phenomena reported.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
Ø For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5 Million
7 $5 Million to $50 Million
8 $50 Million to $500 Million
9 $500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

APRIL 1973

Ray Haley, Office of Hydrology

The major flooding which began in March continued along the Mississippi mainstem and the extreme lower parts of its tributary basins. Saturated soil conditions resulting from the March floods produced high runoff and subsequent bankfull and overbank conditions which were further aggravated by continuing heavy amounts of precipitation from the middle to the end of the month. The damage estimate for the area within the lower Mississippi Basin for the floods of March-June, 1973, was $420 million, with 12,623,000 acres affected.

Moderate flooding also occurred along the Neuse and Cape Fear Rivers in North Carolina and along the East Gulf Coast area.

Record flooding took place on the St. John and Penobscot Rivers in Maine at the end of the month.

Date April 1973	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	ST. LAWRENCE DRAINAGE		
	Lake Huron		
1-3	Moderate to heavy rainfall at the beginning of the month caused minor flooding on the Shiawassee River at Owosso, Mich. Strong northeasterly winds on Saginaw Bay with little precipitation runoff caused slight flooding on the Saginaw River from Essexville to the city of Saginaw.	0	NA
	Lake Ontario		
4-6	Steady rainfall from a storm moving northeastward from the mid-Atlantic states and central Appalachians caused minor flooding in creeks on the lower Genesee River.	0	NA
	ATLANTIC SLOPE DRAINAGE		
28-30	Major flooding took place on the St. John and Penobscot Rivers as a result of a storm on the 27th-28th. The upper St. John received 2.5 inches of rain, the middle St. John 2.25, and eastern Maine received 2.75-4 inches, which was added to already high base flow levels in state rivers. A record 25.77-foot crest was reported at Fort Kent, Me., on the St. John River. Heavy damage was reported in Penobscot, Aroostook, and Washington Counties.	1	4,300
3-8	Storms on the 1st-2d caused flash flooding in Maine, inland southern New Hampshire, Massachusetts, and Connecticut, with moderate to severe flash flooding in coastal New Hampshire and west coastal Maine. A northeaster dumped 1.5-6.5 inches of rain in southeastern New England, with the heaviest amounts over coastal New Hampshire and west coastal Maine. The Connecticut River crested 3 feet over flood stage at Hartford, Conn., on the 5th.	1	NA
4-7	Precipitation fell over the upper Susquehanna and Chemung Basins in New York and over northeastern New Jersey to cause some minor flooding at a few stations on the Passaic, Millstone, Chemung, and Susquehanna Rivers. Rainfall over northern New Jersey and the Delaware Basins was 150-200 percent above normal for the month producing high water levels and spilling over in New Jersey and New York City reservoirs.	0	NA

Date April 1973	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	ATLANTIC SLOPE DRAINAGE-Continued		
27-30	Several substantial rainfalls occurred over the Washington, D.C., area in April causing some overflow; at least one rainfall at the end of the month also caused flooding on the James at Richmond (1.1 feet above flood stage). Crests of 1.5-2.5 feet above flood stage at Farmville and Mattoax, Va., on the Appomattox River were also reported.	0	NA
1/-5/23	The Roanoke River at Williamston, N.C., continued at 1.3 feet above flood stage for all of the month of April, reflecting the wet soil conditions and heavy runoff present over most of the district. Most streams in North Carolina were near bankfull stage during the month as a result of above normal amounts of rainfall, the heaviest concentration of which was in the southern coastal areas.	0	NA
1-20	Three periods of rainfall, on the 1st-2d, 3d-4th, and 7th-8th contributed to continuous flood conditions in eastern North Carolina on the Lower Tar River, and on the Cape Fear River which crested on the 13th at 6 feet above flood stage at the William O. Huske Lock and Dam, and on the 14th at Elizabethtown, N.C., at 11.7 feet above flood stage. The Neuse River crested at 6.7 feet above flood stage at Goldsboro, N.C., on the 18th.	0	NA
28-30	One-half to 2 inches of rain fell over an area extending from the mountains to south-central Virginia and 1.5 to 1.75 inches in eastern North Carolina during the 24th-27th. This produced overbank conditions at Randolph, Va., on the Roanoke River and on the upper Neuse River at Neuse and Smithfield, N.C. Also affected was the Cape Fear River at the William O. Huske Lock & Dam and Elizabethtown, N.C., where the river crested about 4 feet above flood stage at both stations.	0	NA
Dec. 17 to Apr. 20	The flooding which had continued for several months in the Pee Dee, Santee, and Edisto River Basins finally receded during April. The exception was the Lumber River at Lumberton, N.C., which crested on the 5th at 5.4 feet above flood stage and continued above flood stage through the end of the month. The mainstem of the Pee Dee, including its tributary, the Rocky River, experienced very high flooding from a 3-inch rainfall on the 1st. The flood gates on the High Rock Reservoir were opened, and flooding was reported on the Pee Dee from Blewett Lake, N.C., into South Carolina. Cheraw, S.C., reported a 42.32-foot crest on the 2d. Flood stage there is 30 feet. The Rocky River at Norwood, N.C., crested 18.16 feet above flood stage on the 1st. Damage was estimated at $42,000. Flooding occurred on all of the major tributaries of the Santee on the 1st-5th, and on the Broad and Saluda Rivers the 8th-10th of the month. Crests of 12.6 feet above flood stage and 5.6 feet above flood stage occurred on the Broad River at Blair, S.C., on the 2d	0	150

Date April 1973	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	ATLANTIC SLOPE DRAINAGE-Continued		
	and 9th, respectively. The Santee River at Jamestown, S.C., (flood stage 10 feet) was in flood on the 6th-21st with a crest of 18.4 feet. The Edisto Basin experienced a crest of 3 feet over banks and flooding on the 1st-20th.		
27-30	Minor flooding occurred on the Yadkin River at Elkin and Yadkin College, N.C., and also on the Catawba River at Lookout Shoals Lake, N.C. Damage was mostly to cottages, mobile homes, boats, and docks.	0	50
1/-May 1	Extended flooding on the lower Savannah and Ogeechee Rivers continued throughout the month. The Savannah River at Millhaven, Ga., which began flooding on March 19 crested at 3.5 feet above flood stage and ended on May 2. The Savannah River at Clyo, Ga., experienced flooding on February 1-May 11 with a crest of 6.3 feet above flood stage on April 15. The Ogeechee River at Eden, Ga., crested at 11.4 feet (flood stage 9 feet) on the 13th. Flooding began at Eden on February 6.	0	NA
1-23	Slight flooding was reported in Georgia on the Ocmulgee, Oconee, Altamaha, and Satilla Rivers, with stations reporting overflows from 0.4 feet at Lumber City, Ga., to 6.8 feet at Milledgeville, Ga.	0	NA
	EAST GULF COAST DRAINAGE		
Mar. 13-21	Flooding in progress at the beginning of the month on all tributaries of the Apalachicola River continued into April. Heavy rains caused several minor flood crests during the first two weeks of the month. The Apalachicola at Blountstown was over its banks for all but 5 days of the month as a result of almost 10 inches of rainfall. The river receded on the 21st-27th, but rose again and continued above flood stage until May 6. The Suwannee River experienced a major flood in its upper reaches with damage estimated at $2 million and one fatality. The W.F. George Lock & Dam on the Chattahoochee River reported 4.9 feet overflow on the 1st.	1	2,000
1-8	A carryover from late March rainfall caused crests above flood stage at the beginning of April along the Choctawhatchee, Conecuh, Tallapoosa, Cahaba, Alabama, Black Warrior, and Tombigbee Rivers. Lowland and agricultural areas on the Tallapoosa and Alabama Rivers were mainly affected. The Black Warrior River crested 4-6 feet above flood stage at points below Tuscaloosa. The Tombigbee was over flood stage from March 16 to April 16, with crests from 1.5 feet to 18.4 feet above flood stage from Amory, Miss., to Coffeeville Lock & Dam, Ala. The floods had receded by the 20th.	0	NA

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

Date April 1973	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	EAST GULF COAST DRAINAGE-Continued		
23-30	A 3-inch late month rainfall caused minor lowland flooding along the lower reaches of the Alabama, Black Warrior, and Tombigbee Rivers.	0	NA
1/-12	Flooding which began in March continued in the Pascagoula and Pearl River Basins. The Chickasawhay, Leaf, and mainstem Pascagoula began flooding on March 27 and ended on the 4th, 8th, and 12th, respectively. Crests were 1-5 feet above flood stage. The Pearl River had been over flood stage at various times at all stations during March and April and until mid-May, when floods finally receded. At Bogalousa, continuous flooding was reported from March 7 until May 21. The crest was 5.2 feet above flood stage on May 1.	0	NA
17-24	The second half of the month brought river levels in the Pascagoula Basin and Bogue Chitto River back over flood stage. The greatest overbank amount was 4.6 feet at Franklintown, La. The Pearl River stations reported two crests for the month as a result of the second flood surge-one near the first of the month and the second on or near the 20th.	0	NA
16-24	Above normal precipitation and melting of the heavy snowfall of April 8-9 produced heavy runoff in southeast Minnesota, northeast Iowa, and the southern two-thirds of Wisconsin. This situation caused flooding in the Zumbro, Root, Trempeleau, Black, Wisconsin, Kickapoo, and Wolf River Basins. The Black River at Galesville, Wis., crested only 0.14 feet below the record of 14.63 feet reached in 1967. The floods had receded by the end of the month.	0	NA
16-1/	Rainfall in April over the Mississippi mainstem and tributaries from Dubuque to Burlington, Iowa, continued at record levels. At Moline the normal of 3.17 inches precipitation was exceeded by 8.13 inches, and the total rainfall for the first 4 months of 1973 had already reached 70 percent of the mean annual precipitation for the station. Rivers, which had receded from the March floods, swelled again to flood levels. At DeWitt, Iowa, on the Wapsipinicon River, the old record of 12.30 feet was broken by a crest of 12.7 feet on the 22d. New records were also set on the Rock River with Joslin, Ill., reporting 17.9 feet on the 23d and Moline, Ill., reporting a new modern times record of 16.15 feet on the 26th. Preliminary estimates for this district showed about $24 million damage.	0	24,000
20-28	Most of the tributaries and the main stems of the Iowa, Skunk, and Des Moines Rivers were in flood at various times during the month. Crests ranged from 1 to 6 feet over flood stage. A major storm system moved across southeastern Iowa on the 19th to 21st, yielding rainfall amounts of 5 to 7 inches and producing record flood crests on the lower reaches of the Iowa and Skunk Rivers. At	0	NA

Date April 1973	FLOOD EVENT EAST GULF COAST DRAINAGE-Continued	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	Upper Mississippi Basin-Continued		
	Wapello on the Iowa River the crest was 17.9 feet, exceeding the previous record crest of 17.4 feet occurring on July 15, 1969. On the Skunk River, the crest was 27.05 feet at Augusta as compared with the previous record of 25.00 feet on April 3, 1960. At Brighton, with a shorter period of record, the crest of 19.15 feet topped the old record of 18.90 feet, which occurred April 16, 1966. Although several thousand acres of farmland were flooded, crop damage was small as few crops had been planted. The entire population of Oakland Mills, 40 families, was evacuated. Damage to buildings, roads, and bridges is estimated at several hundred thousand dollars.		
1/-1/	Virtually all major tributaries along the mainstem upper Mississippi were reporting continuing floods throughout the month. Rains were continuous for the first 8 days, and heavy snows fell on the 9th-10th in Iowa, northern Missouri, and northern Illinois. These caused new crests on the upper Illinois, Salt, and Cuivre Rivers. Additional heavy rains from the 20th-22d fell over much of the same areas and caused flash flooding on tributary streams. The Mississippi mainstem from Dubuque, Iowa, to Keokuk, Iowa, crested at the beginning of the month, receded, and then crested again at the end of the month, as all of its tributaries continued feeding it floodwaters from heavy rains and snow. New records were reported at Burlington, Ft. Madison, and Keokuk at the end of the month. The river never dropped below flood stage from Gregory Landing, Mo., to Chester, Ill., and record crests were reported at 7 to 10 stations along that stretch. At St. Louis, Mo., the crest of 43.31 feet on the 29th was 1.3 feet higher than the previous record of 42.0 feet in 1785 and 13.31 feet above flood stage. The record set at Chester, Ill., of 40 feet on the 6th was surpassed by more than 3 feet on the 30th. Flood stage there is 27.0 feet and the old record was 39.8 feet set in 1844. Some tributaries experienced flooding as a result of backwater, and the flow on the Meramec River in Missouri was actually going upstream on the 29th at Valley Park. Although this was a record flood with the greatest damage reported, the volume of flow of water has been surpassed on several occasions. At St. Louis flow at the crest was measured at 850,000 c.f.s. by the U.S.G.S., while the highest estimated flows of 1,300,000 c.f.s. took place in 1785 and 1844. Flows over 850,000 c.f.s. have been recorded at least six times since 1892.	Unknown	83,960
	Missouri Basin		
1-30	The Topeka and Kansas City districts reported 6-10 inches of precipitation at many stations.	Unknown	11,500

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

Missouri Basin-Continued

Date April 1973	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	A heavy rain belt extended from east-central Kansas through west-central, central, and north-central Missouri. Heavy snowfalls on the 7th and 8th in northwest Kansas, and southwest Nebraska, and 1-2 inches of snow at the end of the month in northwest Kansas added to the totals. The Missouri River from Lexington, Mo., to Jefferson City, Mo., was in flood almost the entire month except for a slight recession from the 9th-15th. Hermann, Mo., and St. Charles, Mo., were in continuous flood from March 7 until the end of May, and the station at Hermann, Mo., had a record crest of 33.66 feet on the 24th, 12.66 feet above flood stage. The old record was 33.3 feet, which occurred in 1951.		
Mar. 31-4	Tributaries in west and central Missouri were already in flood at the beginning of the month. The Platte, Little Blue, Blackwater, Lamine, Grand, upstream Nishnabotna, Nemaha, 102, and Little Platte Rivers all reported significant flooding. In Kansas the lower reaches of the Smoky Hill, Solomon, Republican, and Big Blue Rivers were particularly affected. Many stations reported new records for April flooding with crests usually about 2-4 feet above flood stage. Chapman Creek at Chapman, Kans., reached 21.09 feet on the 1st, 11 feet above flood stage. Flood damage was substantial to crops, bridges, roads, railroads, farmland, and levees.	0	88
16-20	Some flooding occurred on the tributaries of the Kansas, lower Smoky Hill, and Big Blue Rivers, but most serious flooding took place on the mainstem Missouri, Grand River, Osage River, and central Missouri tributaries. Loss for the upper tributaries and Missouri was about $2,627,800 for March-April and on Grand River about $2,021,000 for the same period.	0	2,264
21-23	The Marais des Cygnes River below LaCygne, Kans., overflowed its banks as a result of 1-3-inch rains.	Unknown	11,500

Ohio River Basin

Date April 1973	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
27-30	A 3-4-inch late month rainfall caused overbank flow in the Guyandotte and Little Kanawha Basins. The same late month flooding was reported throughout the Ohio Basin areas with overbank conditions variously reported from Piketon, Ohio, on the Scioto River to New Harmony, Ind., on the Wabash River. Crests ranged from 0.9 feet above flood stage at Seymour, Ohio, on the East Fork of the White River to 6.85 feet at Hazelton, Ind., on the main stem of the White River, with most stations cresting 2 to 3 feet above flood stage.	0	NA
Mar. 7-12	The first two weeks of the month saw continuation of flooding from March on the lower Embassass, White, Little Wabash, and Wabash Rivers. Many of the stations had reported	0	NA

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

Date April 1973	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	Ohio River Basin-Continued		
	crests the previous month, with a few moderate rises also occurring the first week of April. Damage was minor because flooding was confined to lowland areas, although some planting was delayed. No flooding took place in the upper reaches of the tributaries, or in the extreme upper Ohio Basin.		
Mar. 1- May 21	The lower Tennessee at Paducah, Ky., continued above flood stage the entire month. This was also true of the Ohio River at and below Shawneetown, Ill. The Ohio River at Cairo was to remain above flood stage until June 15. The levees held at Cairo, but some damage to streets occurred due to release of water pressure. Illinois State Highways 3 and 146 were closed on April 22. They were reopened to traffic on July 8 and June 28, respectively. Much damage was averted by using Kentucky Dam on the Tennessee River and Borkley Dam on the Cumberland River for flood control. Record high stages occurred in the reservoirs behind these dams on March 28.	0	NA
	White Basin		
Oct. 29-1	The Cache River at Patterson, Ark., continued over flood stage for the sixth consecutive month with a crest of 3.6 feet above flood stage on May 7.	0	NA
Jan. 25-1	The White River also continued over its banks and reported a high of 8.25 feet above flood stage and 11.5 feet above flood stage on May 7 at Clarendon, Ark., and at St. Charles, Ark., respectively.	0	NA
Mar. 1-1/	The White River Basin experienced its most widespread and severe flooding in late April, with very heavy precipitation added to already above normal monthly rainfall. The Black River at Pocahontas, Ark., had a crest of 25.17 feet on the 26th, the highest since April 17, 1927, when the record stage of 25.90 feet occurred.	0	NA
	Arkansas Basin		
Mar. 31-4	The upper Arkansas Basin was nearly saturated from rainfall in March. The end of the month saw 1.5-3 inches fall over the Pawnee and Wet Walnut Creek drainage areas. Those streams were over their banks by the 31st along with Cow Creek, Little Arkansas, Ninnescah, Chikaskia, Salt Fork, Cimarron, Bird Creek, Cottonwood, and Neosho Rivers. Flooding was reported on the Arkansas River from Kinsley, Kans., to Ralston, Okla., as a result of upstream runoff. Damage along Pawnee and Wet Walnut Creek was mainly agricultural and estimated at $150,000, while the Arkansas River to Great Bend suffered $2,058,000 damage, mainly from rainfall erosion of soils, loss of livestock, and crop damage.	0	2,200

Date April 1973	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	Arkansas Basin-Continued		
15-17	Middle tributaries of the Arkansas experienced normal to above normal rainfall for the the month with Erie, Kans., reporting 7.34 inches for this period. Most of this precipitation was concentrated on the 13th, 145h, and 15th over the upper Canadian River Basin and on the 15th and 16th over the lower areas of the basin. This caused only minor flooding.	0	NA
19-24	Some Arkansas Basin stations reported 1-8 feet flooding on the Neosho, Fourche Maline, Poteau, and Petit Jean Rivers and at Dardanelle, Morrilton, and Little Rock on the Arkansas. Numerous rainfall totals of 5 inches or more were reported during this period. At the end of the month several thousand acres of farm and timberland were underwater. The Fourche La Fave River at Houston, Ark., was in flood March 10-May 29.	0	NA
	Red Basin		
15-16	Most flooding in the Red Basin took place during the latter half of the month. Minor bottomland flooding occurred on the North Fork and Salt Fork of the Red River and on the Washita River, while light to moderate flooding took place on tributaries downstream including Clear Boggy Creek and the Blue and Sulphur Rivers. On the 16th, 7 inches of rain fell near Gilmer, Tex., although most areas averaged 1-2 inches. Another heavy rainfall on the 23d-24th produced flooding once again in the Red Basin causing the Cypress, Little Missouri, Sabine, Ouachita, Black, and mainstem Red Rivers to go over their banks. At least $360,000 damage was done on the Sulphur and Cypress Rivers.	0	360
	Lower Mississippi Basin		
Mar. 1/	The lower Mississippi System continued in flood during April. Rainfall over most of the area was intermittent and heavy, causing crests during early April, slight recessions, and a resurge of flooding toward the end of the month. Hardest hit was the Yazoo Basin which could not drain due to the high stage of the Mississippi and which formed a lake about 40 miles wide and 60 miles long covering 675,000 acres, most of which is prime farmland. Two hundred homes in Eagle Lake Community near Vicksburg were evacuated when two levees on Muddy Bayou broke and water started spilling into Eagle Lake. The Yazoo crested 6.2 feet above flood stage at Yazoo City on April 19. Crests on the St. Francis, Tallahatchie, and Big Black Rivers occurred at two times, in late March - early April and late April - early May. The Bonnet Carre Floodway was opened on April 8, the old River Control structure was opened on the 15th and the Morganza Floodway was used for the first time on the 17th. Many stations reported their highest stages since 1950. Some sample crests were	6	NA

Date April 1973	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	Lower Mississippi Basin-Continued		
	42.4 feet at Caruthersville, Mo., 58.2 feet at Greenville, Miss., 53.1 at Vicksburg, Miss., and 54.7 feet at Red River landing, La., all approximately 10 feet above flood stage.		
	Atchafalaya Basin		
Mar. 1	The Atchafalaya River was swelled by floodwaters coming out of the Ouachita, Black, and Red River, together with floodwaters being diverted out of the Mississippi River at Old River Control structure and Morganza floodway. At the end of April, nearly all points on the river were above flood stage. Morgan City reached record highest of 12.4 feet on 4 days near the end of the month, but went higher during May. During March and April, Morgan City received 28.61 inches of rain. Baton Rouge recorded 22.83 inches, and New Orleans 21.47 inches.	0	NA
1/-5	The Sabine River and Trinity River at Liberty, Tex., carried flooding over from March. Deweyville, Tex., reported flooding continuously for the month because of release of water from the Toledo Bend Reservoir.	0	NA
16-30	Major rainfalls on the 5th-9th, 13th-20th, and 23d-26th were heavy over northern south-central Texas and east Texas. The precipitation of the 13th-20th initiated most of the flooding as soil conditions remained wet to saturated over most of the area. The Navidad River at Ganado, Tex., crested 12.27 feet above flood stage. The Lavaca at Edna crested 6.38 feet above flood stage and the Guadalupe at Cuero and Victoria, Tex., was 6.8 feet and 7.49 feet above flood stage, respectively, on the 19th and 20th of the month. Damage was quite extensive on the Sabine River from Emory, Tex., to Logansport, La., amounting to about $2,453,000. Over half of that total was damage to agricultural property. Two lives were lost from flooding in Olmos Basin. An estimated $1 million damage occurred on the 15th-17th in the San Jacinto Basin. Serious flooding occurred in the Upper Trinity Basin, with damage estimated at more than $10,700,000 by the Corps of Engineers on the basis of streamflow. Flash flooding hit the city of Cleburne in the upper Brazos Basin on the 23d. Damage was estimated at nearly $300,000. The Neches River was out of banks at Evadale the entire month of April. The river was above flood stage at Beaumont from the 18th to the 27th with widespread flooding at Beaumont and upstream. A large part of the flooding was due to a long fetch tidal effect along the upper Texas Gulf Coast. Additionally, some 13 inches of rain fell at Port Arthur from the 14th to the 17th - 10 inches of which occurred on the 17th. The Neches River and numerous bayous reacted sharply to the heavy rainfall and were out of banks by the 17th in Jefferson and Hardin Counties. Heaviest flooding occurred on the 18th through the 23d on the northern edge of Beaumont and along Pine Island Bayou. Additional flooding occurred along Village Creek from Kountz	2	17,500

Date April 1973	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	Atchafalaya Basin-Continued downstream to Silsbee, and then downstream along the Neches River. Heavy flows were also noted on Hillebrandt and Taylor Bayous. The heavy rain with no run-off due to the high tides in Sabine Lake accounted for the flooding in northwest and southwest Port Arthur. The Montrose section in southwest Port Arthur reported considerable flooding. Flood damage on the lower Neches River was estimated at some $3 to $4 million.		

1/ Flooding continued at the end of the month.

NA Not available.

FLOOD STAGE DATA

(All dates in April unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From—	Above flood stages -dates To—	Crest * Stage	Crest * Date
	Ft			Ft	
ST LAWRENCE DRAINAGE					
Lake Huron					
Shiawassee:					
Owasso, Mich.	7	1	1	7.05	1
Saginaw:					
Saginaw, Mich.	19	3	3	19.14	3
Lake Ontario					
Canaseraga Creek:					
Groveland, N.Y.	11	4	5	13.02	5
Oatka Creek:					
Garbutt, N.Y.	5	5	6	5.45	6
Black Creek:					
Churchville, N.Y.	5	5	6	5.73	6
ATLANTIC SLOPE DRAINAGE					
St. John:					
Fort Kent, Me.	U	U	U	25.77	30
Penobscot:					
West Enfield, Me.	20	29	30	21.66	30
Bangor, Me.	11	29	30	11.7	30
Kennebec:					
Skowhegan, Me.	35,000 cfs	28	29	61,000 cfs	29
Connecticut:					
Hartford, Conn.	16	3	8	19.02	5
Bodkin Rock, Conn.	8	3	8	10.8	5
Passaic:					
Little Falls, N.J.	6	5	7	7.25	6
Millstone:					
Blackwells Mills, N.J.	7	4	6	7.57	5
Chemung:					
Chemung, N.Y.	12	5	5	12.76	5
Susquehanna:					
Conklin, N.Y.	11	4	6	11.80	5
Potomac:					
Point of Rocks, Md.	16	29	29	#16.51	29
Appomattox:					
Farmville, Va.	16	27	28	17.50	28
Mattoax, Va.	21	--	--	23.51	30
Matoaca, Va.	U	U	U	9.6	29
James:					
Richmond (Westham), Va.	12	28	28	13.10	28
Roanoke:					
Randolph, Va.	21	28	29	23.8	28
Williamston, N.C.	10	Mar 17	May 23	11.3	4-29
Tar:					
Tarboro, N.C.	19	6	8	19.5	6
Greenville, N.C.	13	6	8	14.3	8
Neuse:					
Neuse, N.C.	14	1 9 29	5 11 30	17.0 15.0 15.3	4 10 30
Smithfield, N.C.	13	1 28	13 30	18.9 15.4	3 30
Goldsboro, N.C.	14	1	18	20.7	10
Kinston, N.C.	14	2	20	18.2	11
Cape Fear:					
Fayetteville, N.C.	35	2 9	5 10	43.6 35.5	3 10
Wm. O. Huske Lock & Dam, N.C.	42	1 28	13 30	58.0 46.1	4 29
ATLANTIC SLOPE DRAINAGE-Continued					
Cape Fear-Cont'd:					
Elizabethtown, N.C.	20	1 29	11 30	31.7 23.8	4 29
Lock and Dam 1, N.C.	24	6	6	24.2	6
Yadkin:					
Elkin, N.C.	16	27	27	17.3	27
Yadkin College, N.C.	18	28	28	18.7	28
Rocky:					
Norwood, N.C.	15	1	2	33.16 E	1
Lynches:					
Effingham, S.C.	14	6	10	16.46	7
Lumber:					
Lumberton, N.C.	9	Dec. 17	May 8	12.3 11.2 14.3 15.6 12.6 14.4	Dec 23 Jan 24 Feb 6 Feb 16 Mar 10 5
Little Pee Dee:					
Galivants Ferry, S.C.	9	2	23	11.9	10-11
Waccamaw:					
Conway, S.C.	7	12	24	8.3	16-18
Black:					
Kingstree, S.C.	12	4 8	6 14	12.1 13.0	5 11
Pee Dee:					
Cheraw, S.C.	30	1	4	42.32	2
Pee Dee, S.C.	19	Mar 6	21	22.0 27.0	Mar 24 [illegible]
Catawba:					
Lookout Shoals Lake, N.C.	100	27	30	104.5	27
Wateree:					
Lake Wateree, S.C.	100	1	5	104.5	2
Camden, S.C.	23	2	4	27.4	3
Broad:					
Gaffney, S.C.	10	1	1	10.20	1
Blair, S.C.	14	1 8	4 10	26.6 19.6	2 9
Saluda:					
West Pelzer, S.C.	9	1	2	10.3	1
Chappells, S.C.	14	Mar 31 8	3 10	22.3 18.7	2 8
Congaree:					
Columbia, S.C.	19	1	3	23.9	2
Santee:					
Jamestown, S.C.	10	6	21	18.4	10
North Fork Edisto:					
Orangeburg, S.C.	8	1	14	9.1	10
Edisto:					
Givhans Ferry St Pk, S.C.	10	1	20	13.0	13-14
Savannah:					
Augusta, Ga.	21	8	8	21.5	8
Wade Plantation, Ga.	15	Mar 19	May 2	17.6 18.5	Mar 27 12
Clyo, Ga.	11	Feb 1	May 11	15.5 15.9 17.3 14.1	Feb 20 Mar 30 15 May 1
Ogeechee:					
Midville, Ga.	6	11	13	[illegible]	11
Scarboro, Ga.	8	1	19	[illegible]	14
Eden, Ga.	9	Feb 6	24	#12.5 #[illegible] 11.4	Feb [illegible] Mar 11 13
Ocmulgee:					
Macon, Ga.	18	1 8	3 10	21.4 22.4	2 9

FLOOD STAGE DATA

(All dates in April unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
	Ft.			*Ft.*	
ATLANTIC SLOPE DRAINAGE-Conti					
Ocmulgee-Continued:					
Lumber City, Ga.	15	10 18	13 19	15.6 15.4	12 18
Oconee:					
Milledgeville, Ga.	20	2 8	3 9	23.4 26.8	3 8
Dublin, Ga.	21	6 11	8 14	21.6 23.5	7 12
Mt. Vernon, Ga.	16	7	17	18.4	14
Altamaha:					
Charlotte, Ga.	15	Mar 25	23	15.8 19.3+	Mar 29 12
Satilla:					
Waycross, Ga.	16	4	13	18.7	7
EAST GULF OF MEXICO DRAINAGE					
Alafia:					
Lithia Springs, Fla.	--	5	6	13.87	6
Peachtree Creek:					
Atlanta, Ga.	13	7	7	14.5	7
Chattahoochee:					
W.F. George L&D (TW), Ga.	134	1 8	2 9	138.9 134.9	1 8
Flint:					
Albany, Ga.	20	5 9 29	5 9 30	20.1 20.4 21.7 19.2	5 9 29 Mar 22
Apalachicola:					
Blountstown, Fla.	15	Mar 13 27	21 May 6	#23.5 #20.6	4 29
Choctawhatchee:					
Newton, Ala.	19	1	2	#22.6	1
Geneva, Ala.	23	2	5	#24.3	3
Caryville, Fla.	12	2 U	U 15	13.95 13.70	4 10
Conecuh:					
River Falls, Ala.	37	3	4	#40.8	4
Brewton, Ala.	17	5	10	#19.8	6
Coosa:					
Gadsden, Ala.	511	26	27	#512.2	27
Tallapoosa:					
Tallapoosa Water Pl, Ala.	25	2 10 28	4 10 29	#31.4 #25.8 #25.9	2 10 28
Cahaba:					
Centerville, Ala.	23	Mar 31 8	1 8	24.1 #23.3	Mar 31 8
Alabama:					
Montgomery, Ala.	35	1 28	4 29	#39.6 #36.5	3 28
Jones Bluff L&D (TW), Ala.	122	2	4	#123.8	4
Selma, Ala.	45	4	4	#46.8	4
Millers Ferry L&D(TW),Ala.	66	1 27	13 May 5	#75.8 #74.8	5 29
Claiborne, Ala.	40	1 28	15 May 5	#46.4 #45.3	7-8 May 2
Black Warrior:					
Oliver L&D (TW), Tuscaloosa, Ala	47	1	2	#51.0	1
Warrior L&D(TW), Ala.	30	1 27	6 May 1	#36.5 #33.6	4 29
East Fork:					
Fulton, Miss.	16	1 19 24	2 22 30	16.25 16.4 17.02	1 19 25
Tibbee Creek:					
Tibbee, Miss.	23	26	29	24.95	27
EAST GULF OF MEXICO DRAINAGE Continued					
Noxubee:					
Macon, Miss.	25	1	3	26.95	1
Tombigbee:					
Amory, Miss.	20	18 24	20 30	21.5 26.9	19 27
Aberdeen, Miss.	34	28	30	36.2	28
Gainesville L&D TW,Ala.	36	Mar 18 28	6 May 3	54.4 #37.1	Mar 23 May 1-2
Demopolis L&D TW, Ala.	48	Mar 18 27	12 May 3	#64.0 #53.5	Mar 27 30
Coffeeville L&D TW, Ala.	43	Mar 16 26	16 May 3	58.7 #50.1	1-3 May 3
Chickasahway:					
Enterprise, Miss.	20	Mar 27 19	4 21	25.4 20.4	2 19
Shubuta, Miss.	30	4 26	6 28	30.5 34.5	5 26
Leaf:					
Beaumont, Miss.	20	Mar 26 21 28	8 24 May 3	23.9 20.8 23.29	Mar 30 21 30
Pascagoula:					
Merrill, Miss.	22	Mar 27	12	23.8	2
Bogue Chitto:					
Franklinton, La.	11	18	21	15.6	19
Pearl:					
Edinburg, Miss.	20	3 18	5 24	20.0 23.5	4 20
Carthage, Miss.	17	Mar 17 17	7 27	22.8 21.0	Mar 19 21
Ofahoma, Miss.	14	21	22	14.2	21
Jackson, Miss.	18	Mar 12	May 16	31.9 33.0	Mar 22 19
Monticello, Miss.	19	Mar 17 17	15 May 7	27.85 26.55	Mar 26 27
Columbia, Miss.	17	Mar 25 19	13 May 5	23.5 23.0 22.5	Mar 28 2 28
Bogalusa, La.	15	Mar 7	May 21	20.5	Mar 30- Apr 1
Pearl River, La.	12	Mar 11	May 21	16.4 16.5	Mar 29-30 21
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Zumbro:					
Theilman, Minn.	38	16	18	39.95	17
Trempealeau:					
Dodge, Wis.	7	16	20	9.33	18
Black:					
Galesville, Wis.	12	17	20	14.49	18
Root:					
Houston, Minn.	16	15	15	15.30	15
Hokah, Minn.	47	16	18	49.6	17
Kickapoo:					
Soldiers Grove, Wis.	723	16	19	725.5	17
Gays Mills, Wis.	698 8	16 16	19 26	700.21 10.21	17 18
Wisconsin:					
Portage, Wis.	17	19	21	19.07	20
Muscoda, Wis.	9	20	24	9.79	22
Wolf:					
New London, Wis.	9	21	25	9.1	22
Turkey:					
Garber, Iowa	17	16	19	23.04	16

FLOOD STAGE DATA

(All dates in April unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From—	Above flood stages -dates To—	Crest * Stage	Crest * Date
	Ft			Ft	
MISSISSIPPI SYSTEM-Cont'd					
Upper Mississippi Basin-Cont'd					
Little Maquoketa:					
Durango, Iowa	15	16	16	15.50	16
Maquoketa:					
Maquoketa, Iowa	13	16	18	16.35	17
Plum:					
Savanna, Ill.	22	21	23	23.57	22
Wapsipinicon:					
Independence, Iowa	12	17	19	22.55	17
DeWitt, Iowa	10	17	29	12.80	22
Pecatonica:					
Martintown, Wis.	11	16 29	28 Jun 1	14.29 M	24 M
Freeport, Ill.	13	23	25	13.01	23
Shirland, Ill.	12	18	Jun 2	14.6	23-24
Kishwaukee:					
Perryville, Ill.	10	21	26	19.7	22
Green:					
Geneseo, Ill.	8	Mar 31 10 21	4 12 M	9.8 10.4 14.53	2 10 22
Rock:					
Rockton, Ill.	10	21	May 10	13.48	22
Rockford, Ill.	13.5	20	M	15.0	21
Joslin, Ill.	12	21	Jun 8	17.9	23
Moline, Ill.	12	21	Jun 2	16.15	26
West Fork Cedar:					
Finchford, Iowa	12	16	19	13.20	18
Shell Rock:					
Marble Rock, Iowa	4	16	18	5.25	16
Shell Rock, Iowa	12	16	18	12.66	17
Black Hawk Creek:					
Hudson, Iowa	12	15	18	15.13	17
Cedar:					
Charles City, Iowa	12	16	18	14.91	17
Janesville, Iowa	11	18	19	11.65	18
Waterloo, Iowa	15	17	19	16.15	18
Cedar Rapids, Iowa	13	20	21	14.20	21
Iowa:					
Marshalltown, Iowa	13	15	24	16.52	17
Wapello, Iowa	10	10 17	10 28	10.0 17.9	10 23
North Skunk:					
Sigourney, Iowa	16	15	24	20.17 18.27	18 23
South Skunk:					
Ames, Iowa	10	16	17	12.17	16
Oskaloosa, Iowa	15	16	24	19.68	19
Skunk:					
Brighton, Iowa	14	17	27	19.15	21
Augusta, Iowa	15	1 10 20	2 10 26	15.55 15.35 27.05	1 10 23
Edwards:					
New Boston, Ill.	17	22	22	23.31	22
Pope Creek:					
Keithsburg, Ill.	17	23 Also flooded on 11, 21, 27, & 29 to 30.	23	27.98	23
Henderson:					
Oquawka, Ill.	21.5	21	22	26.54	22
MISSISSIPPI SYSTEM-Cont'd.					
Upper Mississippi Basin-Cont'd.					
West Fork Des Moines:					
Humboldt, Iowa	8	17	17	8.03	17
South Raccoon:					
Redfield, Iowa	14	16	16	14.78	16
North Raccoon:					
Jefferson, Iowa	10	3 13 15 26	3 15 20 26	10.0 10.8 12.5 10.2	3 14 18 26
Perry, Iowa	13	17	19	13.9	18
Raccoon:					
Van Meter, Iowa	13	15	19	17.5	16
Des Moines, SW 18th St., Iowa	12	1 16	1 19	12.0 15.0	1 17
North:					
Norwalk, Iowa	18	15	17	20.9	16
Middle:					
Indianola, Iowa	19	1 16	1 17	21.15 20.69	1 16
South:					
Ackworth, Iowa	19	Mar 31 16	1 16	24.47 25.41	Mar 31 16
Cedar Creek:					
Bussey, Iowa	16.5	1 13 22	1 17 22	20.20 18.03 20.57 19.68	1 13 17 22
Des Moines:					
Saylorville, Iowa	13	Mar 4 15	6 27	14.68 18.80	2 19
SE 14th St., Des Moines, Iowa	21	1 14	2 22	21.50 26.41	1 19
Tracy, Iowa	14	5 17	11 29	15.67 15.44	7 22
Eddyville, Iowa	15	5 14	12 May 13	17.37 18.62	9 22
Ottumwa, Iowa	10	21	23	10.88	22
Keosauqua, Iowa	15	21	22	17.90	22
Salt:					
New London, Mo.	19	1 21	5 1	23.0 31.81	2 25
Cuivre:					
Old Monroe, Mo.	24	M	1	33.65 33.06	3 29
Fox:					
Dayton, Ill.	12	M	M	15.34	23
Vermilion:					
Leonore, Ill.	10	M	M	18.64	22
Sangamon:					
Monticello, Ill.	13	21	1	15.11	25
Oakford, Ill.	18	23	30	21.57	23
Illinois:					
Morris, Ill.	13	1 22	5 27	15.22 18.38	2 23
LaSalle, Ill.	20	Mar 30	May 14	27.37	23
Peoria, Ill.	18	Mar 14	May 19	21.8 24.4	5 27
Havana, Ill.	14	Mar 10	1	21.0 23.9	6 29
Beardstown, Ill.	14	Mar 9	1	24.0 27.1	6 29
Meredosia, Ill.	32	M	1	26.75	29
Big:					
Byrnesville, Mo.	16	23	25	19.9	24

FLOOD STAGE DATA

(All dates in April unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
	Ft.			Ft	
MISSISSIPPI SYSTEM-Cont'd.					
Upper Mississippi Basin-Cont'd.					
Meramec:					
Steelville, Mo.	12	23	25	13.1	23
Eureka, Mo.	18	23	25	21.5	25
Sullivan, Mo.	15	23	25	16.3	23
Valley Park, Mo.	16	1 23	13 May 3	17.45 22.45	6 25
Kaskaskia:					
Carlyle, Ill.	21	M	10	21.52	6
New Athens, Ill.	25	2 25	10 May 4	26.22 M	6 M
Big Muddy:					
Murphysboro, Ill.	16	M	1	M	M
Mississippi:					
Dubuque, Iowa	17	22	27	17.9	25
Sabula, Iowa	16	M	M	16.2	25
Clinton, Iowa	16	Mar 18 22	1 29	20.1 17.34	Mar 25 25
L&D 14, LeClaire, Iowa	10	Mar 17 22	3 M	13.6 11.99	Mar 25 25
Moline, Ill.	13.5	22	29	15.0	25
Davenport, Iowa	15	Mar 19 22	2 1	18.8 18.5	Mar 25 25-26
Fairport, Iowa	14	Mar 16 19	5 1/	19.6 20.11	Mar 26 25
Muscatine, Iowa	16	Mar 16 21	4 1	20.8 21.67	Mar 26 25
Keithsburg, Ill.	12	Mar 13	Jun 12	19.35	25
Oquawka, Ill.	15	M	M	24.02	25
Burlington, Iowa	15	Mar 15 10 19	8 12 1/	18.7 15.2 21.5	Mar 27 10-12 25
Ft. Madison, Iowa	528	M	M	532.52	29
Keokuk, Iowa	16	Mar 20 21	5 1/	19.1 23.5	Mar 27 24
Gregory Landing, Mo.	16	Mar 15	May 25	20.56 24.58 21.62	2 24 May 3
Quincy, Ill.	17	Mar 12	1	23.98 28.90 24.45	2 23 May 4
Hannibal, Mo.	16	Mar 10	1/	24.18 28.59 24.5 22.25 21.85	2 25 May 4 May 18 May 29
Louisiana, Mo.	15	Mar 9	1	23.01 27.05 22.50 20.28 20.36	3 24 May 5 May 19 May 30
Dam 24, Clarksville, Mo.	25	Mar 9	1	33.31 36.76 32.3	3 24 May 5
Dam 25, Winfield, Mo.	26	Mar 10	1/	34.57 36.93 35.4	4 27 May 1
Grafton, Ill.	18	Mar 8	1	29.5 33.12 31.8	5 28 May 1
Alton, Ill., Dam 26 TW	21	Mar 8	1	33.92 36.89 35.01	5 28 May 1
St. Louis, Mo.	30	Mar 11	1/	39.83 43.23 41.8	5 28 May 1
Chester, Ill.	27	Mar 9	1/	39.95 43.32 42.80	6 30 May 1
Cape Girardeau, Mo.	32	M	1/	40.3 43.2 45.6 42.2	Mar 20 7 May 1 May 9

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
	Ft.			Ft.	
Missouri Basin					
Nishnabotna:					
Hamburg, Iowa	18	1	3	21.4	1
Nemaha:					
Falls City, Nebr.	20	Mar 31	1	26.1	Mar 31
Tarkio:					
Fairfax, Mo.	17	16	16	18.1	16
Nodaway:					
Clarinda, Iowa	14	16	16	15.8	16
Burlington Jct., Mo.	18	16	16	18.0	16
102:					
Maryville, Mo.	14	1 16	2 17	16.5 16.8	1 17
Rosedale, Mo.	13	1 16	3 18	17.6 18.0	2 17
Little Platte:					
Smithville, Mo.	24	Mar 31 16	2 17	30.76 26.17	Mar 31 16
Platte:					
Agency, Mo.	20	1 16	4 20	24.9 24.2	1 17
Buffalo Creek:					
Jamestown, Kans.	16	Mar 31	1	R17.12	1
Republican:					
Clay Center, Kans.	15	Mar 31	1	17.89	1
Mulberry Creek:					
Salina, Kans.	24	Mar 31	1	#26.6	Mar 31
Saline:					
Lincoln, Kans.	30	Mar 31	3	#34.52	2
Tescott, Kans.	25	Mar 31	4	29.56	2
Solomon:					
Osborne, Kans.	14	Mar 31	1	R17.20	1
Glasco, Kans.	22	Mar 31	2	R24.0#	1
Minneapolis, Kans.	26	1	1	#R26.55	1
Niles, Kans.	24	Mar 31	5	R29.17	3
Chapman Creek:					
Chapman, Kans.	10	1 21	1 21	R21.09 12.87	1 21
Lyon Creek:					
Woodbine, Kans.	17	Mar 31	1	19.60	Mar 31
Smoky Hill:					
Lindsborg, Kans.	21	Mar 31	1	#R25.15	Mar 31
Mentor, Kans.	16	Mar 31	2	R21.65	1
New Cambria, Kans.	25	Mar 31	4	R30.10	1
Abilene, Kans.	22	2	5	#R24.93	2
Enterprise, Kans.	21	1	6	R24.42	3
Mill Creek:					
Washington, Kans.	18	Mar 31	1	R19.58	Mar 31
Black Vermillion:					
Frankfort, Kans.	19	Mar 31 16	2 17	R27.63 22.28	1 16
Big Blue:					
Beatrice, Kans.	16	1	2	#16.90	1
Barneston, Kans.	18	Mar 31	2	#R23.45	1
Blue Rapids, Kans.	1101	Mar 31	3	#1106.28	2
Rock Creek:					
Louisville, Kans.	20	1	1	27.66	1
Mill Creek:					
Paxico, Kans.	19	16	16	#19.9	16

FLOOD STAGE DATA

(All dates in April unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
	Ft			Ft	
MISSISSIPPI SYSTEM-Continued					
Missouri Basin-Continued					
Soldier Creek:					
Topeka, Kans.	12	16	16	#12.20	16
Delaware:					
Muscotah, Kans.	27	16	16	#27.26	16
Wakarusa:					
Lawrence, Kans.	23	Mar 31	1	#28.3	Mar 31
		17	17	#27.6	17
Stranger Creek:					
Easton, Kans.	15	Mar 31	2	#R21.00	1
		16	16	#15.90	16
Tonganoxie, Kans.	22	Mar 31	3	#24.80	2
		16	16	#23.35	16
Kansas:					
Kansas City, Kans.	23	1	3	25.8	2
		16	18	24.2	17
Little Blue:					
Lake City, Mo.	18	1	4	24.20	1
		15	17	22.50	16
		21	22	22.50	21
Grand:					
Pattonsburg, Mo.	25	1	2	30.15	1
		16	18	28.35	17
Gallatin, Mo.	21	1	3	25.8	2
		17	18	21.9	17
Chillicothe, Mo.	24	1	4	30.9	2
		16	19	29.3	17
Sumner, Mo.	26	Mar 25	7	34.7	Mar 28
				34.43	4
		12	26	33.84	23
Brunswick, Mo.	12	Mar 25	9	23.92	4
		12	28	22.15	Mar 29
				22.58	23
Chariton:					
Novinger, Mo.	20	20	23	24.20	21
Prairie Hill, Mo.	15	1	2	17.1	1
		16	17	16.1	16
		20	25	21.8	23
Lamine:					
Clifton City, Mo.	19	1	2	24.64	1
		15	16	20.96	15
		16	17	23.32	17
		21	23	29.00	21
Blackwater:					
Valley City, Mo.	22	1	2	27.30	31
		14	17	28.50	16
		20	23	32.50	21
Blue Lick, Mo.	25	1	5	28.84	3
		15	28	38.06	21
Pottawatomie Creek:					
Lane, Kans.	23	Mar 31	2	#23.90	1
		17	17	24.50	17
Marmaton:					
Fort Scott (nr), Kans.	38	Mar 31	1	40.07	1
Marais des Cygnes:					
Reading, Kans.	18	16	16	#22.80	16
Osawatomie, Kans.	28	Mar 31	2	#31.8	1
		17	18	#28.7	17
La Cygne, Kans.	25	Mar 31	4	#29.39	3
		16	19	27.97	18
Trading Post, Kans.	24	Mar 31	4	#28.42	Mar 29
		21	23	#26.50	22
Kansas-Missouri State Line	25	Mar 25	5	29.5	Mar 29
				28.8	2
		16	19	27.2	18
		21	23	27.9	22
Missouri:					
Rulo, Nebr.	17	1	2	19.62	1
St. Joseph, Mo.	17	1	3	21.0	1
		16	18	18.5	17
Leavenworth, Kans.	19	1	3	22.8	2
		16	18	20.0	17

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
	Ft			Ft	
MISSISSIPPI SYSTEM-Continued					
Missouri Basin-Continued					
Missouri-Continued:					
Kansas City, Mo.	22	1	3	23.26	1
Napoleon, Mo.	17	1	[illegible]	22.9	2
		16	19	20.5	18
Lexington, Mo.	22	Mar 25	9	26.8	Mar 29
				30.0	2
		15	24	27.0	17
Waverly, Mo.	18	Mar 25	9	23.3	Mar 27
				26.0	2
		15	26	23.6	18
Miami, Mo.	18	Mar 25	7	23.6	Mar 27
				29.95	2
		16	27	U	1
Glasgow, Mo.	25	Mar 26	7	30.3	Mar 28
				31.7	4
		16	27	32.0	22
Boonville, Mo.	21	Mar 25	8	27.1	Mar 28
				27.66	2
		16	28	30.45	23
Jefferson City, Mo.	23	Mar 25	9	28.8	Mar 29
				29.50	3
		15	29	31.40	24
Hermann, Mo.	21	Mar 7	May 18	30.6	Mar 7
				31.97	5
				33.66	24
St. Charles, Mo.	25	Mar 7	1	33.5	Mar 15
				34.8	6
				36.4	26
Ohio Basin					
Little Kanawha:					
Creston, W. Va.	20	28	1	#21.2	
Guyandotte:					
Branchland, W.Va.	30	29	29	1	
Scioto:					
Piketon, Ohio	16	24	24	17.68	24
		28	29	18.57	28
Vermilion:					
Danville, Ill.	18	23	24	19.50	23
Embarrass:					
Ste. Marie, Ill.	18	25	25	18.0	25
Lawrenceville, Ill.	11	Mar 11	7	17.8	Mar 16
				14.8	5
		21	May 2	15.88	26
East Fork White:					
Seymour, Ind.	14	24	25	14.90	24
White:					
Spencer, Ind.	14	Mar 26	3	16.95	Mar 28
		23	26	17.20	24
Elliston, Ind.	18	Mar 26	5	23.0	Mar 29
		20	28	22.70	25
Newberry, Ind.	18	Mar 30	4	19.6	Mar 31
		26	28	18.30	26
Edwardsport, Ind.	15	Mar 11	8	19.5	Mar 31
		20	29	20.4	26
Petersburg, Ind.	16	Mar 12	12	21.9	Mar 21
		19	May 2	22.15	26
Hazleton, Ind.	16	Mar 15	6	22.9	Mar 21
		20	1/	22.85	27
Skillet Fork:					
Wayne City, Ill.	15	20	26	#19.72	23
Little Wabash:					
Wilcox, Ill.	16	Mar 25	6	20.15	Mar 27
		20	29	21.22	24
Carmi, Ill.	27	Mar 14	9	31.47	Mar 22
		24	May 5	30.06	29
Wabash:					
Lafayette, Ind.	11	2	3	12.45	2
		21	24	14.40	24
Covington, Ind.	16	1	4	17.36	3
		22	27	19.68	25
Montezuma, Ind.	14	Mar 11	7	20.25	Mar 18
				17.79	3
		21	29	21.99	25

FLOOD STAGE DATA

(All dates in April unless otherwise specified)

River and station	Flood stage	Above flood stages -dates				Crest *		
		From–		To–		Stage	Date	
	Ft.					Ft.		
MISSISSIPPI SYSTEM-Continued								
Ohio Basin-Continued								
Wabash-Continued:								
Clinton, Ind.	18		24		26	21.66		25
Terre Haute, Ind.	14	Mar	11		7	17.9	Mar	19
			22		29	18.8		26
Hutsonville, Ill.	20	Mar	17		2	21.4	Mar	21
			26		30	21.5		28
Riverton, Ind.	18	Mar	17		2	19.0	Mar	21
			26		30	18.94		28
Vincennes, Ind.	16	Mar	14		8	19.1	Mar	22
			24	May	2	18.85		30
Mt. Carmel, Ill.	17	Mar	14		12	23.4	Mar	23
			21	May	4	22.84		29
New Harmony, Ind.	15	Mar	15		12	17.7	Mar	22
			23	May	4	17.4		30
Tennessee:								
Whitesburg, Ala.	560	Mar	31		2	561.28		1
			27		30	561.15		29
Paducah, Ky.	320	Mar	12	May	21	336.8	Mar	25
						335.09		1
						331.35	May	7
Ohio:								
Mt. Vernon, Ind.	35	Mar	20		1	40.1	Mar	25
Dam No 49, Uniontown, Ky.	37	Mar	20		4	43.3	Mar	26
			10		16	37.4		13
			26	May	10	37.5		28
Shawneetown, Ill.	33	Mar	19	May	12	43.0	Mar	26
						36.6		28
Dam 50, Fords Ferry, Ky.	34	Mar	18	May	15	46.6	Mar	27
Dam 51, Golconda, Ill.	40	Mar	21		5	45.7	Mar	27
Paducah, Ky.	39	Mar	18		20	47.5	Mar	26
Dam 52, Brookport, Ill	37	Mar	14		1	49.5	Mar	27
						42.9		28-29
						46.2	May	5
Dam 53, Grand Chain, Ill.	42	Mar	12		1	55.4		1
						53.9	May	5-6
Cairo, Ill.	40	Mar	11		1/	55.8		2
						50.1		22
						54.7	May	4
White Basin								
Buffalo:								
Gilbert, Ark.	30		22		23	40.5		22
Black:								
Poplar Bluff, Mo.	16		20		21	18.40		20
			23		24	18.15		23
Pocahontas, Ark.	17	Mar	11	May	20	22.2	Mar	16
						25.17		26
Black Rock, Ark.	14	Mar	8		1/	24.4	Mar	12
						29.3		24
Little Red:								
Judsonia, Ark.	30		20	May	8	33.90		23
Cache:								
Patterson, Ark.	7	Oct.	29		1/	10.6	May	7
White:								
Calico Rock, Ark.	19		23		24	27.80		23
Batesville, Ark.	23		19		20	26.8		19
			22		25	35.0		24
Newport, Ark.	26		20	May	19	32.7		25
Augusta, Ark.	32		20	May	23	37.15		26
Georgetown, Ark.	21	Mar	14		5	23.5	Mar	18
			19		1	30.1		27
Des Arc, Ark.	24	Mar	15	May	30	34.2		28
Clarendon, Ark.	26	Mar	12		1/	29.45	Mar	26
						34.9	May	3
St. Charles, Ark.	25	Jan	29		1/	36.5	May	7
Arkansas Basin								
Pawnee:								
Larned, Kans.	20		2		4	#24.96		2
MISSISSIPPI SYSTEM-Continued								
Arkansas Basin-Continued								
Walnut Creek:								
Albert, Kans.	22	Mar	31		4	24.45		3
Cow Creek:								
Lyons, Kans.	18	Mar	31		2	#18.7		1
Little Arkansas:								
Sedgwick, Kans.	18	Mar	31		4	#23.3	Mar	31
Ninnescah:								
Peck, Kans.	17	Mar	31		1	20.30	Mar	31
Chikaskia:								
Blackwell, Okla.	26	Mar	31		2	30.68		1
Salt Fork:								
Tonkawa, Okla.	17	Mar	31		3	#20.20		2
			25		27	#18.06		26
Cimarron:								
Waynoka, Okla.	8		2		3	# 8.1		2
Bird Creek:								
Avant, Okla.	16		16		16	#21.9		16
Owasso, Okla.	25	Mar	31		2	25.25		1
			16		19	30.90		18
			22		23	#27.60		2
Cottonwood:								
Plymouth, Kans.	28		1		3	#29.34		2
Neosho:								
Iola, Kans.	20	Mar	31		1	#21.5	Mar	31
			16		17	#22.8		16
Chanute, Kans.	23	Mar	31		1	#24.85		1
			16		17	26.81		16
Oswego, Kans.	17	Mar	31		3	21.90		2
			16		19	20.65		18
			21		24	21.55		23
North Canadian:								
Yukon, Okla.	11		16		17	#12.40		16
Little:								
Tecumseh, Okla.	11		15		16	11.4		15
Canadian:								
Canadian, Texas	8		15		15	9.82		15
Fourche Maline:								
Red Oak, Okla.	15		22		23	#16.20		23
Poteau:								
Poteau, Okla.	24		22		24	#29.47		22
Pitit Jean:								
Danville, Ark.	20		20		25	23.40		24
Fourche La Fave:								
Houston, Ark.	25	Mar	10	May	29	#34.13	Apr	27
Arkansas:								
Kinsley, Kans.	9		1		2	10.66		1
Great Bend, Kans.	8		1		5	10.70		3
Hutchinson, Kans.	8	Mar	26		7	10.85		2
Oxford, Kans.	14		1		2	15.12		1
Arkansas City, Kans.	17	Mar	25		7	23.03		2
Ralston, Okla.	16		3		4	16.78		3
Ozark, Ark.	357		U		U	362.50		24
Dardanelle, Ark.	32		22		26	40.50		23
Morrilton, Ark.	30		17	May	4	37.41		24
Little Rock, Ark.	23		23		29	26.19		24
Red Basin								
Salt Fork Red:								
Mangum, Okla.	10		24		25	#13.13		24

FLOOD STAGE DATA

(All dates in April unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest*	
		From—	To—	Stage	Date
	Ft			Ft	
MISSISSIPPI SYSTEM-Continued					
Red Basin-Continued					
North Fork Red:					
Headrick, Okla.	12	1 16	1 17	13.00 13.30	1 16
Washita:					
Carnegie, Okla.	18	1	2	#19.47	1
Blue:					
Blue, Okla.	21	16 24	18 26	#26.21 27.81	16 24
Clear Boggy Creek:					
Caney, Okla.	19	16 23	22 27	M #23.34	M 24
Sulphur:					
Hagansport, Tex.	44	15 20	16 28	46.22 47.10	16 25-26
Naples, Tex.	22	Mar 27 19	4 May 7	26.6 30.07	Mar 30 28
Cypress Creek:					
Jefferson, Tex.	18	24	27	19.9	25
Little Missouri:					
Boughton, Ark.	20	20 25	21 26	23.49 21.49	21 25
Saline:					
Benton, Ark.	20	20 23	20 24	22.35 25.0	20 23
Ouachita:					
Arkadelphia, Ark.	17	20 23	21 26	23.82 24.86	20 24
Camden, Ark.	26	Mar 6 19	6 May 8	33.1 38.3	Mar 14 3
Monroe, La.	40	Mar 18	1/	48.7	May 9-11
Columbia Lock, La.	65	Mar 24	1/	70.7	May 13
Black:					
Jonesville Lock, La.	52	Mar 24	1/	59.65	May 17
Red:					
Dekalb, Tex.	22	18 24	22 M	23.7 28.7	20 27
Alexandria, La.	32	Mar 31 23	2 May 21	32.1 35.7	1 May 3 & 9-10
Lower Mississippi Basin					
St. Francis:					
Fisk, Mo.	20	Mar 11	1/	24.4 22.8 22.6 24.70 21.26 22.14 21.19	Mar 16-18 3,7-8 13 26 May 8 May 13 May 28
St. Francis, Ark.	18	Mar 11	1/	21.6 21.10 21.0 22.30 22.33 19.19 19.30	Mar 26 1 20 28 May 3 May 25 May 30,31
Madison, Ark.	32	25	May 19	36.1	May 2
Tallahatchie:					
Swan Lake, Miss.	26	Feb 9 19	16 1/	31.55 30.09	Mar 18 May 4
Yazoo:					
Greenwood, Miss.	35	Mar 16	10	38.34	Mar 21
Yazoo City, Miss.	29	Mar 16	1/	34.2 35.2	Mar 25 19
Big Black:					
West, Miss.	12	8	May 17	20.1	27
Bovina, Miss.	28	Mar 11 18	6 28	39.3 29.2	Mar 22 19
Comite:					
Comite, La.	18	18	19	19.0	19
MISSISSIPPI SYSTEM-Continued					
Lower Mississippi Basin-Continued					
Amite:					
Denham Springs, La.	25	18	21	28.4	19
Mississippi:					
New Madrid, Mo.	34	Mar 14	May 23	43.3 42.3	3-4 May 4,6
Caruthersville, Mo.	32	Mar 13	May 25	42.4 41.5	3-4 May 5-7
Memphis, Tenn.	34	Mar 21	May 23	40.4 40.48	5 May 8
Helena, Ark.	44	Mar 24	May 25	48.5 50.15	7-10 May 10
Arkansas City, Ark.	44	6 22	14 May 25	44.39 47.6	9 May 11-13
Greenville, Miss.	48	Mar 26	Jun 3	55.5 57.0 58.2	11 May 1-2 May 12-14
Vicksburg, Miss.	43	Mar 26	Jun 26	50.6 53.1	13 May 13-14
Natchez, Miss.	48	Mar 26	Jun 2	54.7 56.7	18 May 13-16
Red River Landing, La.	45	Mar 25	Jun 26	S53.5 54.7	5 May 13-16
Baton Rouge, La.	35	Mar 28	Jun 23	41.2 42.1	9 May 10
Donaldsonville, La.	28	Mar 30	Jun 8	32.3 32.0	9 May 9-16
Reserve, La.	22	2	May 31	24.5 23.27	8-9 May 10
New Orleans, La.	17	3 May 2	19 May 23	T18.5 17.5	7 May 13-14
Atchafalaya Basin					
Atchafalaya:					
Simmesport, La.	41	3	Jun 11	49.0	May 14-16
Melville, La.	41	17	Jun 2	44.3	May 14
Morgan City, La.	7	Dec 20	1/	12.4 13.7	25-27 May 27
WEST GULF OF MEXICO DRAINAGE					
Mermentau:					
Mermentau, La.	5	17	28	8.0	21
Calcasieu:					
Hineston, La.	12	17	25	19.0	18
Oakdale, La.	12	19	22	14.9	19-20
Kinder, La.	16	19	25	19.6	21
Sabine:					
Emory, Tex.	12	16 22	17 May 9	13.34 15.31	16 25
Mineola, Tex.	14	Mar 11 16	3 May 17	17.2 18.91	Mar 12,28 26
Gladewater, Tex.	26	Mar 16 18	7 May 12	31.7 30.85 36.39	Mar 19 1 29
Longview, Tex.	25	Mar 19 20	11 May 16	29.7 28.03 34.2	Mar 26 4 May 1
Tatum, Tex.	25	26	May 9	26.08 26.45	28 May 3
Logansport, La.	28	28	May 14	30.00	May 8
Bon Wier, Tex.	17	Mar 25 17	3 24	19.45 21.44	Mar 25 21
Deweyville, Tex.	14	Mar 20	May 20	16.14 16.1	21 May 11
Orange, Tex.	4	20	24	4.4	21,22
Neches:					
Alto, Tex.	16	25	28	20.00	28
Weiss Bluff, Tex.	15	19	25	17.00	21
Lawsons Crossing, Tex.	4	16	30	8.85	22
Beaumont, Tex.	5	18	27	8.6	21

FLOOD STAGE DATA

(All dates in April unless otherwise specified)

APRIL 1973

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
	Ft.			*Ft.*	
WEST GULF OF MEXICO DRAINAGE -Continued					
Elm Fork:					
Carrollton, Tex.	6	24	24	6.68	24
Trinity:					
Dallas, Tex.	30	24	26	37.42	25
Rosser, Tex.	26	24	28	31.45	24
Trinidad, Tex.	28	17	20	35.76	18
		24	May 4	42.03	26
Long Lake, Tex.	35	20	May 9	45.1	29
Liberty, Tex.	24	Mar 26	5	27.75	Mar 31
		18	May 17	27.3	22
				27.90	May 11
WEST GULF OF MEXICO DRAINAGE -Continued					
Navasota:					
Easterly, Tex.	14	18	22	14.6	19,21
Bryan 17 Ne, Tex.	12	16	25	13.56	22
		28	May 4	14.22	28
Navidad:					
Ganado, Tex.	21	16	21	33.27	19
Lavaca:					
Edna, Tex.	21	17	20	27.38	18
Guadalupe:					
Cuero, Tex.	20	16	21	26.8	19
Victoria, Tex.	21	17	22	28.49	20

*	Provisional
#	Highest Stage Observed
1	Continued at end of month
___	Highest Stage of Record
E	Estimated
M	Missing
R	Highest April Stage of Record
S	Morganza Floodway opened April 17 (10 gates)
T	Bonnet Carre Floodway opened April 8
U	Unknown

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	ALBANY, N. Y. 1004 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	86	5.7	1.3	31	.7
1000	20	164	6.3	-.7	29	1.2
950	30	537	4.7	-.5	29	3.1
900	30	977	2.6	-2.2	29	4.9
850	30	1,438	.3	-4.7	28	6.8
800	30	1,923	-1.2	-8.6	28	7.7
750	30	2,436	-3.0	-10.6	28	9.4
700	30	2,981	-5.2	-12.4	28	10.0
650	30	3,561	-7.9	-17.3	28	11.0
600	30	4,179	-11.0	-22.2	28	12.5
550	30	4,843	-15.2	-27.7	28	13.0
500	30	5,556	-20.1	-31.7	28	14.5
450	30	6,329	-25.2	-36.8	27	15.8
400	30	7,174	-31.5	-42.1	28	17.6
350	30	8,108	-38.8	-45.9	27	19.3
300	30	9,146	-46.2		27	20.1
250	30	10,340	-52.3		27	22.3
200	30	11,774	-54.9		27	23.9
175	30	12,629	-54.3		26	20.8
150	30	13,618	-53.9		27	19.5
125	29	14,789	-54.1		27	15.8
100	29	16,214	-56.1		27	12.3
80	29	17,626	-57.6		27	9.1
70	28	18,470	-58.2		28	7.0
60	27	19,440	-57.9		29	5.3
50	26	20,591	-58.9		30	2.6
40	26	21,994	-58.1		32	1.6
30	24	23,819	-56.4		02	1.4
25	22	24,984	-54.9		01	1.3
20	21	26,420	-53.1		29	1.3
15	16	28,302	-50.0		28	3.8
10						
7						

Standard pressure surface (mb)	ALBUQUERQUE, N. MEX. 835 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,619	3.8	-3.5	11	.6
1000						
950						
900						
850						
800	30	1,968	4.8	-9.0	27	1.9
750	30	2,490	1.5	-12.2	29	4.6
700	30	3,042	-2.6	-14.2	28	7.0
650	30	3,625	-6.9	-17.0	27	8.5
600	30	4,245	-11.4	-20.1	27	10.4
550	30	4,907	-15.7	-26.1	26	11.4
500	30	5,619	-20.6	-32.3	26	13.4
450	30	6,390	-26.1	-38.5	26	14.2
400	30	7,232	-32.2	-45.0	26	15.5
350	30	8,164	-38.7	-49.4	26	17.0
300	30	9,204	-45.5		26	21.5
250	30	10,402	-51.8		26	25.6
200	28	11,831	-55.2		26	28.7
175	28	12,684	-54.9		26	28.8
150	28	13,667	-56.0		27	26.1
125	28	14,821	-58.4		26	25.5
100	28	16,219	-60.3		26	20.6
80	28	17,604	-61.9		26	15.6
70	27	18,431	-61.1		27	11.2
60	27	19,389	-60.9		26	6.4
50	27	20,522	-60.4		26	4.2
40	26	21,919	-59.2		26	2.7
30	25	23,743	-55.3		28	3.1
25	24	24,917	-53.0		27	4.3
20	23	26,361	-50.5		27	7.6
15	20	28,252	-46.8		27	11.9
10	15	30,968	-40.2		27	22.3
7						

Standard pressure surface (mb)	AMARILLO, TEXAS 888 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,095	4.9	1.1	25	2.4
1000						
950						
900						
850	30	1,455	7.2	-3.7	26	4.1
800	30	1,952	5.2	-7.0	28	6.0
750	30	2,477	2.3	-9.5	28	7.3
700	30	3,030	-1.2	-12.5	27	8.1
650	30	3,617	-5.1	-16.2	27	9.1
600	30	4,241	-9.6	-20.7	26	10.2
550	30	4,907	-14.4	-26.4	26	12.8
500	30	5,622	-19.6	-31.9	26	14.5
450	30	6,397	-25.0	-37.6	26	16.8
400	30	7,241	-31.6	-44.3	26	19.2
350	30	8,176	-38.0	-49.0	26	21.7
300	30	9,219	-45.0		26	26.0
250	30	10,418	-52.2		26	32.1
200	30	11,849	-55.6		26	34.5
175	30	12,700	-55.6		26	33.0
150	30	13,681	-56.2		26	31.7
125	30	14,836	-58.2		26	27.4
100	30	16,232	-60.5		26	22.4
80	29	17,620	-62.4		26	14.2
70	29	18,445	-62.0		26	11.3
60	29	19,401	-60.9		26	6.8
50	29	20,537	-60.2		26	4.6
40	29	21,935	-58.4		26	3.3
30	26	23,753	-55.7		28	3.3
25	25	24,915	-53.7		28	4.0
20	24	26,356	-50.6		28	5.1
15	21	28,243	-47.5		27	9.7
10	12	30,957	-40.9		27	19.8
7						

Standard pressure surface (mb)	* ANCHORAGE, ALASKA 1007 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	45	1.4	-4.4	13	.6
1000	23	126	1.6	-5.9	12	1.1
950	29	513	.0	-6.8	10	2.3
900	29	944	-2.9	-8.9	10	2.9
850	29	1,393	-6.6	-10.7	12	3.3
800	29	1,864	-10.1	-12.5	13	4.4
750	29	2,359	-13.1	-17.1	15	5.3
700	29	2,881	-16.7	-21.7	16	5.8
650	29	3,435	-19.8	-25.0	17	5.5
600	29	4,024	-23.7	-30.5	18	6.0
550	29	4,655	-27.9	-34.8	19	6.4
500	29	5,333	-32.3	-40.1	20	7.9
450	29	6,068	-37.4	-42.9	20	9.9
400	29	6,872	-42.9	-43.6	21	10.8
350	29	7,765	-48.1		22	12.2
300	29	8,767	-52.6		22	13.8
250	29	9,945	-51.6		23	12.2
200	29	11,399	-49.7		22	9.9
175	28	12,274	-48.9		23	9.1
150	28	13,287	-49.0		23	8.1
125	28	14,483	-49.4		23	7.4
100	28	15,940	-51.0		23	5.7
80	28	17,390	-51.7		22	4.7
70	27	18,259	-52.0		23	4.8
60	27	19,257	-52.3		23	4.4
50	26	20,436	-53.0		24	2.7
40	26	21,874	-53.4		24	2.4
30	25	23,725	-54.4		25	.9
25	23	24,894	-54.7		29	1.8
20	22	26,325	-54.8		34	1.6
15	20	28,175	-53.7		34	2.2
10	15	30,780	-51.4		34	3.1
7	10	33,138	-45.6			

Standard pressure surface (mb)	* ANNETTE, ALASKA 1016 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	37	3.8	.1	15	1.6
1000	28	174	4.1	.3	15	2.7
950	30	576	1.1	-1.7	16	5.3
900	30	1,009	-1.6	-4.[illegible]	18	5.6
850	30	1,462	-4.4	[illegible]	19	6.5
800	30	1,938	-6.9	-12.1	20	5.8
750	30	2,439	-9.7	-15.4	21	5.8
700	30	2,969	-12.7	-19.5	22	6.5
650	30	3,531	-15.6	-22.9	23	7.4
600	30	4,131	-19.[illegible]	-26.7	24	8.9
550	30	4,774	-22.7	-30.0	25	10.7
500	30	5,467	-27.0	-35.1	25	12.4
450	30	6,219	-32.1	-38.7	26	13.7
400	30	7,041	-37.7	-40.7	26	14.5
350	29	7,956	-43.5	-43.5	27	14.9
300	29	8,976	-49.6		27	17.7
250	29	10,157	-54.0		27	18.5
200	29	11,585	-54.3		28	16.4
175	29	12,443	-53.5		28	14.9
150	29	13,436	-53.0		28	12.0
125	29	14,611	-53.7		28	9.9
100	29	16,042	-54.6		28	8.2
80	27	17,467	-55.1		28	6.5
70	25	18,324	-55.1		29	5.2
60	25	19,308	-55.5		29	4.6
50	25	20,469	-56.0		30	3.8
40	25	21,888	-56.1		33	3.4
30	25	23,717	-56.2		36	2.9
25	24	24,877	-55.8		01	2.9
20	22	26,310	-55.3		01	2.9
15	19	28,151	-54.0		36	2.9
10	13	30,782	-50.0		35	2.8
7	9	33,132	-44.7			

Standard pressure surface (mb)	ATHENS, GEORGIA 987 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	9.9	6.6	22	1.1
1000						
950	30	565	11.1	5.0	24	4.1
900	30	1,015	8.9	1.5	26	5.9
850	30	1,486	6.4	-2.9	26	7.1
800	30	1,982	4.8	-5.7	26	9.0
750	30	2,507	2.9	-10.0	26	11.4
700	30	3,063	.1	-14.1	26	13.6
650	30	3,654	-3.1	-16.5	26	16.4
600	30	4,284	-6.5	-19.7	26	18.9
550	30	4,958	-10.8	-24.4	26	20.8
500	30	5,684	-15.6	-27.9	26	23.1
450	30	6,471	-20.7	-32.7	26	26.3
400	30	7,332	-27.0	-39.0	26	29.1
350	30	8,284	-33.5	-44.4	26	33.5
300	30	9,346	-41.2	-47.9	26	32.7
250	30	10,563	-49.1		27	36.4
200	30	12,002	-56.2		27	43.1
175	30	12,847	-57.7		27	39.1
150	30	13,816	-59.5		28	34.3
125	30	14,953	-61.8		27	27.7
100	30	16,324	-64.2		27	20.6
80	30	17,688	-64.8		27	13.0
70	30	18,503	-64.8		27	7.7
60	30	19,446	-63.7		27	5.3
50	30	20,569	-62.1		26	4.2
40	30	21,957	-59.7		29	1.9
30	29	23,772	-55.8		03	1.9
25	29	24,940	-53.1		34	2.0
20	29	26,388	-50.4		29	2.8
15	27	28,287	-46.0		27	8.4
10	11	31,051	-39.3			

Standard pressure surface (mb)	* BARROW, ALASKA 1024 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	-21.1	-22.8	05	2.8
1000	30	182	-18.2	-18.9	07	4.4
950	30	568	-15.6	-17.9	07	4.5
900	30	978	-13.6	-17.0	08	3.6
850	30	1,413	-14.0	-18.3	09	2.6
800	30	1,872	-16.0	-20.1	10	2.4
750	30	2,355	-18.6	-23.2	11	2.4
700	30	2,867	-21.4	-26.8	13	1.9
650	30	3,411	-24.4	-30.6	15	1.6
600	30	3,990	-28.0	-34.7	17	1.5
550	30	4,609	-32.0	-38.8	19	2.0
500	30	5,277	-36.2	-43.2	22	2.7
450	30	6,001	-40.8	-46.1	24	2.9
400	30	6,793	-46.0		24	3.7
350	29	7,676	-51.0		24	4.2
300	29	8,669	-53.2		25	4.0
250	29	9,852	-49.7		23	2.7
200	29	11,321	-47.4		21	2.9
175	29	12,204	-47.4		22	3.0
150	29	13,223	-47.5		21	2.4
125	29	14,425	-48.7		20	2.7
100	28	15,889	-49.3		18	3.0
80	25	17,345	-50.3		21	3.1
70	25	18,219	-50.8		20	2.4
60	24	19,221	-51.3		22	1.9
50	23	20,406	-52.0		21	1.9
40	21	21,848	-52.7		25	2.5
30	18	23,708	-53.6		27	2.2
25	17	24,882	-54.0		27	2.7
20	8	26,308	-54.1			
15						
10						

Standard pressure surface (mb)	BARTER IS., ALASKA 1021 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	15	-20.6	-23.8	15	.2
1000	28	173	-17.4	-17.8	08	1.0
950	28	560	-13.7	-15.4	09	2.7
900	28	973	-11.5	-15.1	09	3.0
850	28	1,412	-11.5	-15.7	10	2.2
800	28	1,876	-13.3	-17.0	14	1.5
750	28	2,365	-15.8	-20.0	17	1.8
700	28	2,882	-18.8	-23.8	21	2.1
650	28	3,431	-22.3	-27.3	21	3.2
600	28	4,014	-26.1	-31.5	22	3.7
550	28	4,638	-30.4	-35.8	22	4.5
500	28	5,309	-35.2	-40.7	23	5.1
450	28	6,036	-40.2	-42.3	23	5.8
400	28	6,830	-45.5		23	7.1
350	28	7,713	-50.4		24	8.6
300	28	8,708	-53.4		24	9.3
250	28	9,889	-50.3		24	7.0
200	28	11,356	-47.6		23	5.7
175	28	12,239	-47.3		23	4.8
150	28	13,258	-47.6		23	4.7
125	28	14,461	-48.5		23	3.3
100	27	15,925	-49.7		23	3.6
80	27	17,382	-51.0		25	2.6
70	27	18,250	-51.4		25	2.1
60	27	19,250	-52.0		27	2.1
50	27	20,429	-52.5		27	2.4
40	26	21,869	-52.9		29	2.5
30	26	23,723	-53.6		31	3.6
25	26	24,894	-54.1		32	3.3
20	24	26,321	-54.3		32	3.7
15	18	28,161	-54.0		32	4.4
10	11	30,777	-51.4			

Standard pressure surface (mb)	BETHEL, ALASKA 1007 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	39	-5.5	-8.0	35	2.1
1000	20	142	-6.2	-9.5	35	3.8
950	30	500	-4.7	-9.1	07	2.1
900	30	924	-6.8	-10.7	13	2.3
850	29	1,368	-9.0	-13.4	15	2.6
800	29	1,836	-11.3	-17.5	15	3.1
750	29	2,328	-14.1	-20.9	15	3.0
700	29	2,849	-17.3	-23.5	16	3.2
650	29	3,401	-20.6	-27.4	17	3.0
600	29	3,989	-24.5	-31.8	18	3.4
550	29	4,617	-28.7	-36.0	19	4.0
500	29	5,293	-33.0	-40.9	20	3.9
450	29	6,027	-37.7	-44.0	21	4.7
400	29	6,829	-43.5		22	5.7
350	29	7,719	-49.0		23	7.2
300	29	8,719	-52.4		22	9.0
250	29	9,898	-51.4		22	7.3
200	29	11,358	-48.6		22	7.2
175	27	12,239	-48.3		22	6.5
150	27	13,253	-48.3		22	6.7
125	26	14,451	-49.0		22	5.3
100	26	15,913	-50.1		22	5.4
80	26	17,367	-51.4		20	4.8
70	25	18,236	-51.7		21	4.4
60	24	19,243	-52.3		23	3.8
50	24	20,423	-52.2		22	4.0
40	24	21,864	-53.1		22	2.5
30	22	23,715	-54.0		25	2.6
25	21	24,881	-54.6		24	2.3
20	18	26,298	-55.5		29	2.5
15	13	28,111	-55.8		30	2.1
10						

Standard pressure surface (mb)	* BISMARCK, N. DAK. 954 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	503	.2	-2.8	01	1.0
1000						
950	21	577	-1.3	-5.4	36	1.8
900	30	972	1.8	-5.2	01	1.6
850	30	1,431	-.6	-7.1	34	2.2
800	30	1,914	-3.1	-9.3	34	4.0
750	30	2,423	-5.6	-12.3	32	5.6
700	30	2,961	-8.8	-16.1	31	6.2
650	30	3,532	-12.0	-18.8	31	6.8
600	30	4,140	-15.9	-24.7	31	7.3
550	30	4,791	-19.8	-30.1	30	8.6
500	30	5,492	-24.4	-35.9	29	10.1
450	30	6,251	-29.8	-38.6	29	11.9
400	30	7,080	-36.1	-44.1	28	12.0
350	30	7,996	-43.2		28	12.5
300	30	9,016	-50.1		28	13.4
250	30	10,191	-55.7		27	14.2
200	30	11,613	-54.2		27	12.4
175	29	12,474	-52.6		27	11.7
150	29	13,470	-52.7		27	10.9
125	29	14,646	-53.2		28	8.9
100	29	16,081	-54.3		28	7.3
80	29	17,508	-55.3		27	6.4
70	29	18,359	-55.9		27	5.9
60	29	19,340	-56.1		27	4.5
50	29	20,497	-56.6		27	3.9
40	28	21,909	-56.7		28	3.5
30	26	23,728	-55.8		29	2.2
25	23	24,883	-55.2		30	2.1
20	23	26,311	-54.5		28	2.6
15	21	28,173	-51.8		27	4.2
10	10	30,861	-46.0			

Standard pressure surface (mb)	BOISE, IDAHO 916 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	871	4.7	-2.5	27	.2
1000						
950						
900	30	1,011	6.3	-3.8	32	1.2
850	30	1,479	4.5	-7.1	33	3.7
800	30	1,970	1.1	-8.7	32	4.8
750	30	2,485	-2.6	-11.4	33	6.0
700	30	3,029	-6.2	-14.7	32	6.7
650	30	3,605	-9.8	-19.0	32	7.1
600	30	4,218	-13.7	-23.1	31	7.9
550	30	4,874	-18.1	-27.5	31	8.0
500	30	5,579	-23.0	-31.9	31	8.9
450	30	6,343	-28.4	-37.2	31	10.6
400	30	7,176	-34.7	-41.7	31	11.0
350	30	8,098	-41.5	-46.4	31	12.0
300	30	9,125	-49.0		31	14.2
250	30	10,304	-55.2		32	17.5
200	30	11,716	-58.0		31	16.1
175	30	12,560	-57.0		31	15.1
150	30	13,538	-55.8		30	12.9
125	30	14,698	-56.5		30	12.1
100	30	16,110	-57.5		30	9.7
80	30	17,517	-58.3		29	7.2
70	30	18,358	-58.3		29	6.4
60	30	19,327	-58.7		28	4.3
50	30	20,473	-58.3		29	3.7
40	30	21,878	-58.3		28	3.6
30	30	23,691	-57.6		29	2.1
25	30	24,846	-56.3		29	2.6
20	24	26,279	-54.4		28	2.0
15	21	28,124	-52.4		29	4.7
10	18	30,765	-48.0		27	7.2
7	6	33,153	-42.4			

Standard pressure surface (mb)	BOOTHVILLE, LA. 1015 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1	16.6	14.8	17	.8
1000	30	129	17.7	13.2	17	2.1
950	30	567	15.6	9.0	19	4.6
900	30	1,024	13.2	4.3	20	4.8
850	30	1,504	11.5	-.6	23	5.5
800	30	2,009	10.2	-4.5	25	7.5
750	30	2,544	7.7	-6.2	25	9.9
700	30	3,109	4.5	-10.3	25	11.6
650	30	3,710	1.6	-14.3	26	14.8
600	30	4,351	-2.4	-16.6	26	17.0
550	30	5,035	-7.3	-19.2	26	19.8
500	30	5,771	-12.4	-26.0	26	22.5
450	30	6,568	-17.6	-31.2	26	23.6
400	29	7,439	-23.6	-35.2	26	26.2
350	29	8,405	-30.3	-40.4	26	30.8
300	29	9,481	-38.2	-47.6	26	35.5
250	29	10,714	-46.4		26	42.5
200	29	12,168	-55.1		27	47.0
175	29	13,014	-58.4		27	46.9
150	29	13,975	-62.3		27	41.6
125	29	15,092	-65.4		27	33.0
100	29	16,438	-68.9		27	24.3
80	26	17,771	-70.7		26	14.3
70	26	18,567	-68.8		26	7.6
60	26	19,495	-66.5		27	4.7
50	26	20,609	-63.0		28	2.9
40	23	21,992	-60.2		36	1.7
30	22	23,813	-54.2		05	1.8
25	20	24,993	-50.5		02	1.2
20	18	26,459	-47.2		34	1.5
15	1[illegible]	28,366	-44.5		28	4.6
10						
7						

Standard pressure surface (mb)	* BROWNSVILLE, TEXAS 1011 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	7	19.2	16.2	14	2.5
1000	30	102	19.9	16.8	14	3.6
950	30	543	17.6	13.3	15	6.8
900	30	1,006	16.8	7.3	17	7.2
850	30	1,493	15.4	2.1	19	7.0
800	30	2,006	13.6	-.4	21	7.5
750	30	2,547	11.0	-4.1	22	8.4
700	30	3,119	8.4	-7.4	24	9.7
650	30	3,728	4.9	-12.8	25	11.4
600	30	4,375	.0	-15.8	25	13.7
550	30	5,065	-5.4	-20.0	25	15.9
500	30	5,805	-11.0	-25.2	25	18.4
450	30	6,606	-16.4	-30.9	26	22.0
400	30	7,482	-22.0	-35.5	26	26.5
350	30	8,454	-28.8	-41.5	26	31.8
300	30	9,539	-36.0	-48.6	26	39.3
250	30	10,783	-44.5		26	46.3
200	30	12,243	-55.0		26	50.0
175	30	13,086	-60.3		26	49.4
150	30	14,034	-65.6		26	45.6
125	30	15,134	-68.7		26	37.0
100	30	16,459	-72.1		26	26.3
80	30	17,767	-73.5		26	16.2
70	30	18,549	-72.9		25	10.9
60	30	19,459	-69.3		24	3.6
50	30	20,564	-64.0		21	1.6
40	30	21,941	-60.6		13	.7
30	29	23,757	-54.5		05	3.1
25	29	24,935	-51.0		03	1.8
20	26	26,397	-47.4		04	1.6
15	24	28,322	-43.5		31	2.8
10	21	31,089	-36.7		26	4.9
7	14	33,590	-31.9			

Standard pressure surface (mb)	BUFFALO, N. Y. 988 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	218	5.5	.7	26	1.5
1000						
950	30	541	5.1	-.1	26	3.3
900	30	981	2.9	-2.9	27	4.8
850	30	1,442	.9	-5.5	27	6.4
800	30	1,928	-1.2	-8.0	27	7.6
750	30	2,441	-3.6	-9.8	27	8.2
700	30	2,984	-6.2	-12.5	27	7.8
650	30	3,561	-9.2	-16.5	27	8.3
600	30	4,177	-12.3	-20.8	27	9.1
550	30	4,837	-16.3	-26.2	27	9.9
500	30	5,547	-21.1	-32.1	27	11.3
450	30	6,318	-26.2	-36.6	27	13.0
400	30	7,159	-32.2	-42.5	27	14.2
350	30	8,091	-39.0	-46.0	26	15.5
300	30	9,129	-46.3		26	18.0
250	30	10,321	-52.7		26	18.7
200	29	11,750	-54.7		26	21.4
175	29	12,607	-54.1		26	19.7
150	29	13,597	-53.8		26	17.9
125	29	14,768	-54.3		26	16.0
100	29	16,196	-55.4		26	13.3
80	28	17,618	-57.0		26	9.5
70	28	18,462	-57.5		26	7.8
60	27	19,430	-58.2		26	5.7
50	27	20,578	-58.1		27	3.8
40	27	21,985	-57.6		27	2.2
30	25	23,808	-55.7		29	2.0
25	22	24,983	-54.5		28	2.1
20	20	26,411	-52.8		27	2.7
15	16	28,279	-50.6		26	3.8
10	8	31,018	-44.8			
7						

Standard pressure surface (mb)	CAPE HATTERAS, N. C. 1016 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	13.5	9.8	27	1.8
1000	28	147	14.1	6.9	28	2.4
950	30	568	11.9	4.1	26	4.5
900	30	1,019	9.2	1.0	26	5.7
850	30	1,491	7.0	-3.4	25	7.3
800	30	1,987	4.8	-6.7	25	8.9
750	30	2,512	2.6	-10.9	25	10.2
700	30	3,067	-.1	-14.1	26	12.6
650	30	3,658	-3.2	-16.9	26	14.5
600	30	4,286	-7.1	-21.2	26	16.1
550	30	4,960	-11.3	-25.4	26	18.5
500	30	5,684	-16.2	-29.8	26	22.3
450	30	6,470	-21.0	-33.9	26	24.6
400	30	7,330	-26.8	-40.5	26	27.5
350	30	8,283	-33.5	-45.1	27	30.3
300	30	9,346	-41.2	-49.8	26	30.0
250	30	10,563	-49.0		27	34.9
200	30	12,004	-55.8		27	32.3
175	30	12,851	-57.1		27	32.1
150	30	13,825	-58.1		28	28.7
125	29	14,970	-59.8		27	23.5
100	28	16,359	-62.6		27	18.0
80	28	17,731	-64.0		27	12.8
70	27	18,548	-63.6		28	8.9
60	27	19,497	-62.4		28	5.0
50	26	20,625	-60.6		32	2.1
40	26	22,020	-58.9		36	2.0
30	25	23,842	-55.0		04	2.6
25	22	25,018	-52.2		33	2.3
20	19	26,475	-49.6		30	3.8
15	13	28,408	-44.4		27	9.5
10	8	31,148	-39.4			
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

APRIL 1973

*** CARIBOU, MAINE — 986 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	191	.1	-2.9	32	1.4
1000						
950	30	509	-.2	-4.7	32	2.2
900	30	946	-1.9	-7.2	32	3.4
850	30	1,394	-2.9	-9.5	30	4.5
800	30	1,874	-3.9	-11.4	29	6.0
750	30	2,382	-5.9	-12.4	29	6.6
700	30	2,921	-7.7	-14.7	29	7.6
650	30	3,495	-9.9	-17.5	28	9.2
600	30	4,109	-13.1	-21.6	28	9.6
550	30	4,767	-17.0	-26.4	28	10.4
500	30	5,476	-21.6	-31.3	29	11.3
450	30	6,245	-27.1	-35.9	28	12.8
400	30	7,084	-33.0	-42.0	28	13.7
350	30	8,013	-39.7	-45.6	28	13.9
300	30	9,048	-47.2		28	14.6
250	29	10,236	-52.2		28	16.7
200	29	11,676	-52.4		28	16.5
175	26	12,526	-52.0		27	14.8
150	26	13,526	-51.5		27	13.6
125	26	14,708	-52.2		27	11.7
100	25	16,146	-53.5		27	8.5
80	25	17,577	-54.8		27	6.6
70	25	18,431	-55.1		27	5.0
60	25	19,414	-55.9		28	3.9
50	25	20,573	-56.2		28	3.3
40	24	21,989	-56.2		30	2.2
30	24	23,823	-54.6		32	1.7
25	24	24,992	-53.9		31	1.7
20	23	26,428	-53.1		31	2.5
15	22	28,293	-51.0		27	4.9
10	18	30,953	-46.6		27	8.7
7	14	33,324	-40.5			

CHARLESTON, S. C. — 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	13	12.5	9.6	24	1.5
1000	28	150	14.8	7.3	24	1.4
950	30	573	12.9	5.1	25	4.5
900	30	1,025	10.3	1.9	25	6.3
850	30	1,499	8.0	-2.0	26	7.9
800	30	1,998	6.7	-8.3	26	9.4
750	30	2,527	5.0	-11.9	26	10.9
700	30	3,087	2.2	-15.3	26	12.4
650	30	3,682	-1.0	-18.1	27	14.3
600	30	4,316	-4.8	-21.3	27	16.5
550	30	4,995	-9.1	-23.8	27	19.5
500	30	5,726	-13.8	-27.8	27	22.8
450	30	6,518	-19.2	-32.1	27	25.3
400	30	7,384	-25.1	-37.2	27	27.6
350	30	8,344	-32.0	-43.6	27	31.4
300	30	9,412	-40.0	-48.0	26	35.3
250	30	10,635	-48.1		27	39.8
200	30	12,077	-56.2		27	44.4
175	30	12,922	-58.4		27	43.8
150	30	13,888	-59.8		27	38.0
125	30	15,021	-62.3		27	31.2
100	30	16,392	-65.1		27	23.0
80	29	17,747	-66.4		27	14.6
70	29	18,556	-65.7		26	9.3
60	28	19,496	-64.0		26	7.1
50	28	20,619	-62.1		29	3.2
40	27	22,003	-59.4		34	1.5
30	26	23,826	-54.7		01	1.3
25	25	24,999	-52.0		35	1.8
20	23	26,453	-48.4		29	3.7
15	21	28,359	-44.3		27	7.9
10	16	31,129	-37.6		27	15.5
7						

CHATHAM, MASS. — 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	16	6.0	2.5	29	1.0
1000	25	133	6.9	1.1	31	2.0
950	30	527	6.4	-.5	28	3.5
900	30	969	4.7	-3.2	28	5.5
850	30	1,434	2.7	-6.4	28	7.3
800	30	1,923	1.0	-8.5	28	8.3
750	30	2,440	-1.3	-11.3	27	9.9
700	30	2,987	-4.1	-15.7	27	11.1
650	30	3,568	-7.5	-19.1	27	12.2
600	30	4,188	-10.8	-23.5	28	13.6
550	30	4,852	-14.8	-27.4	27	15.7
500	30	5,566	-19.7	-32.3	27	17.4
450	30	6,340	-25.3	-37.7	27	18.8
400	30	7,185	-31.5	-43.6	27	18.7
350	30	8,120	-38.1	-46.6	28	20.9
300	30	9,162	-45.0		27	24.1
250	30	10,363	-50.8		27	28.2
200	30	11,804	-54.3		27	26.8
175	30	12,659	-55.0		27	24.1
150	30	13,644	-54.8		26	21.9
125	30	14,809	-55.4		27	17.3
100	30	16,227	-57.4		27	13.0
80	29	17,632	-58.6		27	9.4
70	29	18,470	-59.1		28	7.0
60	28	19,437	-58.9		29	5.9
50	27	20,583	-58.6		29	3.4
40	22	21,996	-57.4		31	2.4
30	21	23,818	-55.7		36	2.3
25	21	24,984	-54.1		33	1.8
20	17	26,414	-52.1		30	2.8
15	14	28,321	-48.7		27	5.8
10	10	31,016	-43.1			
7						

CHIHUAHUA, MEXICO — 855 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,428	10.3	-1.0	24	1.4
1000						
950						
900						
850	28	1,478	11.0	-2.8	25	1.7
800	30	1,981	10.5	-4.9	25	4.2
750	30	2,515	6.9	-8.1	25	6.3
700	30	3,078	4.0	-11.8	25	9.9
650	30	3,677	.5	-16.0	25	10.9
600	30	4,314	-3.8	-21.1	25	12.4
550	30	4,995	-8.4	-24.9	25	15.4
500	30	5,727	-13.7	-29.7	25	18.9
450	30	6,520	-19.1	-34.4	26	21.4
400	30	7,385	-25.5	-38.8	25	23.7
350	30	8,343	-32.5	-44.4	25	28.6
300	30	9,410	-40.0	-48.8	25	30.2
250	30	10,634	-47.4		26	34.8
200	30	12,083	-54.9		26	36.4
175	29	12,927	-57.8		26	36.4
150	29	13,892	-60.8		26	35.1
125	29	15,017	-64.0		26	30.6
100	27	16,378	-67.1		27	24.5
80	26	17,719	-68.6			
70	24	18,518	-67.3			
60	24	19,450	-66.0			
50	24	20,565	-63.1		26	2.7
40	24	21,950	-59.8		26	4.2
30	24	23,769	-54.4		29	.8
25	24	24,944	-52.0		28	1.0
20	24	26,401	-48.4		25	5.0
15	21	28,306	-45.2		26	8.4
10	15	31,057	-38.7		26	10.0
7						

*** COLD BAY, ALASKA — 1006 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	30	-.9	-2.2	36	.6
1000	21	130	-2.0	-4.2	34	2.2
950	30	484	-4.0	-4.7	14	.2
900	30	909	-6.4	-7.9	20	1.2
850	30	1,354	-8.3	-11.9	23	1.2
800	30	1,823	-10.3	-16.2	25	1.6
750	30	2,319	-12.2	-20.0	25	2.4
700	30	2,844	-15.0	-23.2	23	2.6
650	30	3,401	-18.1	-26.5	24	3.3
600	30	3,995	-21.7	-30.3	24	3.2
550	30	4,630	-25.9	-36.0	25	3.7
500	30	5,314	-30.6	-40.3	24	5.0
450	30	6,055	-35.7	-43.1	24	6.0
400	30	6,864	-41.4	-44.2	25	7.6
350	29	7,760	-46.8		24	8.8
300	29	8,769	-50.9		25	9.4
250	27	9,946	-51.4		25	12.0
200	27	11,402	-49.3		24	11.0
175	27	12,278	-49.0		24	10.6
150	27	13,290	-49.4		23	9.1
125	27	14,484	-49.9		24	8.7
100	25	15,933	-50.5		23	6.5
80	24	17,386	-51.4		23	4.9
70	23	18,254	-51.9		22	4.3
60	23	19,253	-51.9		22	3.5
50	22	20,432	-52.1		21	2.6
40	22	21,875	-52.7		20	2.0
30	19	23,740	-53.5		22	.6
25	18	24,913	-53.8		28	1.1
20	18	26,345	-54.2		17	.3
15	15	28,187	-53.0		33	.8
10	11	30,808	-50.1			
7						

DAYTON, OHIO — 978 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	299	6.5	3.8	14	.5
1000						
950	30	537	7.1	2.4	21	2.6
900	30	982	5.5	.6	24	4.6
850	30	1,447	2.8	-1.3	25	5.7
800	30	1,936	.7	-6.3	25	5.7
750	30	2,453	-1.7	-9.6	26	6.3
700	30	2,999	-4.6	-12.9	26	7.0
650	30	3,580	-7.4	-15.1	26	7.9
600	30	4,200	-10.7	-20.0	26	8.6
550	30	4,864	-14.9	-24.3	26	9.9
500	30	5,579	-19.7	-30.3	26	11.8
450	30	6,352	-25.4	-34.7	26	13.6
400	30	7,196	-31.7	-40.5	26	14.6
350	30	8,130	-38.4	-43.5	26	16.2
300	30	9,170	-45.8		26	18.8
250	30	10,366	-52.2		26	24.2
200	30	11,799	-55.2		26	26.8
175	30	12,651	-54.9		26	24.9
150	30	13,637	-55.3		26	22.3
125	30	14,799	-56.3		26	20.3
100	29	16,210	-57.8		26	16.6
80	29	17,615	-58.8		26	13.1
70	29	18,452	-59.5		26	10.1
60	29	19,417	-59.6		26	6.5
50	29	20,558	-59.5		26	4.6
40	29	21,957	-58.7		27	3.0
30	29	23,774	-56.3		27	2.4
25	28	24,935	-54.8		27	2.5
20	28	26,370	-52.5		27	4.1
15	21	28,231	-49.7		27	6.9
10	9	30,950	-43.8			

DEL RIO, TEXAS — 976 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	314	15.2	11.5	10	2.2
1000						
950	30	541	14.9	10.2	13	3.8
900	30	998	13.1	7.5	16	4.1
850	30	1,479	11.9	2.4	21	3.5
800	30	1,985	10.8	-4.1	24	4.7
750	30	2,521	8.4	-8.1	26	5.9
700	30	3,087	4.8	-12.2	26	8.5
650	30	3,687	.9	-17.4	25	11.3
600	30	4,325	-3.6	-20.6	25	15.1
550	30	5,006	-8.6	-23.9	25	18.3
500	30	5,737	-13.8	-30.6	25	21.9
450	30	6,529	-19.3	-34.5	25	25.2
400	30	7,394	-25.6	-39.7	26	28.5
350	30	8,352	-32.2	-45.5	26	33.0
300	30	9,421	-39.7	-48.1	26	37.5
250	30	10,646	-47.8		26	43.0
200	29	12,089	-54.8		26	47.6
175	29	12,937	-57.8		26	46.0
150	29	13,903	-60.8		26	41.7
125	29	15,028	-64.1		26	35.4
100	29	16,385	-67.0		26	25.8
80	29	17,727	-68.2		26	16.0
70	29	18,527	-68.7		25	11.2
60	29	19,457	-65.8		25	6.9
50	28	20,572	-63.0		25	3.3
40	28	21,959	-59.5		26	2.0
30	25	23,770	-54.1		33	1.6
25	25	24,945	-51.9		32	1.4
20	23	26,402	-48.2		27	4.4
15	22	28,308	-44.4		27	6.9
10	6	31,056	-38.7			

DENVER, COLO. — 834 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,611	1.7	-4.7	30	.7
1000						
950						
900						
850						
800	30	1,947	1.9	-7.8	33	2.1
750	30	2,465	-1.1	-11.0	33	4.5
700	30	3,012	-5.1	-13.1	32	5.5
650	30	3,590	-8.8	-16.6	31	5.7
600	30	4,206	-12.8	-21.0	30	6.7
550	30	4,864	-17.3	-26.0	30	7.5
500	30	5,571	-22.3	-32.0	29	8.5
450	30	6,337	-27.8	-37.1	29	9.3
400	30	7,173	-33.9	-42.9	29	9.7
350	30	8,098	-40.9	-48.6	28	10.1
300	30	9,126	-48.6		28	11.8
250	30	10,308	-54.7		27	15.6
200	29	11,726	-55.6		27	15.6
175	29	12,578	-54.6		27	16.5
150	29	13,567	-54.4		27	15.1
125	29	14,734	-55.5		27	13.8
100	28	16,145	-57.2		26	12.4
80	27	17,553	-57.7		27	9.7
70	27	18,395	-58.2		27	8.0
60	26	19,367	-58.6		27	6.1
50	25	20,512	-58.5		27	4.8
40	24	21,915	-57.7		28	2.9
30	21	23,733	-56.1		27	2.5
25	21	24,895	-55.0		27	3.7
20	21	26,327	-53.2		28	4.4
15	21	28,192	-50.5		27	6.2
10	14	30,853	-45.3		27	17.0

DODGE CITY, KANS. — 921 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	791	3.4	.1	25	1.8
1000						
950						
900	30	979	6.7	.4	28	2.4
850	30	1,448	5.7	-4.0	27	4.2
800	30	1,943	3.4	-7.6	28	5.4
750	30	2,463	.5	-9.9	28	6.3
700	30	3,013	-3.3	-13.6	28	7.3
650	30	3,596	-6.6	-18.1	28	7.8
600	30	4,216	-10.7	-21.8	27	9.3
550	30	4,880	-15.2	-26.8	27	11.3
500	30	5,593	-20.4	-32.8	26	12.8
450	29	6,363	-26.0	-38.2	26	14.6
400	29	7,206	-31.9	-43.1	26	13.7
350	29	8,138	-39.1	-48.0	26	14.4
300	29	9,175	-46.7		26	17.3
250	29	10,367	-53.0		26	20.6
200	29	11,795	-55.4		26	25.6
175	29	12,649	-54.5		26	25.8
150	29	13,636	-54.8		26	24.5
125	27	14,794	-56.5		26	21.8
100	26	16,206	-58.0		26	15.5
80	25	17,613	-59.2		26	11.4
70	25	18,450	-59.1		26	9.2
60	24	19,420	-59.2		26	5.9
50	22	20,572	-58.7		24	3.3
40	22	21,977	-57.5		26	2.7
30	21	23,806	-55.1		28	3.0
25	16	24,983	-53.3		28	3.0
20	14	26,424	-51.7		28	3.9
15	9	28,273	-48.7			
10						

EL PASO, TEXAS — 879 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,193	8.4	-7.2	30	1.7
1000						
950						
900						
850	30	1,472	10.7	-8.4	30	2.1
800	30	1,974	7.9	-9.5	29	3.8
750	30	2,503	4.2	-11.4	28	5.6
700	30	3,059	-.1	-14.9	26	6.8
650	30	3,648	-4.3	-18.2	26	9.5
600	30	4,274	-8.3	-23.2	25	13.0
550	30	4,943	-12.8	-28.6	26	15.3
500	30	5,663	-17.7	-32.9	26	19.0
450	30	6,444	-22.9	-36.8	26	22.3
400	29	7,302	-28.5	-42.8	26	25.8
350	29	8,249	-35.3	-48.5	26	29.0
300	29	9,302	-43.1	-49.3	26	33.5
250	29	10,511	-50.6		26	35.3
200	29	11,947	-55.8		26	40.9
175	28	12,790	-57.2		26	42.2
150	28	13,762	-58.8		26	35.5
125	28	14,902	-60.8		26	33.2
100	27	16,284	-63.4		26	24.7
80	26	17,644	-65.7		26	17.6
70	26	18,456	-65.2		26	13.5
60	25	19,398	-63.7		27	7.7
50	23	20,528	-62.0		24	3.8
40	23	21,916	-59.5		26	2.2
30	23	23,734	-55.5		29	1.7
25	22	24,903	-53.0		27	3.1
20	22	26,354	-49.6		27	4.8
15	17	28,257	-46.4		27	9.1
10						

ELY, NEV. — 806 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,908	-1.3	-7.7	20	1.2
1000						
950						
900						
850						
800	25	1,986	1.0	-6.1	20	1.1
750	30	2,489	-.5	-8.3	35	3.3
700	30	3,037	-4.5	-11.7	33	4.2
650	30	3,617	-8.3	-14.8	33	5.6
600	30	4,234	-12.1	-20.0	31	6.2
550	30	4,894	-16.4	-24.7	30	7.4
500	30	5,604	-21.4	-29.7	30	8.6
450	30	6,372	-26.9	-35.9	31	8.6
400	30	7,211	-33.4	-40.8	30	8.2
350	30	8,138	-40.5	-47.0	30	9.7
300	30	9,169	-48.0		31	12.3
250	30	10,353	-54.5		31	13.8
200	30	11,771	-56.8		30	16.4
175	30	12,619	-56.3		30	16.4
150	30	13,600	-55.7		30	15.6
125	30	14,759	-56.9		29	14.8
100	30	16,168	-58.3		29	11.3
80	30	17,566	-59.8		28	9.0
70	30	18,401	-59.5		28	7.4
60	29	19,367	-59.4		28	5.7
50	28	20,509	-59.0		28	3.4
40	28	21,909	-58.9		27	2.6
30	25	23,728	-56.8		28	3.0
25	24	24,882	-55.6		27	4.0
20	23	26,309	-53.4		28	5.3
15	19	28,169	-50.5		28	6.3
10	5	30,847	-45.0			
7						

EMPALME, MEXICO — 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	12	13.8	5.6	33	.9
1000	30	101	17.6	4.1	34	1.4
950	30	540	17.8	.4	35	2.2
900	30	1,000	15.7	-4.1	31	1.0
850	30	1,482	12.7	-5.7	22	2.4
800	30	1,988	10.2	-10.2	23	4.2
750	30	2,522	7.4	-13.4	25	5.4
700	30	3,086	4.3	-16.7	26	7.3
650	30	3,685	.7	-19.7	26	9.3
600	30	4,323	-3.4	-23.0	26	10.9
550	30	5,005	-8.1	-27.1	26	14.1
500	30	5,737	-13.3	-31.3	26	16.6
450	30	6,530	-19.1	-35.2	26	19.5
400	30	7,396	-25.6	-41.1	27	22.2
350	30	8,354	-32.3	-46.1	26	25.6
300	30	9,422	-39.7	-51.4	26	31.8
250	30	10,649	-47.0		26	37.5
200	30	12,100	-54.9		26	40.2
175	30	12,947	-58.0		26	40.9
150	30	13,914	-60.1		26	38.8
125	30	15,044	-63.4		26	33.6
100	30	16,402	-66.7		26	25.1
80	30	17,742	-68.9		26	17.0
70	30	18,542	-68.7		27	12.7
60	30	19,470	-66.5		27	7.8
50	30	20,581	-63.7		27	4.0
40	28	21,964	-59.7		27	.6
30	25	23,780	-54.9		36	1.1
25	23	24,957	-51.7		33	1.2
20	23	26,417	-48.4		28	2.2
15	23	28,322	-45.7		27	7.2
10	12	31,049	-40.0			
7						

*** FAIRBANKS, ALASKA — 997 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	135	-1.2	-7.8	36	1.6
1000	11	169	-2.0	-10.1	36	1.8
950	30	518	-.7	-8.9	08	2.0
900	30	947	-3.5	-10.9	17	1.5
850	30	1,396	-6.8	-12.9	19	2.1
800	30	1,867	-10.1	-15.3	20	3.2
750	30	2,361	-13.5	-18.8	21	3.7
700	30	2,882	-17.3	-22.4	21	4.5
650	30	3,434	-20.8	-25.3	21	5.4
600	30	4,021	-25.0	-29.2	21	6.8
550	30	4,648	-29.4	-33.7	21	7.6
500	30	5,322	-34.0	-38.9	21	8.5
450	30	6,053	-38.6	-40.5	22	9.8
400	30	6,852	-44.3	-43.5	22	11.4
350	30	7,739	-49.6		21	12.8
300	30	8,735	-53.5		21	12.7
250	30	9,909	-52.6		22	11.5
200	30	11,366	-49.3		23	8.5
175	29	12,240	-49.1		23	7.0
150	29	13,253	-48.7		22	6.6
125	29	14,451	-49.3		23	5.3
100	28	15,906	-50.9		23	4.8
80	28	17,357	-51.6		23	3.8
70	28	18,223	-52.0		23	3.6
60	28	19,221	-52.2		24	3.3
50	27	20,403	-52.8		25	2.9
40	24	21,832	-53.7		28	1.9
30	22	23,676	-54.7		28	2.3
25	22	24,842	-55.1		31	2.9
20	19	26,262	-56.0		32	2.8
15	14	28,083	-55.4		30	4.1
10	10	30,723	-51.4			
7	5	33,167	-45.1			

FLINT, MICH. — 985 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	236	4.7	1.3	15	.2
1000						
950	30	529	4.7	-1.1	24	1.5
900	30	969	2.8	-2.9	26	2.8
850	30	1,430	.7	-7.0	27	4.3
800	30	1,916	-1.3	-8.7	27	5.6
750	30	2,429	-3.6	-12.0	27	6.5
700	30	2,971	-6.5	-14.8	27	7.5
650	30	3,548	-9.4	-18.1	27	8.0
600	30	4,163	-12.6	-22.1	27	9.3
550	30	4,823	-16.4	-26.7	26	10.7
500	30	5,533	-21.4	-31.4	26	12.4
450	30	6,302	-26.8	-35.7	26	12.9
400	30	7,141	-33.1	-41.7	26	14.1
350	29	8,081	-39.5	-46.3	26	14.8
300	28	9,134	-46.9		26	18.1
250	28	10,321	-54.5		26	22.1
200	28	11,743	-55.6		26	24.6
175	28	12,595	-54.7		27	21.6
150	28	13,584	-54.4		26	18.1
125	28	14,750	-55.0		26	16.4
100	28	16,175	-55.9		26	12.0
80	28	17,590	-57.1		26	8.8
70	28	18,434	-57.7		26	7.4
60	28	19,407	-58.0		26	5.5
50	28	20,557	-58.0		26	3.9
40	28	21,962	-58.2		28	1.8
30	28	23,781	-56.0		27	2.3
25	27	24,944	-54.8		27	2.4
20	27	26,377	-53.2		27	3.0
15	23	28,242	-50.8		28	4.3
10	16	30,908	-44.8		26	10.1
7						

FORT WORTH, TEXAS — 992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	180	12.6	9.8	24	1.3
1000						
950	30	544	12.1	7.2	24	2.7
900	30	997	10.7	4.1	23	4.6
850	30	1,472	8.9	.7	24	5.1
800	30	1,973	7.1	-4.4	26	6.3
750	30	2,501	4.5	-9.5	26	8.7
700	30	3,060	1.4	-13.8	27	11.3
650	30	3,653	-2.5	-17.6	27	13.1
600	29	4,286	-6.9	-21.2	27	15.1
550	29	4,959	-11.4	-26.0	26	17.9
500	29	5,683	-16.3	-32.1	26	21.0
450	29	6,468	-21.7	-37.1	26	24.8
400	29	7,325	-27.9	-41.4	26	28.6
350	28	8,270	-34.6	-46.8	26	31.7
300	28	9,328	-41.9	-46.0	26	36.8
250	28	10,542	-49.5		26	42.1
200	27	11,979	-55.2		26	46.6
175	26	12,827	-56.5		26	45.6
150	26	13,801	-58.6		26	40.1
125	25	14,941	-60.3		26	35.4
100	24	16,323	-63.1		26	25.5
80	22	17,692	-64.7		26	18.5
70	20	18,506	-65.2		25	15.4
60	19	19,452	-63.3		25	9.5
50	19	20,578	-62.0		26	5.1
40	18	21,971	-58.5		26	2.1
30	13	23,789	-54.2		29	2.3
25	11	24,953	-52.8		27	3.8
20	10	26,397	-50.5		27	7.1
15	10	28,293	-46.4		27	10.9
10						
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	GLASGOW, MONT. 933 MB						GRAND JUNCTION, COLO. 849 MB						• GREAT FALLS, MONT. 888 MB						GREEN BAY, WIS. 988 MB						GREENSBORO, N. C. 984 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	696	.8	-2.7	01	1.6	30	1,472	4.4	-4.7	12	2.2	30	1,118	1.3	-5.9	25	2.8	30	210	3.8	.1	03	1.2	30	275	8.3	5.2	23	.9
1000																														
950																			30	524	3.2	-2.3	04	1.5	30	563	[illegible]	3.6	24	4.2
900	30	985	2.1	-3.5	33	2.3													30	962	1.4	-4.3	01	.6	30	1,012	7.7	1.2	25	5.2
850	30	1,445	.0	-5.6	32	4.5	14	1,518	3.1	-8.3	09	2.8	30	1,467	1.3	-5.7	28	5.0	30	1,421	-.6	-5.8	28	1.1	30	1,481	5.0	-.6	26	6.6
800	30	1,929	-3.0	-8.2	32	4.7	30	1,955	3.5	-7.5	16	1.8	30	1,952	-2.0	-7.6	30	5.8	30	1,904	-2.6	-8.3	28	2.7	30	1,974	2.7	-4.4	26	7.9
750	30	2,438	-5.8	-11.4	31	6.5	30	2,476	-.1	-9.5	22	1.3	30	2,462	-5.6	-10.3	30	6.3	30	2,414	-4.8	-11.0	28	4.4	30	2,494	.8	-9.1	27	9.8
700	30	2,975	-8.9	-14.5	32	7.4	30	3,024	-4.3	-11.6	27	2.6	30	3,000	-9.3	-13.9	31	6.9	30	2,954	-7.5	-13.9	27	5.9	30	3,047	-1.5	-13.1	27	12.1
650	30	3,548	-12.4	-17.1	31	8.0	30	3,604	-8.5	-14.3	29	3.9	30	3,569	-12.6	-17.4	31	7.0	30	3,529	-10.4	-18.3	27	7.3	30	3,634	-4.3	-16.4	26	14.3
600	29	4,158	-16.2	-23.4	31	8.3	30	4,220	-12.8	-18.5	29	5.6	30	4,176	-16.3	-22.4	30	7.8	30	4,142	-13.7	-22.4	26	8.6	30	4,261	-7.8	-20.3	26	16.3
550	29	4,805	-20.4	-28.7	31	9.2	30	4,878	-17.0	-24.4	29	7.2	30	4,826	-20.4	-28.0	30	8.7	30	4,798	-17.5	-26.7	27	9.2	30	4,933	-12.3	-23.9	27	17.9
500	29	5,504	-25.1	-33.4	30	10.0	30	5,567	-22.0	-30.7	29	8.4	29	5,524	-25.2	-32.5	30	9.2	30	5,506	-22.4	-32.7	26	11.2	30	5,654	-16.9	-28.8	27	20.4
450	29	6,262	-30.4	-37.4	31	10.2	30	6,354	-27.3	-37.1	29	8.9	29	6,281	-30.5	-37.2	30	10.5	30	6,272	-27.6	-37.1	26	12.5	30	6,437	-22.0	-34.1	27	23.2
400	29	7,089	-36.5	-42.2	30	11.7	30	7,191	-34.0	-41.8	29	9.2	29	7,107	-36.0	-41.7	30	11.3	30	7,108	-33.9	-42.5	26	15.[illegible]	30	7,294	-28.0	-40.0	27	26.7
350	29	8,004	-43.2		30	12.3	30	8,115	-41.0	-47.3	29	9.4	29	8,022	-43.3		30	12.1	30	8,033	-41.0	-45.0	26	15.9	30	8,242	-34.7	-46.3	27	29.7
300	29	9,023	-50.8		29	13.2	30	9,144	-48.5		30	10.0	29	9,040	-50.7		30	14.1	30	9,060	-49.0		26	16.6	30	9,299	-42.1	-49.7	27	33.2
250	29	10,195	-55.8		30	11.7	29	10,332	-54.2		28	14.5	29	10,211	-56.2		30	14.4	30	10,239	-55.1		26	19.6	30	10,512	-49.6		27	33.2
200	29	11,615	-54.8		30	11.0	29	11,754	-56.2		28	17.6	29	11,628	-55.7		30	12.7	30	11,661	-54.8		26	19.1	30	11,953	-55.3		27	33.5
175	29	12,472	-53.1		29	9.5	29	12,606	-54.7		28	15.7	29	12,481	-54.0		30	10.2	30	12,517	-54.1		26	18.0	30	12,802	-56.9		27	30.9
150	29	13,468	-52.7		29	7.9	29	13,593	-55.1		28	14.7	28	13,472	-53.8		30	9.0	30	13,507	-53.7		26	15.2	30	13,775	-57.9		27	28.1
125	29	14,641	-53.8		29	7.2	28	14,753	-55.9		27	14.7	28	14,643	-54.3		29	8.7	30	14,679	-53.9		25	13.4	29	14,924	-58.9		28	24.4
100	27	16,067	-55.0		29	6.7	28	16,165	-58.2		27	12.2	28	16,070	-55.3		29	5.7	30	16,109	-54.6		26	11.1	29	16,315	-61.2		27	17.7
80	27	17,490	-55.7		28	5.2	27	17,571	-58.6		27	10.1	28	17,490	-56.1		29	5.7	30	17,533	-55.8		25	8.1	29	17,692	-63.0		27	12.9
70	27	18,340	-56.1		28	4.8	27	18,410	-59.1		27	7.5	28	18,338	-56.8		29	5.4	30	18,382	-56.5		26	6.5	28	18,517	-63.1		27	7.9
60	26	19,317	-56.5		27	4.5	27	19,377	-59.0		26	5.7	28	19,314	-56.9		28	3.9	30	19,359	-57.2		26	5.1	28	19,468	-62.3		27	4.7
50	25	20,476	-56.8		28	4.4	27	20,521	-58.9		26	4.1	28	20,468	-57.3		28	3.9	29	20,509	-57.7		26	4.0	28	20,599	-60.7		29	3.1
40	25	21,890	-56.7		28	3.0	26	21,927	-58.2		27	3.3	26	21,889	-57.3		27	3.3	29	21,917	-57.9		26	2.6	27	21,990	-59.2		30	2.4
30	24	23,719	-55.5		30	2.4	25	23,746	-55.6		28	3.1	26	23,712	-56.4		29	2.6	27	23,728	-56.6		25	2.2	27	23,809	-55.5		02	1.6
25	23	24,887	-55.0		32	1.8	24	24,909	-54.6		27	3.7	25	24,867	-55.7		29	2.8	25	24,891	-55.7		26	3.3	25	24,979	-53.6		36	1.5
20	20	26,311	-54.2		29	1.9	22	26,347	-52.3		27	5.2	22	26,285	-54.5		31	2.6	24	26,316	-54.2		27	3.6	23	26,425	-50.9		29	3.7
15	18	28,162	-52.3		28	1.9	21	28,228	-48.8		28	7.4	21	28,141	-52.3		27	3.5	22	28,156	-52.3		27	4.8	23	28,315	-46.8		28	6.8
10	9	30,822	-47.7				18	30,921	-42.6		27	13.9	17	30,787	-47.4		28	7.0	14	30,795	-47.3		26	11.4	8	31,059	-40.3			
7							5	33,461	-36.9				14	33,137	-42.3		28	12.9												
5													7	35,346	-37.8															

Standard pressure surface (mb)	GUADALUPE IS., MEXICO 1014 MB						• GUAM, MARIANA IS. 1000 MB						HILO, HAWAII 10.8 MB						HUNTINGTON W. VA. 984 MB						• INTERNATIONAL FALLS, MINN. 971 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	29	23	14.5	9.6	34	7.0	30	111	25.4	22.2	09	5.3	30	10	19.3	17.4	26	1.4	30	246	7.8	4.5	18	1.2	30	359	-1.1	-6.2	36	.9
1000	29	140	13.7	8.5	33	7.6	21	116	25.5	22.3	08	5.8	30	160	19.8	16.4	28	.6												
950	29	570	10.8	3.8	33	6.3	30	562	22.1	19.7	08	12.4	30	601	16.5	14.6	07	2.3	30	537	9.3	3.5	22	4.2	30	534	-.3	-6.7	06	1.0
900	29	1,020	10.6	-4.0	34	5.6	30	1,031	19.2	15.9	09	12.3	30	1,060	13.4	11.9	08	3.7	30	984	6.8	1.2	24	6.0	30	967	-1.1	-7.9	25	.4
850	29	1,496	10.0	-9.7	33	5.1	30	1,522	16.9	10.1	09	10.6	30	1,539	10.4	8.7	10	3.5	30	1,451	3.8	-1.9	26	7.3	30	1,421	-3.4	-10.9	29	1.9
800	29	1,999	9.0	-11.5	33	4.6	30	2,038	15.0	4.4	09	8.7	30	2,042	7.8	3.4	10	3.5	30	1,943	1.5	-4.2	26	8.0	30	1,899	-5.3	-13.0	28	2.9
750	29	2,531	6.6	-14.0	33	5.4	30	2,583	12.7	-2.6	09	6.7	30	2,575	7.6	-6.9	09	3.9	30	2,461	-.6	-8.4	26	9.0	30	2,403	-7.6	-16.0	28	3.8
700	29	3,093	3.6	-16.9	31	6.3	30	3,159	10.7	-9.4	09	5.8	30	3,144	7.2	-12.7	08	2.8	30	3,010	-3.2	-10.8	26	10.6	30	2,937	-10.6	-18.7	29	4.2
650	29	3,691	.6	-19.7	31	6.9	30	3,773	7.7	-12.4	09	5.1	30	3,750	4.2	-15.9	04	1.2	30	3,594	-6.0	-15.3	26	12.0	30	3,504	-13.7	-22.5	29	5.6
600	29	4,329	-3.6	-23.1	30	8.8	30	4,429	4.5	-16.9	08	6.4	30	4,396	.8	-19.9	33	1.3	30	4,217	-9.4	-19.2	27	13.2	30	4,109	-16.9	-26.6	29	6.7
550	29	5,010	-8.2	-26.8	30	10.3	30	5,132	.7	-20.3	08	7.2	30	5,089	-3.8	-24.0	29	3.1	30	4,884	-13.6	-23.5	26	14.6	30	4,757	-20.8	-29.7	28	8.7
500	29	5,742	-13.5	-31.6	29	13.9	30	5,890	-4.3	-24.5	07	6.7	30	5,834	-9.1	-28.4	29	4.6	30	5,602	-18.4	-28.9	27	16.1	30	5,456	-25.4	-34.2	28	9.9
450	29	6,535	-19.3	-35.9	28	14.4	30	6,712	-9.7	-29.0	06	6.6	30	6,640	-15.0	-33.0	28	7.1	30	6,380	-24.0	-34.4	27	17.6	30	6,212	-30.7	-38.9	28	11.1
400	29	7,399	-26.2	-41.5	28	15.9	30	7,609	-16.4	-33.9	04	3.7	29	7,519	-21.6	-38.0	28	10.3	30	7,229	-30.4	-39.5	26	20.7	29	7,041	-36.7	-42.7	27	13.7
350	29	8,354	-33.5	-47.8	28	17.2	30	8,603	-23.0	-40.0	33	3.1	29	8,492	-28.9	-43.1	28	13.2	30	8,168	-36.9	-43.0	26	23.3	29	7,956	-43.4		26	16.4
300	29	9,414	-41.7	-52.4	28	18.3	30	9,713	-30.8	-46.0	28	7.2	28	9,571	-37.1	-50.7	27	17.5	30	9,216	-43.8	-45.5	26	27.1	29	8,975	-50.0		26	17.2
250	29	10,628	-50.0		26	22.9	30	10,980	-40.9	-53.3	27	12.0	27	10,805	-46.2		27	25.9	30	10,423	-50.4		26	31.7	29	10,154	-54.4		26	16.8
200	29	12,063	-56.5				30	12,459	-53.0		26	14.4	26	12,257	-55.2		27	37.2	30	11,863	-54.6		26	35.3	29	11,585	-52.9		26	13.2
175	29	12,907	-58.1				30	13,307	-59.8		26	14.1	26	13,100	-60.0		27	38.7	30	12,717	-54.9		26	32.7	29	12,451	-51.4		26	12.0
150	29	13,875	-59.5				30	14,254	-67.1		27	11.4	26	14,050	-65.4		27	35.3	30	13,702	-55.5		26	28.3	29	13,451	-51.9		26	9.7
125	28	15,010	-62.8				30	15,335	-74.2		28	7.0	26	15,149	-69.1		27	26.5	30	14,862	-56.3		26	25.6	29	14,632	-52.2		27	8.7
100	28	16,372	-66.2				30	16,616	-79.4		03	2.7	25	16,473	-72.0		27	18.9	29	16,270	-58.6		26	19.7	29	16,073	-53.4		26	7.8
80	28	17,718	-67.8				26	17,874	-80.5		08	8.8	24	17,783	-72.5		26	12.5	27	17,672	-60.0		27	12.7	29	17,504	-54.5		26	6.3
70	28	18,525	-66.5				25	18,634	-77.2		08	9.1	24	18,572	-70.8		26	8.0	26	18,509	-59.8		26	8.4	29	18,359	-55.0		26	5.7
60	28	19,460	-65.5				25	19,529	-72.3		09	7.3	24	19,490	-68.9		24	3.8	26	19,473	-59.7		26	6.9	29	19,343	-55.7		26	5.3
50	27	20,577	-62.9				23	20,618	-65.6		11	5.5	24	20,590	-65.2		12	1.2	26	20,615	-58.6		27	4.3	28	20,501	-56.6		26	4.3
40	27	21,960	-59.6				23	21,989	-60.9		09	1.3	24	21,960	-61.7		10	3.0	25	22,017	-57.9		31	2.0	26	21,914	-56.3		27	3.4
30	25	23,784	-54.3				23	23,811	-53.5		27	.7	24	23,766	-55.7		08	3.0	23	23,840	-55.3		32	1.7	25	23,748	-55.5		25	2.0
25	24	24,960	-51.4				23	24,991	-50.8		29	1.0	23	24,939	-51.8		06	1.5	22	25,012	-53.3		30	1.4	24	24,914	-55.0		27	2.3
20	23	26,425	-47.5				20	26,449	-46.4		25	2.6	22	26,398	-47.9		05	1.7	19	26,464	-51.1		29	3.3	24	26,342	-54.2		28	2.9
15	21	28,326	-45.3				16	28,372	-43.0		33	2.4	17	28,303	-45.3		35	1.6	17	28,354	-47.3		28	7.8	23	28,188	-52.3		28	4.0
10	11	31,054	-39.0				13	31,128	-39.2				8	31,035	-40.2				10	31,067	-41.5				20	30,813	-48.3		28	5.6
7																									18	33,201	-42.3		27	8.0
5																									7	35,395	-40.6			

Standard pressure surface (mb)	JACKSON, MISS. 1003 MB						JOHN F. KENNEDY INT. AP NY 1013 MB						JOHNSTON IS., PACIFIC AREA 1015 MB						KEY WEST, FLA. 1015 MB						+ KORDR, CAROLINE IS. 1007 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	100	12.8	9.1	18	1.4	30	5	9.1	1.6	28	1.9	30	3	24.3	20.4	07	8.3	30	3	23.0	18.0	10	3.3	30	30	27.9	24.4	08	5.0
1000	20	155	12.8	7.9	20	2.0	26	136	8.6	.7	30	3.3	30	135	22.8	18.8	07	9.2	30	133	22.4	17.6	10	3.8	30	92	27.0	24.3	08	5.8
950	30	557	13.2	7.8	21	4.8	30	535	7.4	-.4	29	4.2	30	580	19.0	17.1	08	10.2	30	578	18.8	16.1	12	4.4	30	545	23.6	22.2	08	8.9
900	30	1,010	10.6	5.1	22	5.9	30	979	5.4	-1.6	29	3.9	30	1,044	16.1	12.9	08	10.2	30	1,040	16.0	11.3	15	3.6	30	1,017	20.6	18.8	08	9.1
850	30	1,485	8.9	.0	24	7.3	30	1,445	3.4	-3.3	28	6.6	30	1,528	13.2	8.7	08	9.4	30	1,525	13.9	6.0	19	2.2	30	1,511	18.2	14.3	09	8.2
800	30	1,986	7.3	-3.6	24	9.0	30	1,936	1.6	-6.7	28	8.6	30	2,037	11.1	2.1	08	7.2	30	2,036	12.9	-1.9	24	2.7	30	2,030	16.1	9.3	09	7.4
750	30	2,515	5.2	-8.4	25	10.7	30	2,454	-.7	-9.0	28	9.1	30	2,575	10.4	-7.5	08	4.1	30	2,576	11.5	-6.9	25	3.2	30	2,577	13.2	6.4	09	7.0
700	30	3,076	2.2	-12.4	26	12.8	30	3,002	-3.7	-12.2	28	10.2	30	3,148	8.8	-12.1	07	1.4	30	3,148	8.0	-11.0	26	5.1	30	3,156	10.3	1.9	09	6.9
650	30	3,670	-1.3	-15.2	26	15.9	30	3,565	-6.7	-15.4	27	10.7	30	3,758	6.1	-14.5	33	.4	30	3,756	4.8	-14.0	27	6.9	30	3,770	7.1	-.9	10	7.0
600	30	4,304	-5.0	-19.5	26	19.8	30	4,206	-10.1	-20.7	27	11.8	30	4,408	2.1	-17.1	27	2.0	30	4,404	.8	-16.6	27	8.7	30	4,425	3.5	-5.9	09	7.1
550	30	4,982	-9.2	-24.3	26	21.4	30	4,872	-14.0	-26.0	27	12.8	30	5,104	-2.8	-21.3	25	3.0	30	5,097	-3.6	-21.1	27	10.3	30	5,127	-.2	-11.0	09	7.0
500	30	5,712	-14.5	-28.5	26	23.7	30	5,589	-18.7	-30.6	27	13.1	30	5,852	-8.1	-25.7	25	3.5	30	5,843	-8.8	-24.2	27	12.3	30	5,884	-4.5	-15.9	09	7.3
450	29	6,500	-20.1	-32.8	26	26.4	30	6,366	-24.4	-35.5	27	15.0	30	6,662	-13.5	-31.1	27	5.2	30	6,651	-13.9	-28.9	27	15.0	30	6,707	-9.0	-20.8	09	6.6
400	29	7,362	-26.2	-38.6	26	30.0	28	7,217	-30.7	-41.6	27	15.2	29	7,546	-20.2	-36.3	27	7.6	29	7,535	-19.7	-35.3	27	17.2	30	7,610	-14.2	-27.3	08	5.5
350	29	8,318	-32.8	-44.6	26	32.2	27	8,152	-37.7	-43.8	27	15.9	29	8,525	-26.6	-41.8	27	13.0	29	8,516	-26.4	-39.8	27	19.2	30	8,613	-20.8	-35.3	07	4.1
300	28	9,386	-40.5	-48.2	26	38.3	27	9,196	-44.6		27	20.3	29	9,618	-34.4	-47.9	27	22.2	29	9,609	-34.6	-47.5	27	24.3	30	9,731	-29.4	-42.8	08	1.7
250	27	10,609	-48.4		26	43.3	27	10,401	-50.3		27	25.3	29	10,871	-42.8		26	33.2	29	10,857	-44.4		28	28.1	30	11,006	-39.7	[illegible]	17	3.3
200	26	12,051	-55.5		26	46.9	27	11,840	-54.6		27	27.4	29	12,339	-54.3		26	38.4	29	12,317	-55.1		29	32.9	30	12,491	-52.3		20	4.1
175	26	12,897	-58.0		27	47.4	25	12,692	-54.5		27	27.3	29	13,183	-60.5		27	38.8	29	13,161	-59.9		28	35.0	30	13,341	-59.2		22	3.5
150	26	13,863	-60.3		27	41.5	25	13,678	-54.6		27	25.3	27	14,132	-66.9		27	36.0	29	14,112	-65.2		28	31.3	29	14,289	-66.8		23	1.7
125	26	14,995	-62.1		27	34.2	25	14,843	-55.4		27	22.2	26	15,218	-72.0		27	28.6	29	15,209	-69.9		28	26.5	29	15,370	-74.7		29	1.4
100	26	16,364	-65.4		27	24.5	25	16,259	-57.4		27	18.8	25	16,522	-74.9		27	16.7	28	16,527	-72.5		28	18.7	29	16,644	-81.1		06	3.0
80	25	17,719	-66.8		26	16.8	25	17,665	-58.4		27	13.9	25	17,812	-75.3		26	9.7	28	17,829	-74.9		27	10.4	29	17,890	-82.0		08	11.3
70	25	18,528	-65.6		26	11.7	25	18,505	-58.9		27	11.3	24	18,591	-72.7		27	4.2	28	18,606	-73.7		27	5.8	28	18,648	-75.7		09	11.2
60	24	19,468	-64.2		27	6.6	24	19,473	-59.0		28	7.4	24	19,501	-70.3		16	.3	28	19,514	-70.5		26	2.6	28	19,558	-68.5		09	6.1
50	24	20,590	-62.1		26	2.9	23	20,618	-58.5		28	5.1	24	20,596	-66.4		10	2.8	28	20,613	-64.6		34	.5	28	20,664	-63.7		11	1.1
40	24	21,977	-59.7		32	1.4	22	22,021	-57.7		28	2.7	24	21,965	-61.3		07	3.5	27	21,991	-60.3		05	2.5	28	22,051	-58.6		27	3.4
30	21	23,790	-55.2		04	1.4	22	23,847	-55.2		33	.6	22	23,778	-54.9		06	2.9	26	23,808	-54.4		03	2.2	28	23,880	-53.3		28	6.5
25	21	24,961	-52.5		31	1.7	22	25,016	-53.6		34	.7	22	24,953	-51.7		08	2.0	26	24,987	-50.4		36	.3	27	25,061	-50.6		27	7.6
20	21	26,415	-49.2		30	4.0	22	26,466	-51.7		03	1.5	22	26,415	-47.6		04	2.3	26	26,457	-46.5		07	2.2	26	26,525	-47.3		27	8.4
15	21	28,317	-45.8		27	9.3	19	28,354	-48.5		32	1.2	22	28,331	-44.1		07	4.0	23	28,383	-42.3		28	1.1	24	28,443	-43.7		26	5.8
10	19	31,058	-38.5		27	12.6	19	31,063	-41.3				17	31,079	-40.2		10	7.1	15	31,163	-37.[illegible]		17	2.0	19	31,204	-4[illegible]		[illegible]	7.2
7	7	33,598	-31.4										6	33,535	-36.1				5	33,632	-33.7				9	33,627	-35.8			
5																														

See reference note at end of table

RAWINSONDE DATA

Average monthly values

KWAJALEIN, MARSHALL IS. [illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	27.1	23.7	07	7.6
1000	30	99	26.4	23.2	07	9.3
950	30	551	22.7	20.9	07	12.6
900	30	1,021	19.8	16.9	08	12.6
850	30	1,514	17.3	13.6	09	10.8
800	30	2,031	15.4	9.7	09	8.7
750	30	2,577	13.4	2.4	09	6.9
700	30	3,155	10.4	-2.9	08	5.4
650	30	3,768	6.8	-4.9	08	3.9
600	30	4,422	2.8	-7.7	08	3.0
550	30	5,122	-.8	-12.3	08	3.6
500	30	5,878	-5.0	-17.9	06	2.6
450	30	6,599	-10.0	-21.9	03	.5
400	30	7,598	-15.5	-26.6	28	3.2
350	30	8,593	-22.1	-32.8	27	6.9
300	30	9,709	-30.2	-41.8	25	10.3
250	30	10,978	-40.8	-51.0	25	12.5
200	30	12,455	-53.4	-62.3	25	15.2
175	29	13,302	-60.3		25	15.6
150	26	14,244	-67.9		27	15.9
125	25	15,317	-76.1		27	13.7
100	21	16,568	-81.0		28	8.0
80	17	17,845	-79.5		08	3.4
70	13	18,610	-76.8		10	6.9
60	13	19,513	-70.6		10	5.2
50	12	20,600	-66.8		05	1.7
40	12	21,971	-60.8		30	2.1
30	12	23,791	-53.4		28	5.6
25	12	24,970	-51.4		26	6.6
20	11	26,431	-48.2		29	5.6
15	12	28,348	-42.6		30	.6
10	11	31,095	-41.8		09	5.4
7	7	33,524	-38.0			
5	6	35,878	-33.1			

LAKE CHARLES, LA. 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	14.6	12.9	14	1.2
1000	30	122	15.9	11.2	16	1.7
950	30	557	14.2	5.8	19	3.7
900	30	1,013	12.2	2.0	22	4.4
850	30	1,491	10.4	-3.0	24	5.2
800	30	1,994	8.5	-4.1	25	6.9
750	30	2,525	6.0	-7.7	26	9.2
700	30	3,088	3.2	-13.2	26	11.6
650	30	3,686	.4	-16.1	26	14.4
600	30	4,323	-3.4	-19.1	26	18.4
550	30	5,005	-8.2	-22.5	26	21.3
500	30	5,738	-13.2	-27.6	26	23.2
450	30	6,532	-18.7	-32.7	26	25.0
400	30	7,399	-24.8	-37.8	26	28.5
350	30	8,360	-31.7	-43.4	26	32.2
300	30	9,429	-39.5	-48.2	26	35.9
250	30	10,655	-47.8		26	42.6
200	28	12,097	-55.0		26	48.0
175	28	12,944	-58.2		26	48.0
150	28	13,907	-61.3		26	44.2
125	28	15,030	-63.9		26	35.8
100	25	16,389	-66.7		26	25.2
80	27	17,728	-68.8		26	19.9
70	27	18,528	-67.8		25	15.3
60	26	19,459	-65.6		26	7.4
50	26	20,578	-61.9		24	5.0
40	25	21,966	-59.8		28	2.4
30	24	23,784	-54.8		04	1.3
25	22	24,960	-51.6		01	1.2
20	20	26,417	-48.3		28	3.0
15	18	28,332	-43.8		27	5.5
10	5	31,141	-36.7			

LANDER, WYO. 827 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,697	-2.1	-6.4	29	.9
1000						
950						
900						
850						
800	30	1,958	.0	-7.9	30	1.0
750	30	2,473	-3.1	-10.4	33	2.8
700	30	3,016	-6.9	-12.8	32	4.2
650	30	3,591	-10.5	-16.4	32	5.2
600	30	4,203	-14.3	-21.2	31	6.5
550	30	4,857	-18.4	-26.2	32	7.5
500	30	5,563	-22.8	-31.2	31	8.6
450	30	6,327	-28.3	-37.0	30	9.3
400	30	7,161	-34.7	-41.5	30	9.8
350	30	8,082	-42.1	-46.6	30	10.5
300	30	9,104	-50.4		30	11.9
250	30	10,273	-57.3		30	12.7
200	30	11,679	-57.7		29	13.7
175	30	12,527	-55.3		28	13.0
150	29	13,509	-55.0		28	11.8
125	28	14,670	-55.8		28	10.5
100	28	16,087	-57.0		27	9.7
80	28	17,499	-57.5		27	7.1
70	28	18,341	-58.3		27	6.4
60	27	19,314	-58.3		27	4.8
50	27	20,460	-58.4		27	4.0
40	27	21,865	-58.2		27	3.0
30	26	23,678	-57.2		28	2.3
25	26	24,835	-55.7		28	3.2
20	25	26,266	-54.0		29	3.4
15	24	28,113	-52.0		27	5.5
10	17	30,779	-46.5		27	11.4

* LIHUE KAUAI, HAWAII 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	36	21.9	17.9	06	4.5
1000	30	173	20.9	15.9	06	5.7
950	30	615	17.1	14.6	07	6.9
900	30	1,074	13.7	11.3	07	6.8
850	30	1,554	10.4	8.2	07	6.3
800	30	2,057	8.8	1.1	07	5.7
750	30	2,592	9.1	-10.8	08	4.6
700	30	3,161	7.1	-14.4	08	3.0
650	30	3,768	4.5	-17.2	07	1.8
600	30	4,415	.7	-20.3	01	.4
550	30	5,107	-3.9	-23.9	32	1.1
500	30	5,851	-9.3	-28.5	30	2.5
450	30	6,657	-15.1	-32.7	30	4.2
400	30	7,536	-21.8	-38.2	29	6.5
350	30	8,508	-29.5	-44.3	28	8.3
300	30	9,586	-38.2	-51.7	28	11.8
250	30	10,815	-47.5		28	17.8
200	30	12,259	-56.6		27	27.4
175	30	13,098	-60.5		27	30.2
150	30	14,049	-64.5		27	29.2
125	28	15,157	-68.3		27	22.8
100	26	16,489	-71.8		27	15.8
80	26	17,801	-72.0		26	9.9
70	26	18,592	-69.6		26	7.2
60	22	19,510	-67.6		25	4.7
50	22	20,616	-64.7		25	1.2
40	21	21,990	-60.8		08	2.1
30	20	23,802	-55.0		08	2.6
25	18	24,978	-51.4		07	3.1
20	16	26,442	-47.0		02	1.7
15	16	28,357	-44.7		01	.9
10	16	31,111	-37.4		10	2.5
7	14	33,597	-34.4		11	4.9

LITTLE ROCK, ARK. 1004 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	11.9	9.5	24	.9
1000	21	137	12.0	6.6	24	1.9
950	30	543	11.6	6.2	23	3.3
900	30	994	9.1	4.3	25	5.6
850	30	1,466	6.5	1.1	26	7.3
800	30	1,962	4.9	-2.9	27	8.7
750	30	2,487	2.3	-6.5	27	10.1
700	30	3,042	-.5	-12.3	26	11.9
650	30	3,631	-4.0	-15.4	27	12.9
600	30	4,258	-7.7	-20.3	26	14.7
550	30	4,929	-12.4	-26.4	26	16.2
500	30	5,651	-17.6	-32.0	26	18.9
450	29	6,435	-22.7	-35.3	26	22.1
400	28	7,295	-28.3	-39.9	26	24.9
350	27	8,237	-35.1	-44.4	25	28.2
300	27	9,292	-42.5	-47.7	25	33.7
250	26	10,506	-50.1		25	38.6
200	26	11,944	-55.1		26	40.9
175	26	12,794	-56.3		26	39.7
150	26	13,770	-58.3		26	37.1
125	26	14,914	-59.2		26	31.4
100	26	16,305	-61.6		26	22.4
80	25	17,682	-63.6		25	16.0
70	24	18,507	-63.2		26	11.6
60	24	19,459	-61.9		26	6.2
50	24	20,590	-60.5		25	2.6
40	24	21,986	-58.7		26	1.8
30	24	23,809	-54.7		29	.6
25	24	24,982	-52.6		30	2.0
20	23	26,435	-49.9		29	4.5
15	18	28,332	-46.0		27	8.8
10	[illegible]	31,037	-40.7			

MCGRATH, ALASKA 998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	24	103	-2.2	-7.3	35	.4
1000	11	153	-2.9	-9.6	34	1.4
950	24	496	-1.6	-8.8	07	2.2
900	24	925	-4.1	-11.1	12	2.1
850	24	1,373	-7.3	-13.2	15	2.3
800	24	1,842	-10.8	-15.8	18	3.0
750	24	2,335	-14.0	-19.3	19	3.2
700	24	2,856	-17.5	-22.5	20	4.0
650	24	3,407	-21.0	-25.9	20	5.2
600	24	3,994	-25.2	-29.3	19	5.5
550	24	4,620	-29.4	-33.9	19	6.4
500	24	5,294	-33.9	-39.9	20	6.8
450	24	6,025	-38.7	-42.7	20	8.0
400	24	6,825	-44.2		21	8.8
350	22	7,719	-48.5		22	10.3
300	21	8,725	-51.1		21	10.9
250	21	9,913	-49.6		22	10.3
200	21	11,387	-46.7		22	7.8
175	21	12,273	-46.7		22	7.0
150	21	13,294	-47.1		22	6.6
125	21	14,499	-47.8		21	5.6
100	21	15,967	-49.7		22	5.5
80	21	17,423	-51.4		23	4.3
70	21	18,290	-51.4		22	4.1
60	21	19,290	-51.8		22	4.2
50	21	20,472	-52.3		23	3.0
40	20	21,914	-53.0		24	2.5
30	18	23,770	-53.6		25	2.0
25	17	24,946	-54.0		29	2.2
20	15	26,386	-54.0		32	2.0
15	11	28,237	-53.4		32	3.7
10	9	30,922	-50.5			
7						

+ MAJURO, MARSHALL IS. 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	28.5	24.2	07	7.0
1000	30	96	26.7	22.4	07	8.2
950	30	548	23.1	21.0	07	11.1
900	30	1,019	20.3	17.3	08	10.9
850	30	1,512	17.5	14.6	09	9.8
800	30	2,029	15.5	10.4	09	8.7
750	30	2,576	13.3	5.8	10	8.0
700	30	3,155	10.4	.9	10	6.1
650	30	3,769	7.0	-2.8	10	4.9
600	30	4,423	3.3	-6.5	10	4.3
550	30	5,124	-.5	-10.5	12	2.1
500	30	5,881	-4.2	-16.9	09	1.5
450	30	6,704	-9.0	-20.7	11	1.2
400	30	7,607	-14.3	-27.6	24	2.4
350	30	8,611	-20.6	-34.4	25	6.1
300	30	9,729	-29.1	-41.6	25	7.6
250	29	11,004	-39.6	-50.7	24	9.0
200	29	12,490	-52.1		24	10.7
175	29	13,341	-58.8		25	11.7
150	29	14,292	-66.5		27	13.4
125	29	15,375	-74.1		27	13.3
100	29	16,652	-80.4		27	8.8
80	28	17,909	-79.2		07	3.3
70	27	18,674	-75.5		09	6.7
60	27	19,582	-69.0		09	4.7
50	27	20,689	-62.9		21	1.5
40	27	22,079	-58.4		26	4.6
30	25	23,912	-52.5		27	5.9
25	25	25,098	-49.6		27	7.4
20	23	26,575	-46.8		26	6.9
15	21	28,498	-43.3		26	3.0
10	15	31,273	-37.3		10	5.6
7	5	33,734	-32.9			

* MEDFORD, OREG. 974 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	401	4.5	.4	18	.2
1000						
950	30	608	6.7	.7	30	.9
900	30	1,051	5.5	-1.7	31	.8
850	30	1,516	2.9	-4.8	34	1.5
800	30	2,006	1.0	-10.1	34	3.5
750	30	2,523	-1.1	-14.0	34	5.9
700	29	3,067	-4.0	-16.2	34	7.5
650	29	3,648	-7.2	-19.6	33	9.9
600	29	4,268	-11.0	-23.8	33	11.9
550	29	4,930	-15.2	-28.3	32	14.4
500	29	5,644	-20.1	-31.4	32	16.0
450	28	6,411	-25.5	-35.5	32	18.3
400	28	7,255	-31.9	-41.6	32	19.1
350	28	8,187	-39.3	-45.9	33	18.8
300	28	9,222	-47.1		32	21.1
250	28	10,407	-55.1		32	23.5
200	28	11,811	-60.3		32	21.1
175	28	12,646	-58.9		31	18.1
150	28	13,617	-57.7		30	17.1
125	28	14,767	-58.0		30	14.6
100	28	16,169	-59.4		30	11.5
80	28	17,566	-59.8		30	8.0
70	28	18,402	-59.1		30	6.2
60	26	19,369	-59.2		30	4.8
50	26	20,512	-58.6		30	3.4
40	26	21,913	-59.0		30	2.4
30	24	23,724	-56.6		28	2.1
25	24	24,885	-55.1		29	2.3
20	23	26,310	-54.5		29	3.2
15	22	28,168	-51.1		28	5.1
10	20	30,835	-45.4		27	9.0
7	15	33,227	-40.3		28	16.2
5	10	35,506	-36.7			

MERIDA, MEXICO 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	11	22.2	20.5	10	1.9
1000	30	105	22.9	20.9	10	4.5
950	30	553	21.2	18.9	12	8.2
900	30	1,022	20.1	14.1	13	7.3
850	30	1,515	18.8	9.2	14	4.5
800	30	2,034	16.5	4.4	15	3.0
750	30	2,581	13.8	.8	17	2.7
700	30	3,160	10.7	-5.4	21	2.4
650	30	3,774	7.5	-10.7	23	3.0
600	30	4,427	3.2	-13.9	25	2.9
550	30	5,127	-1.3	-19.5	25	4.2
500	30	5,879	-6.0	-23.4	25	5.6
450	30	6,697	-11.0	-27.2	25	7.7
400	30	7,591	-17.1	-31.7	26	9.8
350	30	8,583	-23.7	-37.6	26	13.7
300	30	9,688	-32.0	-43.1	27	15.0
250	30	10,950	-41.8		27	17.8
200	30	12,425	-53.2		28	21.2
175	30	13,274	-59.0		28	21.8
150	30	14,227	-65.3		28	21.3
125	29	15,317	-71.2		29	21.0
100	29	16,622	-75.6		29	16.7
80	29	17,908	-76.9		30	10.7
70	29	18,677	-75.5		31	7.5
60	29	19,580	-70.5		32	3.6
50	28	20,678	-64.0		27	1.2
40	26	22,060	-59.5		03	2.1
30	26	23,885	-53.8		05	.7
25	26	25,065	-50.3		13	1.4
20	25	26,538	-45.3		36	.5
15	23	28,475	-42.0		34	2.3
10	6	31,231	-39.4			

MIAMI, FLA. 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	21.3	16.8	09	1.3
1000	30	144	20.9	15.8	10	2.5
950	30	587	18.0	13.3	12	3.4
900	30	1,048	15.3	9.8	15	2.5
850	30	1,531	13.1	6.2	20	2.0
800	30	2,040	12.0	-2.2	24	2.5
750	30	2,579	10.2	-5.8	26	4.7
700	30	3,150	7.7	-10.2	26	6.2
650	30	3,758	4.4	-14.2	27	7.3
600	30	4,404	.5	-17.5	27	9.4
550	30	5,096	-4.2	-21.1	27	11.6
500	30	5,840	-9.3	-24.7	27	13.4
450	30	6,647	-14.4	-29.2	27	16.5
400	30	7,530	-20.3	-34.0	27	18.4
350	30	8,509	-27.0	-39.3	27	20.8
300	30	9,599	-35.3	-47.9	28	24.3
250	30	10,843	-44.9		28	28.9
200	30	12,302	-54.9		29	35.4
175	30	13,146	-59.8		29	37.8
150	30	14,098	-64.6		28	32.9
125	30	15,201	-68.3		28	28.4
100	30	16,529	-71.7		28	20.5
80	30	17,837	-73.9		27	12.9
70	29	18,619	-72.2		27	8.0
60	28	19,533	-69.5		27	3.9
50	28	20,634	-64.2		34	1.6
40	25	22,014	-60.5		02	1.9
30	24	23,831	-54.3		02	1.8
25	22	25,008	-50.5		01	1.9
20	22	26,477	-46.6		03	1.2
15	18	28,411	-42.8		22	1.1
10	9	31,182	-36.6			

MIDLAND, TEXAS 913 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	874	7.9	2.0	05	.8
1000						
950						
900	30	993	9.7	3.4	09	1.0
850	30	1,468	9.6	-.8	21	1.6
800	30	1,971	8.4	-5.7	26	3.5
750	30	2,501	5.3	-9.4	27	5.7
700	30	3,061	1.6	-14.1	27	7.8
650	30	3,654	-2.3	-17.5	26	10.6
600	30	4,284	-6.8	-22.9	25	14.1
550	30	4,957	-11.7	-26.9	25	17.7
500	30	5,680	-16.5	-32.1	25	20.7
450	28	6,470	-21.8	-37.6	26	23.3
400	28	7,327	-27.9	-42.7	26	27.7
350	28	8,276	-34.7	-48.0	26	32.6
300	28	9,333	-42.0	-50.4	26	36.4
250	28	10,546	-50.2		26	40.0
200	28	11,982	-56.0		26	45.1
175	27	12,827	-57.2		26	44.0
150	26	13,797	-58.9		26	40.0
125	26	14,937	-60.9		26	33.6
100	25	16,310	-64.1		26	28.0
80	22	17,667	-65.0		27	17.0
70	21	18,478	-64.7		25	12.2
60	20	19,420	-63.6		26	6.3
50	19	20,548	-61.9		24	3.4
40	19	21,938	-59.3		24	1.0
30	19	23,761	-54.9		36	2.0
25	18	24,936	-52.6		35	2.1
20	17	26,383	-49.4		28	3.6
15	17	28,26[illegible]	-45.4		27	8.4
10	12	31,019	-39.1			

MONTERREY, MEXICO 961 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	423	16.9	13.0	06	.5
1000						
950	29	544	17.6	12.8	09	1.5
900	29	1,006	16.4	9.3	14	2.5
850	29	1,492	14.8	5.3	16	3.4
800	29	2,004	13.8	-1.4	23	4.0
750	29	2,546	12.0	-6.4	25	6.0
700	29	3,120	8.5	-10.4	25	9.5
650	29	3,728	4.6	-14.7	25	11.9
600	29	4,375	.2	-18.9	24	13.8
550	29	5,065	-4.8	-22.0	25	16.1
500	29	5,807	-10.3	-26.9	25	18.9
450	29	6,610	-15.8	-31.8	25	20.6
400	29	7,487	-21.9	-36.4	26	25.2
350	28	8,459	-28.3	-42.2	26	29.8
300	28	9,545	-36.0	-48.6	26	35.2
250	28	10,789	-44.6		26	42.5
200	28	12,251	-54.1		26	44.3
175	28	13,098	-59.0		26	41.8
150	28	14,053	-64.5		26	40.7
125	28	15,155	-68.1		26	34.6
100	28	16,485	-71.7		27	24.7
80	27	17,795	-73.4		26	15.9
70	25	18,581	-71.7		26	10.5
60	25	19,494	-69.2		26	5.1
50	25	20,598	-63.9		24	2.4
40	25	21,978	-60.5		25	1.9
30	25	23,792	-55.2		05	.7
25	24	24,967	-51.7		07	1.4
20	24	26,428	-47.7		05	.5
15	24	28,344	-44.4		27	1.7
10	15	31,071	-38.8			

MONETT, MO. 961 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	438	8.0	5.3	22	.7
1000						
950	30	536	8.8	4.7	25	1.5
900	30	983	7.6	1.9	26	4.2
850	30	1,453	5.3	-.1	27	6.1
800	30	1,947	2.7	-3.5	28	7.5
750	30	2,467	.0	-8.0	28	9.0
700	30	3,017	-2.5	-13.7	28	10.5
650	30	3,602	-5.7	-17.5	27	11.3
600	30	4,225	-9.7	-21.0	27	12.9
550	30	4,891	-14.3	-25.2	26	14.1
500	30	5,607	-19.1	-30.0	26	16.8
450	29	6,383	-24.8	-35.4	26	18.5
400	29	7,229	-31.1	-41.5	26	20.6
350	29	8,165	-37.9	-46.1	26	23.2
300	29	9,207	-45.2		25	27.4
250	28	10,406	-51.7		25	32.1
200	28	11,838	-55.8		26	32.8
175	28	12,689	-55.4		26	31.4
150	28	13,671	-55.9		26	30.3
125	28	14,825	-57.9		26	27.2
100	27	16,234	-59.8		26	19.2
80	27	17,623	-61.1		26	13.9
70	27	18,451	-61.2		26	9.9
60	27	19,410	-60.7		26	5.8
50	26	20,550	-60.0		27	3.1
40	26	21,947	-58.8		26	2.8
30	24	23,766	-56.1		29	2.1
25	23	24,926	-54.2		28	2.2
20	22	26,363	-51.4		28	3.4
15	21	28,245	-48.2		27	8.5
10	9	30,912	-42.0			

MONTGOMERY, ALA. 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	57	12.5	8.3	18	.6
1000	26	151	12.9	7.2	16	2.1
950	30	568	12.2	5.7	21	3.9
900	30	1,019	9.6	3.7	23	6.0
850	30	1,492	7.3	-1.4	23	6.6
800	30	1,991	6.4	-6.4	24	8.5
750	30	2,518	4.4	-9.3	25	10.7
700	30	3,078	1.7	-11.2	25	13.3
650	30	3,672	-1.4	-14.6	26	15.7
600	30	4,305	-5.5	-17.9	26	18.0
550	30	4,982	-9.8	-21.5	26	21.1
500	30	5,711	-14.6	-28.5	26	22.7
450	30	6,501	-20.0	-31.8	26	25.4
400	30	7,364	-26.1	-37.2	26	26.7
350	30	8,321	-32.6	-44.3	26	30.1
300	30	9,386	-40.3	-47.9	26	33.4
250	30	10,606	-48.8		26	37.6
200	30	12,047	-56.4		27	40.8
175	30	12,889	-59.0		27	44.4
150	30	13,852	-60.8		28	39.2
125	30	14,984	-62.2		27	28.5
100	30	16,347	-66.4		26	20.5
80	30	17,692	-67.2		27	15.6
70	30	18,500	-66.3		27	9.4
60	30	19,437	-64.7		28	4.6
50	28	20,557	-62.9		28	2.4
40	27	21,939	-60.2		34	1.5
30	27	23,752	-55.9		01	1.4
25	27	24,922	-52.5		34	1.1
20	26	26,370	-49.4		29	2.9
15	25	28,265	-45.3		27	8.9
10	18	31,025	-38.6		27	16.0

NASHVILLE, TENN. 993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	180	9.9	7.1	19	1.2
1000	7	199	6.9	1.0		
950	30	549	10.1	4.6	21	5.2
900	30	997	7.5	3.2	23	7.0
850	30	1,466	4.8	-.2	25	7.6
800	30	1,959	2.7	-4.1	25	8.4
750	30	2,479	.2	-7.8	26	10.8
700	30	3,031	-1.9	-12.4	26	12.6
650	30	3,618	-4.8	-15.4	26	14.4
600	30	4,243	-8.5	-19.2	26	15.9
550	30	4,912	-12.9	-25.1	26	18.0
500	30	5,632	-17.8	-30.4	27	19.4
450	30	6,413	-22.9	-34.8	27	20.6
400	30	7,266	-28.9	-40.8	26	24.6
350	30	8,210	-36.5	-46.9	26	28.2
300	30	9,264	-43.6	-47.5	26	31.7
250	30	10,475	-50.4		26	35.9
200	25	11,867	-54.9		26	39.9
175	25	12,718	-56.0		26	39.7
150	25	13,698	-56.6		26	34.8
125	25	14,849	-58.4		26	28.4
100	24	16,240	-61.5		26	23.9
80	24	17,621	-62.1		26	16.4
70	24	18,447	-61.6		26	10.4
60	24	19,403	-61.5		26	6.6
50	24	20,537	-60.3		26	3.8
40	24	21,932	-59.4		27	2.1
30	23	23,744	-56.0		34	1.5
25	23	24,909	-54.2		31	.9
20	21	26,353	-51.2		28	3.8
15	16	28,264	-47.4		27	7.6
10	7	30,976	-41.0			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* NOME, ALASKA 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	5	-8.3	-11.5	05	2.1
1000	28	121	-7.0	-11.2	07	1.9
950	30	512	-7.7	-11.3	11	2.3
900	30	931	-9.4	-13.4	09	1.3
850	30	1,372	-10.9	-16.5	08	1.4
800	30	1,836	-13.3	-19.3	11	.9
750	30	2,325	-16.0	-22.5	10	.5
700	30	2,841	-19.1	-26.3	13	.4
650	30	3,389	-22.6	-30.4	21	.5
600	30	3,972	-26.2	-34.3	23	.7
550	30	4,597	-30.3	-38.5	25	.9
500	30	5,268	-35.0	-43.2	25	1.2
450	29	5,997	-39.9	-44.8	25	1.8
400	29	6,792	-45.2		28	1.8
350	29	7,677	-50.0		26	2.1
300	29	8,674	-52.7		25	3.2
250	29	9,853	-51.0		23	3.2
200	29	11,316	-48.2		22	3.8
175	29	12,196	-48.4		22	3.5
150	29	13,211	-48.5		22	3.6
125	29	14,409	-49.0		21	3.7
100	29	15,872	-49.9		22	3.8
80	29	17,326	-51.3		20	4.2
70	27	18,191	-51.3		21	3.8
60	27	19,193	-51.4		21	3.5
50	27	20,376	-51.7		20	3.5
40	25	21,818	-52.4		22	2.5
30	25	23,673	-53.6		23	2.2
25	25	24,845	-53.8		24	2.5
20	23	26,272	-54.4		27	1.0
15	19	28,121	-53.7		30	1.8
10	13	30,728	-52.2		32	3.2
7	5	33,079	-50.1			

NORTH PLATTE, NEBR. 915 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	847	1.8	-1.5	35	1.4
1000						
950						
900	28	990	3.3	-1.7	34	3.7
850	30	1,443	3.2	-4.8	33	5.1
800	30	1,932	.7	-6.5	32	5.3
750	30	2,448	-2.1	-10.3	31	5.8
700	30	2,993	-5.5	-12.6	29	6.9
650	30	3,571	-9.2	-16.1	29	7.4
600	30	4,166	-12.8	-21.3	29	7.7
550	30	4,845	-16.9	-26.7	28	8.1
500	30	5,553	-22.0	-31.3	28	8.5
450	30	6,320	-27.3	-35.9	27	9.1
400	30	7,157	-33.7	-41.9	26	9.7
350	30	8,083	-40.9	-48.2	25	11.1
300	30	9,111	-48.4		26	11.5
250	30	10,292	-55.1		27	15.5
200	30	11,711	-55.8		27	17.0
175	29	12,562	-54.5		27	16.8
150	29	13,550	-54.1		27	15.4
125	28	14,712	-54.5		27	15.2
100	28	16,139	-55.9		26	11.3
80	27	17,558	-57.1		26	8.3
70	27	18,401	-58.0		26	7.4
60	27	19,373	-58.1		26	5.6
50	27	20,520	-58.4		27	4.0
40	27	21,927	-57.6		27	2.4
30	27	23,752	-55.5		30	1.7
25	26	24,926	-54.6		30	1.8
20	25	26,366	-52.6		28	3.2
15	22	28,240	-49.9		29	5.4
10	15	30,938	-43.6		27	10.6

OAKLAND, CALIF. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	6	10.6	6.4	31	1.4
1000	30	146	11.2	3.6	32	2.1
950	30	574	11.2	-1.1	33	3.5
900	30	1,025	10.3	-5.6	35	5.2
850	30	1,499	8.6	-9.9	35	6.3
800	30	1,998	5.5	-13.1	34	6.2
750	30	2,522	2.8	-16.1	33	7.4
700	30	3,077	-.6	-18.9	33	8.9
650	30	3,665	-4.0	-20.8	33	11.0
600	30	4,292	-7.8	-24.2	33	12.9
550	30	4,963	-12.4	-28.3	33	14.0
500	30	5,684	-17.7	-32.8	33	15.4
450	30	6,463	-23.6	-36.9	33	16.5
400	30	7,312	-30.3	-42.7	32	18.1
350	30	8,251	-37.7	-48.2	32	19.9
300	30	9,292	-45.8		32	20.8
250	29	10,484	-54.4		32	21.6
200	29	11,894	-59.8		31	20.0
175	29	12,728	-59.4		31	20.5
150	29	13,696	-58.4		30	19.5
125	28	14,847	-59.1		30	17.3
100	27	16,241	-61.5		30	14.6
80	27	17,620	-62.4		30	10.8
70	26	18,443	-61.0		30	8.2
60	26	19,402	-60.8		30	5.3
50	26	20,537	-60.3		30	3.9
40	22	21,937	-58.4		30	2.5
30	20	23,756	-56.8		27	2.5
25	19	24,913	-55.1		28	3.9
20	18	26,341	-52.8		27	5.8
15	15	28,223	-49.6		27	9.0
10	9	30,978	-41.0			

OMAHA, NEBR. 964 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	403	5.0	1.1	01	.7
1000						
950	30	522	6.0	-.4	32	1.1
900	30	966	5.5	-3.7	29	3.0
850	30	1,431	3.1	-5.7	29	4.1
800	30	1,920	.8	-8.3	30	4.8
750	30	2,437	-1.7	-13.2	30	4.8
700	30	2,982	-5.1	-16.6	30	4.9
650	30	3,561	-8.4	-18.7	29	6.3
600	30	4,178	-11.9	-22.2	28	8.0
550	30	4,840	-16.1	-26.2	27	9.1
500	30	5,550	-21.0	-30.7	26	10.0
450	30	6,320	-26.4	-36.9	26	11.9
400	30	7,160	-32.8	-41.9	26	12.3
350	30	8,089	-39.9	-48.4	26	12.4
300	30	9,122	-47.6		27	13.5
250	30	10,306	-54.6		26	17.6
200	30	11,726	-56.2		26	21.6
175	30	12,578	-54.5		26	19.9
150	30	13,569	-53.4		26	17.6
125	30	14,740	-54.8		26	15.8
100	30	16,162	-56.0		26	13.5
80	30	17,578	-57.0		26	10.2
70	30	18,423	-57.6		26	8.0
60	30	19,394	-58.1		27	5.6
50	30	20,544	-57.8		26	4.3
40	29	21,952	-57.2		26	2.4
30	29	23,777	-56.1		27	2.2
25	29	24,940	-54.7		29	2.7
20	25	26,378	-52.8		28	4.6
15	21	28,248	-50.1		28	5.2
10	11	30,918	-44.3			

+ PAGO PAGO, AMERICAN SAMOA 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	5	30.2	25.4	08	3.2
1000	30	93	28.4	22.6	08	3.5
950	30	548	24.8	19.9	07	4.2
900	30	1,021	21.5	16.5	07	4.4
850	30	1,516	18.7	12.6	06	3.9
800	30	2,036	16.4	8.9	06	3.7
750	30	2,584	14.0	4.7	04	3.6
700	30	3,163	10.9	.9	04	3.0
650	30	3,778	7.6	-2.7	04	2.7
600	30	4,434	3.9	-7.2	04	2.5
550	30	5,136	-.3	-11.1	03	2.4
500	30	5,892	-4.8	-16.9	01	2.3
450	30	6,714	-9.3	-22.0	01	1.8
400	30	7,616	-14.9	-27.7	33	1.2
350	30	8,618	-21.2	-34.5	32	1.1
300	30	9,733	-29.6	-42.1	31	1.5
250	30	11,007	-40.0	-49.7	28	2.0
200	30	12,490	-52.5		26	2.8
175	30	13,339	-59.5		25	3.0
150	30	14,286	-67.5		25	3.8
125	30	15,364	-75.1		23	2.7
100	30	16,637	-80.3		20	1.0
80	30	17,898	-78.2		09	2.4
70	30	18,670	-73.7		09	5.9
60	30	19,581	-69.4		09	9.6
50	30	20,681	-64.8		09	12.5
40	30	22,061	-59.8		08	12.5
30	30	23,889	-52.4		08	10.3
25	29	25,073	-50.1		09	9.4
20	29	26,539	-47.1		09	8.6
15	25	28,461	-43.8		09	7.7
10	19	31,206	-38.8		09	9.0
7	5	33,697	-34.9			

* PEORIA, ILL. 988 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	200	6.8	3.6	16	.8
1000						
950	30	523	7.3	1.5	23	2.1
900	30	967	5.4	-1.3	25	3.5
850	30	1,432	3.1	-4.1	26	4.3
800	30	1,922	.5	-7.6	27	4.9
750	30	2,438	-2.1	-10.8	27	4.7
700	30	2,983	-5.5	-15.2	27	5.8
650	30	3,561	-8.5	-17.8	27	7.4
600	30	4,178	-11.7	-21.0	26	9.9
550	30	4,840	-15.6	-26.1	27	11.4
500	30	5,552	-20.8	-31.1	26	12.3
450	30	6,323	-26.2	-35.6	26	13.3
400	30	7,164	-32.6	-41.8	26	15.1
350	30	8,094	-39.6	-45.1	26	16.5
300	30	9,129	-47.0		26	19.3
250	30	10,319	-53.1		26	23.1
200	30	11,746	-55.6		26	24.0
175	30	12,596	-55.8		26	23.5
150	30	13,580	-54.7		26	21.6
125	30	14,745	-55.5		26	19.8
100	29	16,163	-57.1		26	15.0
80	26	17,571	-58.4		26	12.0
70	25	18,406	-58.7		26	8.8
60	25	19,375	-58.8		26	6.1
50	25	20,520	-58.9		25	4.3
40	25	21,922	-58.1		26	3.0
30	24	23,743	-56.1		27	2.1
25	24	24,906	-54.7		27	2.4
20	23	26,341	-52.4		28	3.8
15	22	28,220	-48.7		28	5.7
10	19	30,919	-42.1		27	12.5
7	17	33,389	-35.5		27	22.5
5	6	35,788	-30.2			

* PITTSBURGH, PA. 971 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	359	6.5	2.3	19	1.0
1000						
950	30	538	6.8	1.9	23	2.7
900	30	981	5.0	-.2	26	4.6
850	30	1,446	2.0	-2.4	27	5.5
800	30	1,934	-.3	-5.3	26	5.6
750	30	2,448	-2.8	-9.5	26	6.4
700	30	2,992	-5.5	-13.0	26	8.2
650	30	3,571	-8.3	-17.1	27	9.4
600	30	4,188	-11.7	-21.3	27	10.3
550	30	4,850	-15.8	-26.4	27	11.9
500	30	5,562	-20.2	-31.5	27	12.7
450	30	6,335	-25.5	-35.9	26	14.5
400	30	7,179	-31.7	-40.4	26	15.7
350	30	8,112	-38.6	-44.0	26	17.4
300	30	9,152	-45.7		26	20.5
250	30	10,351	-51.6		26	25.3
200	30	11,786	-54.7		27	28.1
175	30	12,640	-54.8		27	26.3
150	29	13,627	-55.7		27	23.8
125	29	14,788	-55.9		26	21.0
100	29	16,203	-57.5		26	17.0
80	29	17,608	-58.7		26	10.4
70	29	18,446	-59.2		26	7.5
60	29	19,411	-59.5		27	6.5
50	29	20,553	-59.3		28	3.9
40	28	21,953	-58.3		27	2.2
30	25	23,772	-55.9		28	2.0
25	24	24,940	-54.6		28	2.4
20	20	26,374	-52.7		27	3.2
15	19	28,240	-49.7		26	6.0
10	18	30,920	-44.6		27	13.0
7	12	33,316	-37.6			

+ PONAPE, CAROLINE IS. 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	39	28.0	24.2	07	4.5
1000	30	84	26.7	23.0	07	5.3
950	30	537	23.1	21.1	08	10.0
900	30	1,008	19.9	17.9	08	10.9
850	30	1,500	17.5	13.3	09	11.1
800	30	2,018	16.0	6.9	09	8.8
750	30	2,566	13.6	4.2	09	6.8
700	30	3,144	10.2	1.4	10	6.5
650	30	3,757	6.4	-1.3	10	5.9
600	30	4,410	3.1	-5.0	10	5.1
550	30	5,112	-.3	-9.8	10	3.8
500	30	5,869	-4.4	-15.4	10	3.2
450	30	6,692	-9.1	-20.2	08	2.7
400	30	7,595	-14.2	-25.6	07	1.7
350	30	8,599	-20.7	-32.1	28	.9
300	30	9,718	-28.9	-40.1	24	3.6
250	30	10,994	-39.7	-50.2	23	4.8
200	30	12,479	-52.2		22	7.3
175	30	13,330	-59.0		24	7.5
150	30	14,280	-66.7		27	7.8
125	30	15,360	-74.8		28	7.5
100	29	16,634	-81.0		29	3.3
80	28	17,886	-80.6		08	6.0
70	28	18,648	-75.9		09	7.3
60	28	19,555	-69.8		10	5.2
50	28	20,657	-64.0		17	1.0
40	27	22,048	-58.0		26	3.5
30	21	23,881	-52.8		28	6.8
25	19	25,068	-49.9		27	7.3
20	18	26,539	-46.7		26	8.2
15	15	28,447	-45.1		26	5.3
10	10	31,189	-40.4			

PORTLAND, MAINE 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	20	4.4	-1.1	33	1.4
1000	25	130	5.5	-3.1	33	2.1
950	30	523	3.9	-4.0	31	3.0
900	30	961	1.7	-5.9	31	3.6
850	30	1,421	.4	-7.6	30	4.7
800	30	1,906	-1.2	-9.9	29	6.8
750	30	2,419	-3.0	-12.6	29	8.7
700	30	2,963	-5.6	-15.3	28	10.1
650	30	3,542	-8.6	-19.1	28	11.1
600	29	4,151	-12.3	-24.3	28	12.3
550	29	4,810	-16.6	-27.7	28	13.4
500	29	5,520	-21.5	-32.9	28	15.5
450	29	6,290	-26.5	-37.3	28	17.1
400	28	7,145	-32.4	-42.1	28	19.0
350	28	8,076	-39.3	-45.0	28	19.0
300	28	9,112	-46.9		27	22.1
250	28	10,304	-52.3		27	25.6
200	28	11,740	-53.5		27	21.4
175	28	12,598	-53.8		27	19.6
150	28	13,588	-53.9		27	18.3
125	28	14,759	-54.2		27	14.8
100	28	16,184	-56.5		27	11.7
80	27	17,594	-57.8		27	7.7
70	27	18,436	-58.2		28	6.1
60	26	19,403	-58.2		28	4.4
50	26	20,551	-57.9		30	4.0
40	26	21,959	-57.5		31	2.0
30	23	23,785	-55.8		31	1.7
25	20	24,947	-54.7		30	2.6
20	17	26,379	-53.1		30	2.6
15	14	28,233	-50.8		27	4.6
10	6	30,875	-46.2			

* QUILLAYUTE, WASH. 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	58	4.3	2.8	07	.2
1000	30	179	6.0	3.4	30	.4
950	30	598	4.7	.2	27	2.7
900	30	1,038	2.3	-3.6	27	3.3
850	30	1,497	-.2	-7.1	27	3.5
800	30	1,981	-2.3	-11.0	28	4.5
750	30	2,491	-4.2	-15.0	29	6.6
700	30	3,033	-6.7	-18.7	29	8.4
650	30	3,609	-9.6	-21.2	30	10.1
600	30	4,223	-13.1	-23.7	30	11.8
550	30	4,880	-17.5	-26.2	30	13.6
500	30	5,587	-22.2	-30.9	30	15.9
450	30	6,353	-27.7	-34.8	30	18.0
400	30	7,190	-33.9	-39.6	30	20.0
350	29	8,116	-40.9	-44.2	31	22.4
300	29	9,145	-48.3		30	23.4
250	29	10,326	-55.9		31	24.0
200	29	11,728	-60.0		30	21.6
175	29	12,564	-58.6		30	18.8
150	29	13,540	-56.4		30	14.6
125	28	14,696	-56.5		30	12.4
100	28	16,110	-57.2		30	8.8
80	28	17,521	-57.4		30	6.8
70	28	18,365	-57.4		30	5.8
60	28	19,339	-57.7		30	5.1
50	27	20,490	-58.1		30	3.6
40	27	21,897	-57.8		32	3.2
30	25	23,720	-56.8		32	2.3
25	25	24,878	-56.1		32	1.5
20	24	26,305	-55.0		30	1.7
15	24	28,153	-52.7		30	1.7
10	21	30,798	-48.2		29	4.4
7	13	33,204	-40.2			

RAPID CITY, S. DAK. 902 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	966	1.9	-3.1	33	4.1
1000						
950						
900	21	1,021	.8	-4.5	33	3.3
850	30	1,445	2.6	-5.6	33	6.5
800	30	1,934	-.4	-7.4	33	6.9
750	30	2,447	-3.6	-9.9	33	6.3
700	30	2,988	-7.2	-13.6	32	6.4
650	30	3,563	-10.4	-18.1	31	7.2
600	30	4,175	-14.2	-22.9	30	7.9
550	30	4,830	-18.5	-27.4	30	8.8
500	30	5,534	-23.2	-32.5	29	9.0
450	30	6,298	-28.7	-37.7	29	9.8
400	30	7,130	-35.3	-43.1	28	9.7
350	30	8,049	-42.3	-47.0	28	9.9
300	30	9,071	-49.8		28	11.5
250	30	10,246	-56.2		28	12.5
200	29	11,666	-55.9		28	13.0
175	29	12,521	-53.8		28	11.7
150	28	13,509	-54.2		27	11.8
125	28	14,679	-54.4		27	10.4
100	27	16,103	-55.8		27	8.4
80	25	17,523	-57.0		27	6.5
70	25	18,367	-57.6		27	6.2
60	23	19,339	-57.1		27	5.3
50	23	20,492	-57.8		27	3.7
40	23	21,899	-57.9		28	3.5
30	21	23,720	-56.2		29	2.4
25	21	24,882	-55.1		30	2.4
20	19	26,313	-54.1		30	2.5
15	17	28,185	-51.8		29	3.9
10	10	30,823	-47.2			

ST CLOUD, MINN. 977 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	316	1.7	-2.4	05	.6
1000						
950	30	538	3.1	-4.0	06	1.0
900	30	975	1.3	-6.0	07	.6
850	30	1,433	-.6	-8.8	35	1.4
800	30	1,916	-3.1	-11.1	33	2.2
750	30	2,425	-5.4	-14.3	30	3.2
700	30	2,963	-8.4	-16.8	29	4.6
650	30	3,536	-11.3	-19.3	29	6.2
600	30	4,146	-14.8	-22.7	28	7.2
550	30	4,800	-18.8	-26.8	28	8.7
500	30	5,504	-23.2	-31.5	27	9.4
450	30	6,267	-28.7	-36.6	26	10.5
400	30	7,099	-35.2	-42.7	26	12.7
350	30	8,019	-42.2	-46.1	26	15.7
300	30	9,041	-50.2		26	16.7
250	30	10,214	-56.0		26	19.0
200	30	11,636	-54.8		26	15.2
175	30	12,492	-53.8		26	13.3
150	30	13,486	-52.8		26	12.2
125	30	14,661	-53.5		27	10.3
100	30	16,093	-54.6		26	8.1
80	30	17,517	-55.9		26	7.2
70	30	18,367	-56.2		26	6.7
60	30	19,345	-56.8		26	5.2
50	30	20,499	-57.4		26	3.9
40	27	21,907	-57.6		26	2.7
30	26	23,732	-55.9		28	2.0
25	26	24,894	-55.1		28	2.1
20	24	26,312	-53.7		29	2.6
15	15	28,181	-51.5		28	3.8
10	11	30,816	-46.7		28	5.9

* ST PAUL IS., ALASKA 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	10	-3.6	-5.3	03	4.0
1000	22	152	-4.9	-6.8	01	3.8
950	30	500	-6.4	-7.4	03	3.5
900	30	921	-8.4	-11.6	02	2.6
850	30	1,363	-9.7	-14.5	02	2.0
800	30	1,829	-11.7	-18.3	01	1.9
750	30	2,322	-14.0	-21.4	36	1.6
700	30	2,843	-16.9	-25.2	34	2.0
650	30	3,396	-20.0	-29.1	35	1.6
600	30	3,985	-23.6	-32.4	33	1.2
550	30	4,616	[illegible]	-36.8	30	1.5
500	30	5,295	-32.2	-40.7	29	2.2
450	29	6,024	-37.0	-41.2	27	3.8
400	29	6,830	-42.5	-43.0	27	4.5
350	29	7,724	-47.5		28	6.1
300	29	8,731	-51.4		27	6.5
250	29	9,912	-51.8		27	6.5
200	29	11,365	-50.0		26	6.3
175	29	12,240	-49.3		25	6.1
150	29	13,251	-49.2		25	6.1
125	29	14,448	-49.4		25	5.2
100	29	15,908	-50.1		23	5.4
80	29	17,363	-51.1		23	4.2
70	29	18,231	-51.5		22	4.2
60	28	19,228	-51.6		22	3.5
50	27	20,411	-52.0		22	3.7
40	27	21,856	-52.2		20	2.5
30	26	23,717	-52.4		21	1.9
25	26	24,896	-52.8		20	.8
20	26	26,335	-52.9		20	.5
15	24	28,189	-52.5		03	.6
10	18	30,838	-48.9		33	2.1

SALEM, ILL. 991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	174	8.8	6.0	19	1.1
1000						
950	30	527	8.7	3.6	23	3.5
900	30	973	6.1	.0	25	4.8
850	30	1,440	4.0	-3.6	25	6.0
800	30	1,931	1.5	-6.4	26	6.6
750	30	2,449	-1.3	-9.7	27	7.6
700	30	2,996	-3.8	-14.7	27	8.8
650	29	3,575	-6.7	-17.7	27	9.9
600	29	4,196	-10.6	-19.5	27	11.7
550	29	4,861	-14.8	-24.5	27	12.6
500	29	5,575	-19.6	-29.9	27	13.9
450	29	6,350	-25.1	-35.7	27	15.9
400	29	7,194	-31.5	-41.4	27	17.7
350	29	8,128	-38.4	-45.1	26	19.9
300	29	9,169	-45.5		26	23.9
250	29	10,366	-51.9		26	28.8
200	29	11,798	-55.5		26	29.5
175	28	12,659	-56.0		26	29.0
150	28	13,640	-55.7		26	27.4
125	28	14,801	-56.7		26	22.5
100	28	16,210	-58.5		26	17.9
80	28	17,608	-60.0		26	12.7
70	28	18,442	-59.7		26	8.6
60	28	19,406	-60.1		25	5.3
50	28	20,546	-59.3		26	4.2
40	28	21,947	-58.6		28	3.1
30	26	23,772	-55.9		27	[illegible]
25	23	24,940	-53.6		28	2.7
20	23	26,383	-51.4		28	4.5
15	20	28,286	-47.9		28	7.6
10	10	30,975	-41.[illegible]			

SALEM, OREG. 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	61	4.7	.6	22	.6
1000	30	181	7.5	3.0	32	.4
950	30	603	6.1	.9	33	1.2
900	30	1,045	3.9	-1.6	31	1.8
850	30	1,507	1.6	-6.4	31	3.3
800	30	1,994	-.3	-10.4	31	4.7
750	30	2,509	-2.1	-13.9	31	6.3
700	30	3,055	-4.8	-17.4	31	8.4
650	30	3,634	-8.0	-21.1	31	9.6
600	30	4,252	-11.9	-24.2	32	11.2
550	30	4,912	-16.3	-27.7	32	12.8
500	30	5,623	-21.2	-31.4	32	14.7
450	30	6,392	-26.5	-35.2	32	17.6
400	30	7,232	-32.9	-40.7	32	19.5
350	29	8,166	-39.5	-45.5	32	20.7
300	29	9,200	-47.3		32	21.4
250	29	10,385	-55.4		32	21.1
200	29	11,786	-60.5		31	20.4
175	29	12,619	-59.3		31	17.9
150	29	13,591	-57.2		30	15.6
125	29	14,745	-57.3		30	13.5
100	29	16,153	-58.2		31	10.6
80	28	17,555	-58.8		30	7.9
70	28	18,393	-58.7		30	6.9
60	28	19,363	-58.3		30	5.3
50	28	20,511	-58.3		30	3.9
40	28	21,913	-58.6		30	3.0
30	27	23,724	-57.0		31	2.2
25	22	24,879	-56.3		33	2.3
20	22	26,300	-55.4		30	2.1
15	14	28,137	-53.0		30	4.4
10	9	30,797	-47.[illegible]			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SALT LAKE CITY, UTAH
870 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,288	4.8	-1.5	15	1.5
1000						
950						
900						
850	30	1,474	5.4	-4.7	14	1.2
800	30	1,967	2.4	-7.3	24	.6
750	30	2,486	-1.3	-9.3	29	1.8
700	30	3,031	-5.6	-11.7	32	3.3
650	30	3,608	-9.6	-14.9	31	5.2
600	30	4,222	-13.5	-19.7	31	6.8
550	30	4,879	-17.7	-24.3	30	7.6
500	30	5,586	-22.2	-29.2	30	7.8
450	30	6,352	-27.5	-34.4	30	8.5
400	30	7,189	-34.0	-40.7	29	8.5
350	30	8,113	-41.2	-47.1	30	9.7
300	30	9,139	-49.3		31	10.4
250	30	10,316	-55.7		30	12.9
200	30	11,731	-56.8		29	14.0
175	30	12,580	-55.6		29	14.1
150	30	13,564	-55.4		29	13.3
125	29	14,725	-56.2		29	12.6
100	27	16,138	-57.8		28	10.1
80	27	17,543	-58.7		28	8.8
70	27	18,381	-59.2		28	7.1
60	27	19,347	-59.1		28	5.4
50	26	20,492	-58.6		28	4.2
40	24	21,889	-58.6		28	3.3
30	21	23,703	-56.6		28	3.3
25	20	24,868	-55.8		27	3.2
20	20	26,294	-54.1		26	5.6
15	17	28,149	-50.3		27	8.0
10	12	30,813	-45.0		27	15.7
7	7	33,219	-40.9			
5						

SAN DIEGO, CALIF.
1000 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	124	11.1	7.6	05	.2
1000	18	140	11.8	4.8	04	.7
950	30	556	11.5	2.7	35	.7
900	30	1,008	11.0	-3.7	34	2.4
850	30	1,483	9.3	-8.0	34	3.8
800	29	1,986	7.1	-11.9	33	4.8
750	29	2,513	3.9	-15.0	33	5.7
700	29	3,069	.5	-18.8	32	7.8
650	29	3,660	-2.6	-21.9	31	10.3
600	29	4,291	-6.6	-25.3	31	11.3
550	29	4,964	-11.4	-29.1	30	12.4
500	29	5,687	-16.8	-33.7	30	14.7
450	29	6,471	-22.0	-38.2	30	16.7
400	29	7,326	-28.4	-43.6	30	19.0
350	29	8,271	-35.9	-49.4	30	20.7
300	29	9,321	-44.1		30	21.5
250	28	10,527	-52.4		30	22.0
200	28	11,948	-57.6		28	26.6
175	27	12,791	-57.3		28	25.8
150	26	13,762	-58.0		28	25.9
125	25	14,905	-60.3		28	23.0
100	25	16,286	-62.9		28	18.3
80	22	17,658	-64.1		28	14.5
70	22	18,477	-63.4		28	10.9
60	22	19,428	-62.4		28	6.1
50	22	20,557	-61.0		28	2.6
40	22	21,952	-58.6		26	1.7
30	22	23,777	-55.1		31	2.3
25	20	24,947	-52.9		30	2.6
20	17	26,395	-51.1		26	3.7
15	17	28,274	-48.6		27	8.1
10	9	31,041	-41.2			
7						
5						

SAN JUAN, P. R.
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	6	24.4	19.2	13	1.4
1000	30	134	23.4	19.3	09	2.5
950	30	581	20.3	17.1	09	4.2
900	30	1,047	17.2	13.3	09	4.3
850	30	1,533	14.3	8.3	09	4.0
800	30	2,045	13.5	.0	09	4.1
750	30	2,587	11.8	-5.3	08	3.6
700	30	3,161	9.1	-9.3	10	3.0
650	30	3,771	6.1	-13.1	11	1.8
600	30	4,422	2.2	-17.1	21	.3
550	30	5,119	-2.0	-20.6	26	1.6
500	30	5,870	-6.4	-25.4	27	3.0
450	30	6,685	-11.7	-29.0	27	4.9
400	30	7,577	-18.1	-34.0	27	7.6
350	30	8,564	-25.2	-39.3	27	10.0
300	29	9,661	-34.0	-47.2	27	11.0
250	29	10,911	-44.0		27	12.3
200	29	12,376	-53.8		27	16.2
175	29	13,224	-59.1		27	17.1
150	29	14,176	-65.4		28	15.7
125	29	15,271	-70.9		28	14.3
100	29	16,577	-74.8		29	10.0
80	29	17,867	-76.6		30	4.0
70	28	18,637	-74.9		30	2.0
60	27	19,541	-69.9		36	.4
50	26	20,639	-64.4		36	1.3
40	26	22,017	-60.0		05	2.0
30	25	23,843	-53.2		09	2.8
25	21	25,033	-49.7		11	3.4
20	20	26,505	-46.4		11	3.7
15	16	28,441	-41.7		10	3.2
10	8	31,189	-38.3			
7						
5						

* SAULT STE MARIE, MICH.
987 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	221	1.3	-2.7	05	1.6
1000						
950	30	529	1.4	-4.5	04	1.3
900	30	964	.2	-7.7	34	1.3
850	30	1,421	-2.0	-9.9	30	2.5
800	30	1,901	-3.9	-13.1	29	3.2
750	30	2,409	-6.3	-14.7	28	4.6
700	30	2,946	-8.8	-18.0	28	5.8
650	30	3,518	-11.4	-20.2	27	7.4
600	30	4,128	-14.4	-24.1	27	9.1
550	30	4,783	-18.1	-28.7	27	10.6
500	30	5,489	-22.7	-32.0	27	12.4
450	30	6,254	-27.8	-36.5	27	13.7
400	30	7,090	-33.9	-42.0	27	14.6
350	30	8,015	-40.7	-44.7	26	16.3
300	30	9,045	-48.5		26	17.7
250	29	10,227	-54.6		26	19.6
200	29	11,655	-54.1		26	17.8
175	29	12,516	-52.7		26	14.9
150	29	13,511	-52.6		26	13.5
125	29	14,691	-52.5		26	11.0
100	29	16,131	-53.2		26	9.6
80	29	17,562	-54.8		26	6.7
70	29	18,416	-55.5		25	5.9
60	29	19,397	-56.2		25	5.6
50	29	20,554	-56.9		26	3.7
40	29	21,967	-57.0		26	2.6
30	27	23,798	-55.6		26	1.6
25	27	24,963	-54.6		26	1.5
20	27	26,396	-53.2		26	2.9
15	26	28,257	-51.0		26	4.6
10	23	30,918	-46.5		27	7.3
7	14	33,335	-40.2		26	12.5
5	6	35,597	-36.2			

* SHREVEPORT, LA.
1004 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	12.2	9.2	20	.8
1000	22	139	11.9	8.4	23	1.3
950	30	547	12.9	7.4	22	4.3
900	30	1,000	10.4	5.3	22	6.2
850	30	1,475	8.6	.4	24	7.2
800	30	1,976	7.2	-4.2	25	8.4
750	30	2,505	4.9	-9.9	26	10.0
700	30	3,064	1.5	-12.5	26	11.8
650	30	3,658	-2.1	-17.3	27	14.2
600	30	4,289	-6.1	-21.6	26	16.8
550	30	4,964	-10.8	-25.6	26	19.4
500	30	5,689	-15.8	-32.0	26	23.7
450	30	6,476	-20.8	-35.8	26	26.8
400	30	7,336	-27.0	-40.4	26	29.4
350	30	8,289	-33.6	-46.9	26	33.1
300	30	9,350	-41.1	-48.4	26	38.2
250	29	10,569	-49.1		26	43.9
200	29	12,011	-55.3		26	49.2
175	29	12,859	-57.5		26	48.2
150	29	13,828	-59.3		26	43.2
125	29	14,966	-61.2		27	34.6
100	29	16,339	-64.8		26	25.4
80	29	17,697	-65.9		26	18.7
70	29	18,508	-65.6		26	13.5
60	29	19,448	-64.5		26	7.7
50	28	20,570	-61.4		26	3.8
40	28	21,961	-59.3		27	1.9
30	26	23,779	-55.1		31	2.0
25	22	24,960	-51.7		29	2.6
20	21	26,415	-49.2		28	5.9
15	17	28,320	-45.1		27	10.1
10	13	31,087	-38.4		28	13.5
7	7	33,615	-32.0			
5						

SPOKANE, WASH.
933 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	720	2.8	-3.3	20	2.1
1000						
950						
900	30	1,013	5.2	-5.1	24	2.8
850	30	1,478	3.1	-9.0	26	2.6
800	30	1,966	-.5	-10.7	27	3.1
750	30	2,479	-4.3	-12.7	28	4.6
700	30	3,018	-8.1	-16.4	28	5.5
650	30	3,590	-11.7	-20.7	30	6.4
600	30	4,199	-15.5	-25.5	30	8.1
550	30	4,850	-19.6	-29.7	30	9.9
500	30	5,552	-23.9	-35.0	30	11.7
450	29	6,311	-28.8	-40.1	30	12.4
400	29	7,144	-34.9	-44.5	30	14.9
350	29	8,065	-41.8	-48.4	31	16.3
300	29	9,090	-49.0		31	17.0
250	29	10,272	-54.6		31	19.6
200	29	11,687	-56.3		31	17.5
175	29	12,539	-54.2		31	15.3
150	29	13,529	-54.1		31	11.7
125	29	14,697	-55.2		30	9.9
100	29	16,117	-56.0		30	7.5
80	29	17,535	-56.7		29	5.6
70	29	18,382	-56.8		29	5.0
60	29	19,358	-56.8		29	4.5
50	29	20,513	-57.1		30	3.3
40	29	21,925	-57.0		29	3.1
30	29	23,751	-56.1		30	1.6
25	26	24,914	-55.3		31	1.9
20	25	26,342	-54.2		30	1.8
15	21	28,197	-51.9		29	2.2
10	14	30,847	-47.4		27	6.2
7						

* SWAN ISLAND, W. I.
1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	26.4	22.8	11	4.9
1000	30	106	26.0	22.4	11	5.8
950	30	557	22.3	19.9	12	8.0
900	30	1,026	19.3	15.2	12	6.8
850	30	1,517	17.0	9.8	11	5.2
800	30	2,033	14.8	4.3	11	3.8
750	30	2,577	12.3	-1.1	10	2.7
700	30	3,153	9.6	-6.3	10	2.1
650	30	3,765	6.9	-11.7	09	1.9
600	30	4,418	3.7	-16.3	09	1.4
550	30	5,119	-.7	-20.4	07	.4
500	30	5,874	-5.1	-23.9	31	1.3
450	30	6,694	-10.1	-28.0	30	2.4
400	30	7,590	-16.7	-33.4	30	4.6
350	30	8,582	-23.7	-39.0	30	6.1
300	30	9,687	-31.9	-46.4	30	7.8
250	30	10,949	-41.7		30	11.1
200	30	12,425	-53.1		30	13.7
175	30	13,273	-59.6		30	14.1
150	30	14,222	-66.1		29	13.6
125	30	15,311	-72.3		29	11.4
100	30	16,606	-76.9		29	5.7
80	29	17,881	-78.2		12	.3
70	29	18,646	-76.2		11	1.5
60	29	19,548	-70.6		07	1.8
50	29	20,647	-64.8		08	1.4
40	28	22,029	-59.1		36	.5
30	26	23,858	-53.3		03	1.0
25	26	25,041	-50.1		06	2.5
20	26	26,513	-45.9		08	3.5
15	25	28,447	-42.8		09	4.6
10	23	31,218	-37.8		10	7.9
7	13	33,700	-33.6			

TAMPA, FLA.
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	16.5	13.6	10	1.2
1000	30	146	17.9	12.4	10	2.7
950	30	584	15.7	9.2	15	3.0
900	30	1,042	13.7	4.7	20	3.4
850	30	1,522	12.0	.0	23	4.8
800	30	2,029	10.7	-5.0	24	6.7
750	30	2,566	9.3	-9.5	25	8.1
700	30	3,134	6.4	-12.7	26	9.0
650	30	3,738	2.9	-14.9	26	10.9
600	30	4,381	-1.3	-18.3	26	13.0
550	30	5,069	-5.6	-22.4	26	14.3
500	30	5,809	-10.7	-25.8	27	17.1
450	29	6,612	-15.8	-29.8	27	20.2
400	29	7,490	-21.7	-35.1	26	22.5
350	29	8,463	-28.4	-41.1	27	24.7
300	29	9,548	-36.2	-47.9	27	29.0
250	29	10,789	-45.5		28	34.6
200	29	12,242	-55.8		28	41.9
175	29	13,084	-60.2		29	40.7
150	29	14,037	-63.4		29	33.4
125	28	15,147	-66.8		29	26.9
100	28	16,483	-70.4		28	20.4
80	28	17,807	-71.0		27	10.4
70	28	18,598	-70.4		27	8.1
60	27	19,519	-67.7		27	3.7
50	27	20,627	-63.9		36	2.0
40	27	22,006	-60.6		02	2.0
30	27	23,823	-54.5		36	1.1
25	27	25,001	-50.6		35	1.6
20	26	26,468	-46.9		27	.5
15	21	28,392	-42.4		27	5.1
10	11	31,173	-36.3			
7						

TOPEKA, KANS.
981 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	268	7.1	4.2	30	.9
1000						
950	30	531	8.0	2.2	26	1.7
900	30	976	6.3	-.4	27	3.4
850	30	1,443	4.2	-4.0	29	4.9
800	30	1,935	1.9	-6.3	29	6.0
750	30	2,453	-.8	-8.4	28	6.9
700	30	3,001	-4.4	-12.5	28	7.6
650	30	3,582	-7.3	-16.7	28	7.8
600	30	4,201	-11.2	-20.6	27	8.7
550	30	4,863	-15.7	-24.8	27	9.2
500	30	5,576	-20.3	-31.1	27	9.5
450	30	6,348	-26.0	-36.7	26	9.7
400	30	7,189	-32.4	-43.2	26	10.7
350	30	8,120	-39.2	-46.6	26	12.7
300	30	9,157	-46.8		26	14.7
250	30	10,347	-53.2		25	19.7
200	30	11,773	-55.8		26	23.9
175	30	12,625	-54.8		26	23.8
150	29	13,608	-54.6		27	22.7
125	29	14,772	-56.0		26	20.5
100	29	16,185	-57.6		26	16.7
80	29	17,590	-59.0		26	11.2
70	28	18,426	-59.0		26	9.2
60	28	19,393	-59.2		26	7.4
50	26	20,531	-58.9		26	4.6
40	24	21,926	-58.3		26	4.5
30	23	23,742	-56.5		27	4.0
25	22	24,901	-55.0		26	5.0
20	22	26,334	-53.1		27	5.0
15	20	28,207	-49.9		27	8.7
10	12	30,860	-44.7		27	17.2
7						

+ TRUK, CAROLINE IS.
1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	2	28.8	24.4	05	5.7
1000	30	99	27.7	23.9	06	7.0
950	30	553	23.8	21.7	07	9.7
900	30	1,026	21.0	17.8	08	10.1
850	30	1,520	18.2	13.8	08	9.4
800	30	2,039	16.3	8.9	09	9.0
750	30	2,587	13.7	5.9	09	8.2
700	30	3,166	10.7	1.5	09	6.7
650	30	3,781	7.5	-2.2	09	6.4
600	30	4,436	3.9	-5.6	09	5.4
550	29	5,138	.0	-10.0	09	5.1
500	29	5,896	-4.0	-17.0	08	4.3
450	29	6,720	-8.7	-22.5	08	3.7
400	29	7,624	-14.2	-28.2	06	2.7
350	29	8,628	-20.5	-34.2	30	1.1
300	29	9,746	-29.3	-41.5	25	2.6
250	29	11,022	-39.7	-50.7	23	5.5
200	28	12,507	-52.2		22	7.8
175	28	13,358	-59.2		23	7.5
150	28	14,306	-66.8		26	7.1
125	27	15,386	-75.0		28	7.6
100	27	16,659	-81.0		33	2.2
80	27	17,909	-80.8		08	7.7
70	27	18,672	-75.1		08	8.9
60	26	19,579	-69.7		10	6.4
50	25	20,677	-64.2		11	1.4
40	25	22,067	-57.5		27	3.3
30	24	23,904	-53.4		28	6.0
25	22	25,088	-50.3		28	6.7
20	20	26,553	-47.3		27	5.7
15	19	28,469	-43.7		24	2.5
10	13	31,226	-39.8		13	3.4
7						

* TUCSON, ARIZ.
922 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	789	9.2	-1.9	15	2.1
1000						
950						
900	30	994	13.7	-5.0	15	1.6
850	30	1,472	10.9	-7.9	21	.6
800	30	1,974	7.1	-9.5	24	2.0
750	30	2,501	3.1	-12.3	25	2.6
700	30	3,056	-.4	-16.0	25	4.2
650	30	3,644	-4.4	-20.6	26	6.5
600	30	4,270	-8.4	-25.5	26	9.1
550	30	4,940	-12.6	-29.6	27	12.6
500	30	5,660	-17.5	-33.4	27	15.5
450	30	6,441	-23.3	-38.3	27	17.5
400	30	7,291	-29.8	-43.5	27	20.2
350	30	8,233	-36.3	-48.8	27	24.2
300	30	9,284	-43.3		27	30.0
250	30	10,492	-50.4		26	34.0
200	30	11,929	-55.2		26	36.2
175	29	12,784	-56.0		26	37.8
150	29	13,761	-57.2		27	33.4
125	29	14,906	-60.5		26	28.6
100	29	16,285	-63.6		26	24.0
80	28	17,652	-64.4		26	15.3
70	27	18,467	-63.9		27	11.2
60	26	19,416	-63.3		27	7.0
50	26	20,540	-61.5		27	3.1
40	26	21,931	-58.9		28	1.9
30	25	23,750	-55.3		28	2.2
25	25	24,920	-52.8		27	3.6
20	24	26,369	-50.6		28	6.4
15	20	28,273	-46.6		27	10.0
10	18	31,003	-39.8		27	14.7
7	12	33,446	-33.4			
5						

* VANDENBERG AFB, CALIF.
1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	100	9.3	6.5	34	1.7
1000	29	147	9.7	6.2	34	2.6
950	30	572	10.4	1.4	35	5.6
900	30	1,022	10.5	-3.2	36	6.2
850	30	1,496	8.5	-7.6	35	6.9
800	30	1,995	6.2	-11.9	34	7.5
750	30	2,522	3.7	-14.9	33	8.4
700	30	3,078	.3	-17.6	33	9.3
650	30	3,669	-2.9	-21.0	33	10.9
600	30	4,298	-7.1	-24.5	33	12.1
550	30	4,971	-11.6	-28.7	33	13.6
500	30	5,694	-17.0	-32.8	32	14.4
450	30	6,475	-23.0	-37.7	32	15.9
400	30	7,327	-29.7	-43.1	32	18.1
350	30	8,267	-37.1	-48.4	31	18.3
300	30	9,312	-45.3		31	21.0
250	30	10,505	-53.9		31	21.4
200	30	11,916	-59.5		30	22.4
175	30	12,750	-59.4		29	22.8
150	30	13,717	-59.0		29	21.6
125	30	14,857	-60.5		28	20.4
100	30	16,238	-63.3		29	16.1
80	30	17,608	-63.5		29	12.2
70	30	18,428	-63.4		28	8.7
60	30	19,378	-62.5		29	6.5
50	29	20,505	-61.4		28	5.3
40	29	21,895	-59.9		29	2.2
30	29	23,706	-56.8		28	3.1
25	29	24,867	-54.9		29	4.5
20	29	26,302	-52.2		27	6.7
15	28	28,182	-48.7		27	10.3
10	26	30,887	-42.3		27	15.4
7	22	33,354	-35.4			
5						

VICTORIA, TEXAS
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	33	15.2	13.5	11	1.6
1000	29	111	16.6	12.8	12	2.3
950	30	545	15.3	10.1	16	4.8
900	30	1,003	13.6	5.2	19	6.3
850	30	1,484	12.2	.8	20	6.7
800	30	1,991	10.2	-2.2	22	7.3
750	30	2,526	7.9	-7.3	24	8.1
700	30	3,092	5.4	-11.5	25	10.2
650	30	3,694	1.6	-14.0	26	13.0
600	30	4,334	-2.6	-20.1	26	16.0
550	30	5,017	-7.4	-24.3	26	19.1
500	30	5,752	-12.8	-28.2	26	21.5
450	30	6,547	-18.4	-34.1	26	25.0
400	30	7,415	-24.5	-36.9	26	28.3
350	30	8,378	-31.2	-43.3	26	33.2
300	30	9,450	-39.0	-48.6	26	37.2
250	30	10,679	-46.9		26	46.1
200	30	12,131	-55.0		26	51.2
175	30	12,977	-58.9		26	51.1
150	30	13,936	-62.4		26	45.5
125	30	15,054	-65.2		26	37.2
100	30	16,406	-67.9		27	25.9
80	29	17,734	-69.9		26	15.3
70	29	18,530	-70.0		25	12.0
60	28	19,452	-67.3		26	7.4
50	27	20,566	-62.6		24	2.9
40	26	21,949	-60.1		26	2.6
30	26	23,768	-54.8		03	1.2
25	26	24,942	-51.8		34	1.8
20	26	26,402	-47.8		32	1.7
15	23	28,320	-44.2		27	6.6
10	16	31,055	-38.6		26	10.9
7						
5						

* WAKE IS., PACIFIC AREA
1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	25.3	21.1	07	8.2
1000	30	155	23.9	19.4	07	9.5
950	30	602	20.1	17.8	08	10.7
900	30	1,068	17.1	13.7	08	10.0
850	30	1,554	13.8	9.1	09	9.2
800	30	2,064	12.5	.0	09	8.3
750	30	2,604	10.8	-5.8	08	7.4
700	30	3,177	8.3	-12.0	08	6.4
650	30	3,786	5.6	-15.6	07	5.6
600	30	4,436	2.2	-18.7	06	4.5
550	30	5,133	-2.1	-22.2	05	4.4
500	30	5,882	-7.3	-26.5	04	4.4
450	30	6,694	-13.0	-31.4	02	4.0
400	30	7,581	-19.4	-36.7	35	3.9
350	30	8,562	-26.4	-42.4	32	5.0
300	30	9,655	-34.7	-49.0	29	9.9
250	30	10,903	-44.1		28	15.6
200	30	12,366	-54.3		28	20.4
175	30	13,212	-59.3		28	21.8
150	30	14,164	-65.0		28	19.8
125	30	15,262	-70.0		29	14.6
100	28	16,574	-74.9		31	7.6
80	27	17,860	-77.0		35	3.8
70	23	18,628	-75.5		01	2.8
60	23	19,531	-70.8		07	2.2
50	23	20,628	-64.9		12	3.0
40	22	22,006	-60.3		11	2.8
30	22	23,825	-54.8		06	2.9
25	22	25,000	-51.4		07	2.8
20	21	26,467	-46.8		03	3.5
15	21	28,386	-43.9		07	1.8
10	18	31,157	-37.8		10	2.5
7	13	33,663	-34.0		09	13.2
5	6	36,038	-30.9			

* WALLOPS IS., VA. NASA
1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	4	9.7	7.2	29	.9
1000	26	138	11.0	4.9	27	2.8
950	29	548	9.8	2.6	28	5.4
900	29	996	7.3	.1	27	5.8
850	29	1,464	4.8	-3.2	26	5.9
800	29	1,957	2.6	-7.1	25	7.4
750	29	2,477	.0	-9.8	25	9.5
700	29	3,027	-2.8	-12.3	25	11.2
650	29	3,611	-5.8	-16.6	25	12.6
600	29	4,234	-9.4	-21.8	26	13.9
550	29	4,901	-13.7	-25.4	26	15.4
500	29	5,619	-18.6	-30.9	27	16.7
450	29	6,397	-23.8	-36.6	27	17.7
400	29	7,246	-29.9	-42.3	26	19.1
350	28	8,186	-36.6	-47.3	26	22.9
300	28	9,235	-43.3	-52.7	26	27.2
250	28	10,446	-50.0		27	31.3
200	26	11,894	-56.0		27	27.5
175	26	12,742	-57.1		27	25.8
150	26	13,716	-57.5		27	26.1
125	26	14,864	-58.9		27	21.7
100	25	16,255	-60.9		27	17.2
80	25	17,638	-62.4		27	10.8
70	24	18,458	-62.3		27	8.9
60	24	19,412	-61.8		27	6.3
50	24	20,544	-60.5		28	4.6
40	24	21,938	-59.0		30	2.5
30	24	23,756	-55.8		31	1.5
25	23	24,919	-54.0		30	1.5
20	22	26,364	-51.4		29	2.8
15	22	28,249	-47.4		27	7.7
10	18	30,985	-40.6		27	13.1
7	10	33,403	-35.3			
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	WASHINGTON DULLES INT. AP 1005 MB						WAYCROSS, GA. 1011 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind		No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.P.S.					Direction	Speed M.P.S.
SURFACE	31	85	7.3	3.4	30	.7	30	44	12.7	11.1	27	.3
1000	21	172	9.1	2.2	25	2.0	28	148	14.5	9.3	23	.5
950	30	547	8.5	.6	28	3.5	30	573	13.8	7.2	25	3.1
900	31	993	5.9	-.5	29	4.5	30	1,028	11.1	3.8	26	4.0
850	30	1,459	3.3	-2.5	29	5.8	30	1,503	9.4	-1.1	26	6.3
800	31	1,949	1.2	-6.1	28	6.8	30	2,006	8.1	-5.4	26	8.5
750	30	2,466	-1.3	-8.7	27	7.5	30	2,536	6.0	-9.3	26	10.9
700	30	3,014	-3.9	-11.7	26	9.6	30	3,099	3.7	-12.5	26	13.2
650	30	3,596	-6.6	-16.1	26	10.2	30	3,697	.6	-14.1	26	15.5
600	30	4,218	-10.2	-20.8	25	12.9	30	4,335	-3.2	-18.5	26	17.7
550	30	4,863	-14.2	-24.0	26	14.4	30	5,018	-7.8	-22.1	26	19.5
500	31	5,600	-19.1	-29.3	26	16.2	30	5,752	-12.8	-27.1	26	22.4
450	30	6,376	-24.3	-34.1	26	18.2	30	6,548	-18.1	-31.1	26	25.3
400	31	7,224	-30.5	-39.9	26	20.1	30	7,418	-23.8	-36.4	26	28.2
350	30	8,163	-37.3	-44.3	26	23.1	30	8,383	-30.8	-42.1	26	32.1
300	31	9,209	-43.9		26	26.5	30	9,456	-38.9	-47.1	26	33.3
250	30	10,417	-50.2		26	31.0	30	10,686	-47.1		27	37.5
200	30	11,858	-54.8		27	31.4	30	12,133	-55.7		27	41.3
175	30	12,710	-55.8		27	30.4	30	12,977	-59.1		28	43.0
150	30	13,691	-55.8		27	26.3	30	13,938	-61.2		28	36.8
125	30	14,850	-56.7		26	22.3	30	15,063	-64.0		27	28.7
100	30	16,256	-59.2		26	17.3	29	16,426	-66.2		27	20.4
80	30	17,649	-60.3		27	11.2	29	17,771	-68.0		27	12.7
70	31	18,481	-60.4		26	8.1	29	18,575	-67.3		27	9.7
60	30	19,441	-60.4		27	6.0	29	19,508	-65.3		27	5.8
50	30	20,580	-60.0		28	3.7	29	20,625	-62.6		30	1.9
40	28	21,975	-58.8		29	1.9	29	22,010	-60.1		35	1.6
30	27	23,796	-55.6		29	1.3	26	23,827	-54.6		03	2.5
25	24	24,959	-54.4		29	1.6	25	25,002	-51.7		01	2.5
20	23	26,388	-52.4		29	3.3	24	26,459	-48.4		33	1.8
15	20	28,269	-48.5		27	7.0	21	28,367	-44.0		27	6.8
10	16	30,957	-43.3		26	15.6	16	31,139	-38.0		26	13.6

Standard pressure surface (mb)	WINNEMUCCA, NEV. 871 MB						WINSLOW, ARIZ. 849 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind		No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.P.S.					Direction	Speed M.P.S.
SURFACE	30	1,312	1.0	-4.4	32	.9	30	1,487	4.0	-7.5	22	1.4
1000												
950												
900												
850	30	1,506	5.1	-5.1	35	2.0	15	1,512	9.3	-4.7	29	.3
800	30	1,999	2.3	-7.2	34	3.5	30	1,972	5.8	-6.9	27	4.3
750	30	2,516	-1.7	-10.1	34	4.6	30	2,497	2.1	-10.2	28	5.2
700	30	3,061	-5.7	-13.5	33	6.1	30	3,050	-2.3	-12.8	27	5.6
650	30	3,639	-9.2	-17.5	33	6.7	30	3,633	-6.9	-15.3	27	6.3
600	30	4,254	-13.1	-21.1	32	7.7	30	4,253	-11.0	-19.8	27	7.1
550	30	4,911	-17.3	-26.1	31	9.5	30	4,916	-15.4	-26.1	28	8.7
500	30	5,619	-22.4	-31.7	32	10.0	30	5,628	-20.7	-31.8	28	9.6
450	30	6,384	-27.9	-36.2	32	10.4	30	6,460	-25.9	-37.6	29	10.6
400	30	7,220	-33.8	-42.5	32	12.3	30	7,241	-32.4	-44.2	29	12.0
350	30	8,146	-40.6	-47.0	32	15.0	30	8,173	-39.1	-49.6	29	15.0
300	30	9,176	-48.0		32	16.9	30	9,211	-46.2		28	18.7
250	30	10,360	-54.8		32	18.5	30	10,406	-52.1		28	23.3
200	30	11,774	-58.4		32	17.5	30	11,838	-55.3		27	26.2
175	30	12,616	-57.2		31	17.7	30	12,690	-55.2		27	26.8
150	29	13,591	-56.5		30	15.5	30	13,674	-55.6		27	25.8
125	29	14,745	-57.8		29	13.8	30	14,829	-58.3		27	23.2
100	27	16,146	-58.6		29	11.4	30	16,223	-61.5		27	18.6
80	26	17,547	-59.3		29	9.6	30	17,604	-62.0		27	13.7
70	26	18,383	-59.5		29	6.9	30	18,431	-61.8		27	9.9
60	25	19,346	-59.0		28	5.6	30	19,387	-61.5		27	5.6
50	25	20,490	-59.1		29	3.5	29	20,517	-61.2		28	4.1
40	25	21,891	-58.7		28	3.1	28	21,909	-59.4		26	2.0
30	25	23,703	-57.7		29	1.5	26	23,728	-55.8		27	2.2
25	23	24,858	-55.8		29	2.4	25	24,889	-54.2		27	4.3
20	23	26,284	-54.3		28	3.7	23	26,329	-52.1		28	5.5
15	14	28,172	-51.3		29	5.3	21	28,208	-48.8		27	9.2
10	6	30,777	-46.3				14	30,887	-42.7			

Standard pressure surface (mb)	YAKUTAT, ALASKA 1014 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.P.S.
SURFACE	30	12	1.2	-.3	09	1.5
1000	28	135	2.3	-.1	11	2.7
950	30	538	.5	-2.5	13	4.9
900	30	970	-2.4	-5.1	15	4.8
850	30	1,421	-5.2	-8.7	16	4.9
800	30	1,895	-8.2	-10.6	17	5.2
750	30	2,393	-11.5	-14.9	17	6.6
700	30	2,919	-14.8	-18.3	18	7.0
650	30	3,477	-17.7	-21.0	19	7.5
600	30	4,071	-21.5	-25.1	20	7.5
550	30	4,708	-25.4	-29.1	21	7.9
500	30	5,394	-29.7	-34.3	22	9.1
450	30	6,138	-34.5	-38.3	22	10.2
400	30	6,952	-40.0	-44.2	23	10.9
350	30	7,854	-46.0		24	12.0
300	30	8,864	-51.8		24	14.8
250	30	10,039	-53.5		25	15.1
200	29	11,479	-51.7		26	13.3
175	29	12,347	-50.9		25	11.5
150	29	13,351	-50.6		25	10.6
125	29	14,540	-51.0		25	8.4
100	28	15,987	-52.4		25	7.2
80	28	17,428	-52.9		25	5.7
70	28	18,289	-53.3		25	4.8
60	28	19,281	-53.7		26	3.8
50	28	20,452	-54.0		27	3.1
40	27	21,881	-54.6		28	2.2
30	25	23,725	-55.3		32	1.9
25	25	24,888	-55.4		33	2.0
20	24	26,310	-55.5		35	2.8
15	19	28,131	-54.7		01	3.5
10	8	30,734	-53.3			

Standard pressure surface (mb)	+ YAP, CAROLINE IS. 1009 MB						YUCCA FLAT, NEV. 879 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind		No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.P.S.					Direction	Speed M.P.S.
SURFACE	30	14	28.5	23.7	08	5.3	30	1,198	4.6	-4.0	31	2.1
1000	31	97	26.6	23.8	08	6.8						
950	30	549	23.1	21.2	07	10.5						
900	30	1,021	20.2	17.3	08	10.6						
850	30	1,513	17.5	13.7	08	9.3	30	1,478	8.5	-7.3	35	3.9
800	30	2,031	15.6	9.1	08	7.4	30	1,976	5.3	-9.8	35	4.2
750	30	2,577	13.3	2.6	08	6.6	30	2,499	1.6	-12.5	35	4.9
700	30	3,155	10.2	-2.1	09	5.5	30	3,051	-2.3	-15.5	33	4.4
650	30	3,769	7.2	-5.5	09	5.5	30	3,635	-6.5	-19.2	32	4.5
600	30	4,423	3.6	-9.3	09	6.2	30	4,256	-10.7	-23.8	32	5.0
550	30	5,126	.0	-14.7	08	6.5	30	4,919	-15.4	-28.9	31	6.1
500	30	5,883	-4.5	-19.1	09	6.6	30	5,631	-20.7	-34.5	31	8.1
450	30	6,705	-9.4	-25.5	09	6.4	30	6,402	-26.3	-38.5	31	10.2
400	30	7,606	-15.0	-29.4	10	3.5	30	7,242	-32.7	-44.3	30	10.8
350	30	8,607	-21.2	-36.7	03	.7	30	8,173	-39.3	-49.3	31	13.4
300	30	9,723	-29.7	-43.9	28	2.9	30	9,210	-46.6		31	15.2
250	30	10,996	-40.0	-51.9	24	5.5	30	10,401	-53.3		30	16.4
200	30	12,480	-52.4		24	7.4	29	11,826	-57.2		29	19.2
175	30	13,329	-59.4		24	6.9	29	12,671	-56.5		29	20.3
150	30	14,277	-67.0		27	6.7	29	13,652	-56.1		29	19.6
125	30	15,358	-74.4		29	5.4	29	14,807	-58.0		28	18.2
100	30	16,635	-80.5		05	3.2	29	16,206	-59.9		28	12.9
80	29	17,888	-81.6		09	9.7	29	17,593	-61.3		28	11.2
70	29	18,646	-76.6		09	10.1	29	18,423	-60.8		28	8.4
60	29	19,548	-70.4		08	7.3	29	19,383	-60.4		28	5.8
50	28	20,650	-63.7		08	2.7	29	20,521	-60.1		27	3.0
40	28	22,034	-59.3		28	.3	29	21,917	-59.3		27	2.4
30	25	23,867	-54.1		26	2.7	27	23,732	-56.4		28	2.4
25	23	25,045	-51.2		27	3.0	25	24,894	-54.3		28	3.7
20	21	26,509	-47.2		25	3.7	23	26,334	-52.6		27	5.3
15	19	28,430	-43.5		23	2.7	21	28,204	-48.8		27	8.9
10	13	31,177	-39.9		10	5.6	9	30,886	-42.6			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dy- [illegible] given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes, dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

° Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft [illegible] higher altitudes.

+ Observations for these stations are scheduled at 0000 G.C.T.

† Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should [illegible] Humidity January 1967.

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun.

APRIL 1973

ALBUQUERQUE, N. MEX.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.19	3.35	2.51	1.87	*	1.87	2.51	3.35	4.19
Apr.									
1-----	----	----	----	1.04	----	1.20	----	----	----
3-----	----	----	----	----	1.31	----	----	----	0.71
4-----	0.73	0.84	0.99	1.18	----	----	0.96	0.86	.75
5-----	.86	.97	1.09	1.24	1.41	1.20	1.06	.94	.83
6-----	.92	1.01	1.13	1.27	1.40	1.20	1.02	.91	.84
8-----	----	----	----	----	----	1.28	1.12	.90	.76
9-----	.95	1.05	1.16	1.29	1.44	1.26	1.12	.98	.87
10----	----	----	----	----	(1.39)	----	----	----	----
12----	.83	.94	1.06	1.20	1.41	----	----	----	----
13----	.80	.88	1.02	1.16	1.38	----	----	----	----
14----	.82	.93	1.07	1.24	1.40	----	----	----	----
15----	.85	.94	1.06	1.22	----	----	----	86	.74
17----	----	1.01	1.13	1.24	1.42	1.22	1.03	.92	.81
21----	----	.95	1.05	1.23	1.40	----	1.05	.96	.88
22----	.79	.90	1.05	1.20	1.41	1.24	1.11	1.01	.92
23----	.82	----	----	----	----	----	----	----	----
24----	.73	.83	.98	1.14	1.34	----	----	----	----
25----	----	----	----	1.17	1.40	1.06	1.01	.89	.79
26----	.85	.96	1.17	1.23	1.41	1.20	1.04	.92	.85
27----	.89	.98	1.10	1.23	1.41	1.21	1.05	.94	.85
28----	.74	.83	.97	1.14	1.28	----	----	----	----
Averages	0.83	0.93	1.07	1.20	1.39	1.21	1.05	0.92	0.82

OMAHA, NEBR.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78

DATA DELAYED

TUCSON, ARIZ.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Apr.									
1-----	0.76	0.89	1.04	1.21	1.41	1.29	1.14	0.99	0.88
2-----	----	----	.90	1.21	1.47	1.25	1.06	.89	.75
3-----	.87	.99	1.10	1.27	1.41	1.22	1.03	----	.80
4-----	.82	.94	1.06	1.24	D 1.36	D 1.03	D .77	D .63	D .53
5-----	.93	1.03	1.14	1.29	1.47	1.29	1.12	1.00	.89
6-----	.84	.96	1.07	1.24	1.43	1.23	1.05	.90	.78
10----	.84	.96	1.07	1.25	1.44	1.12	.93	.74	.60
11----	----	----	----	1.13	1.41	1.27	1.09	.95	.76
12----	.82	.93	1.05	1.22	1.39	1.11	.91	.78	.68
13----	.89	1.00	1.10	1.24	1.43	1.22	1.02	.88	.76
14----	.78	.88	1.02	1.20	1.41	----	.92	.80	.68
15----	.80	.90	1.05	1.24	1.39	1.18	1.01	.87	----
16----	----	----	----	----	----	1.15	.99	.83	.75
17----	.83	.94	1.07	1.22	1.42	1.21	1.06	.93	.82
18----	.73	.81	.92	1.10	----	1.06	.87	.72	.62
19----	.69	.77	.92	1.08	1.37	----	----	.75	.63
21----	.76	.83	.97	1.15	1.40	1.12	.92	.76	.65
22----	.77	.89	1.02	1.18	1.37	1.14	.99	.88	.77
23----	----	----	1.02	1.20	1.37	1.17	1.00	.86	.74
24----	.76	.87	1.00	1.18	1.39	1.20	1.01	.85	.74
25----	.79	.90	1.03	1.18	1.39	1.20	1.01	.87	.76
26----	.87	.97	1.09	1.26	1.45	1.24	1.02	.91	.81
27----	.78	.90	1.03	1.19	1.36	----	----	----	----
28----	.69	.80	.95	1.12	1.40	1.18	.98	.85	.75
30----	----	----	----	----	----	1.20	1.04	.88	.76
Averages	0.80	0.91	1.03	1.20	1.41	1.19	1.00	0.85	0.74

MADISON, WIS.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Apr.									
5-----	S 0.89	S 0.93	----	----	----	----	----	----	----
11----	----	----	0.84	1.09	----	----	----	----	----
12----	----	----	----	1.02	----	----	----	----	----
14----	----	----	M .77	S .97	S 1.06	0.97	----	----	----
16----	----	----	----	----	----	----	S 0.97	S 0.89	S 0.77
17----	----	----	----	1.11	1.26	S 1.06	----	S .84	S .75
23----	.65	.76	.89	S 1.07	1.31	S 1.04	----	M .74	M .61
24----	.74	.90	.98	1.10	----	----	----	----	----
28----	.83	.94	1.50	1.17	----	----	----	----	----
Averages	0.78	0.88	1.00	1.08	1.21	1.02	0.97	0.82	0.71

( )	Clouds Present
*	Values corresponding to true solar noon
BD	Blowing Dust
BN	Blowing Sand
D	Dust
DI	Intense Dust
DM	Moderate Dust
DS	Slight Dust
F	Fog
GF	Ground Fog
H	Haze
HI	Intense Haze
HM	Moderate Haze
HS	Slight
I	Intense Haze-indeterminable
K	Smoke
KI	Intense Smoke
KM	Moderate Smoke
KS	Slight Smoke
M	Moderate Haze-indeterminable
N	Sand
S	Slight Haze-indeterminable

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska.

APRIL 1973

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	151	97	118	106	91	53	130	77	20	86	91	34	68	48	172	117	146	140	90	70	148	148	105	24	136	116	153	166	117	188		107

The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (< 3900 Å) at Ames, Iowa.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	1.70	4.02	5.72	5.11	8.16	9.50	4.14	4.87	3.77	12.79		8.41	9.38	8.89	1.82	8.77	9.87	12.92	7.19	14.87	9.99	16.82	9.26	9.02	2.92	9.99	12.67	10.23	7.67	1.70		8.00

These data are from an U-V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder.

This instrument has not been checked by the NOAA, National Weather Service

TOTAL OZONE DATA

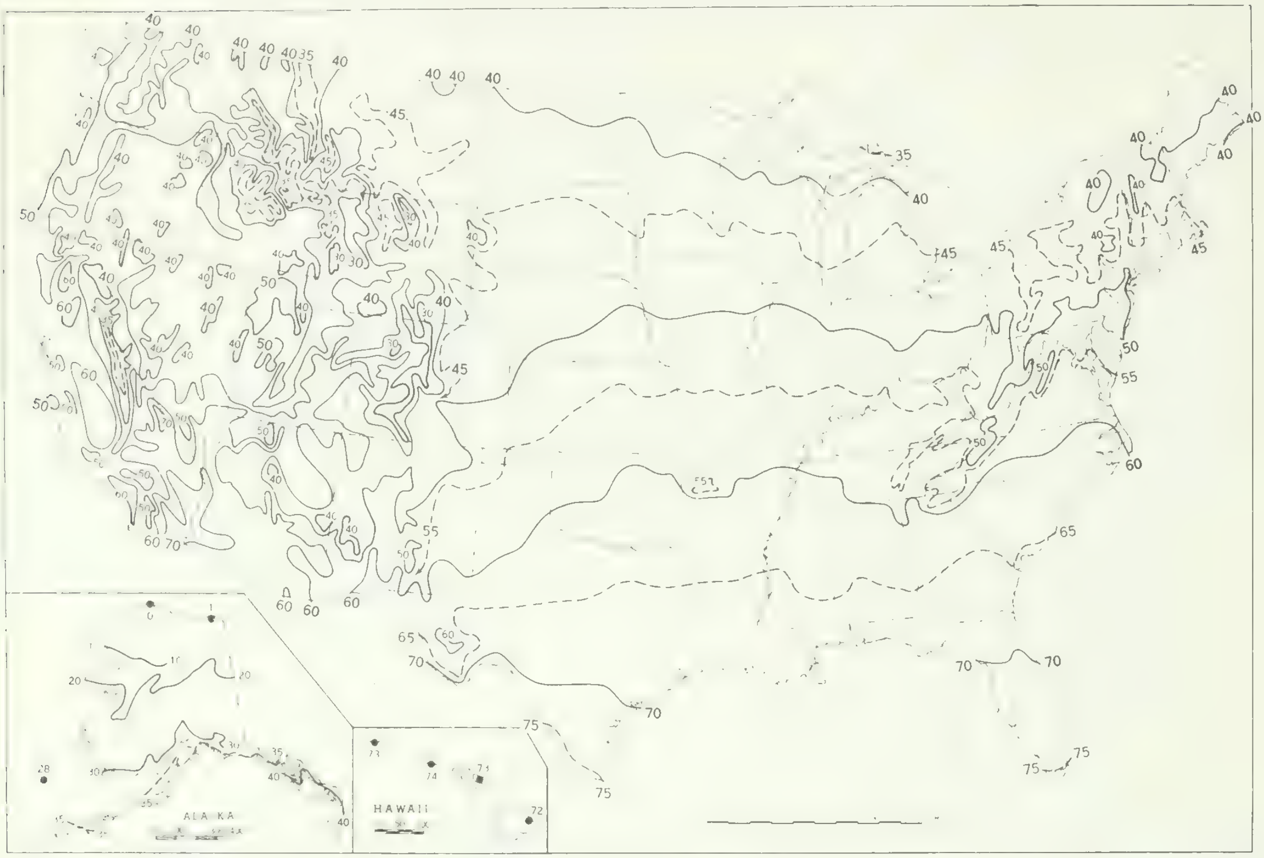
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code xS Q Q Q defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units Milli-atmo-cms.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O3
												DATA NOT RECEIVED IN TIME FOR PUBLICATION																			

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere [illegible] the station. The amount of ozone [illegible] is expressed in terms of thickness of a layer [illegible] standard temperature and pressure [illegible] The code xS designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), April.


ALASKA
HAWAII

B. Temperature Departure from 30 - Year Mean (°F 1931-60), April 1973

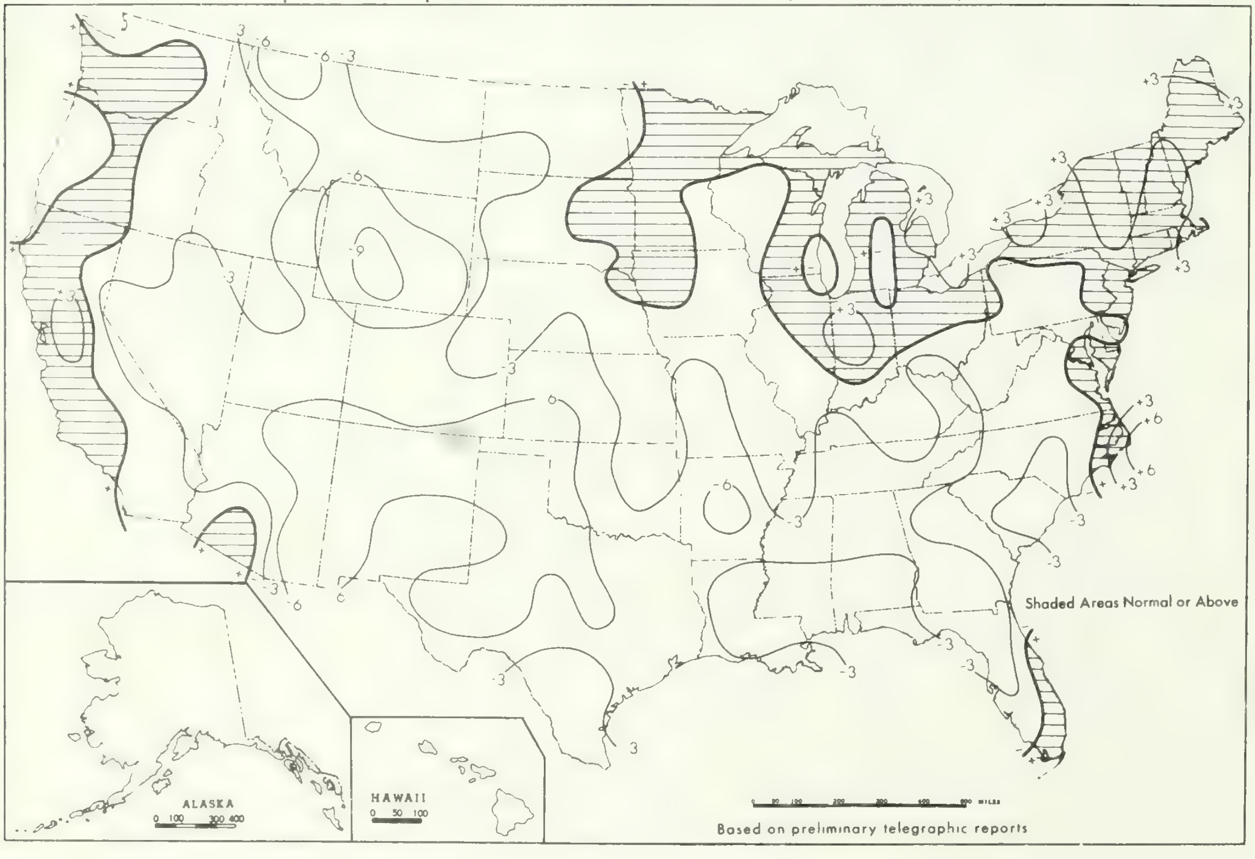
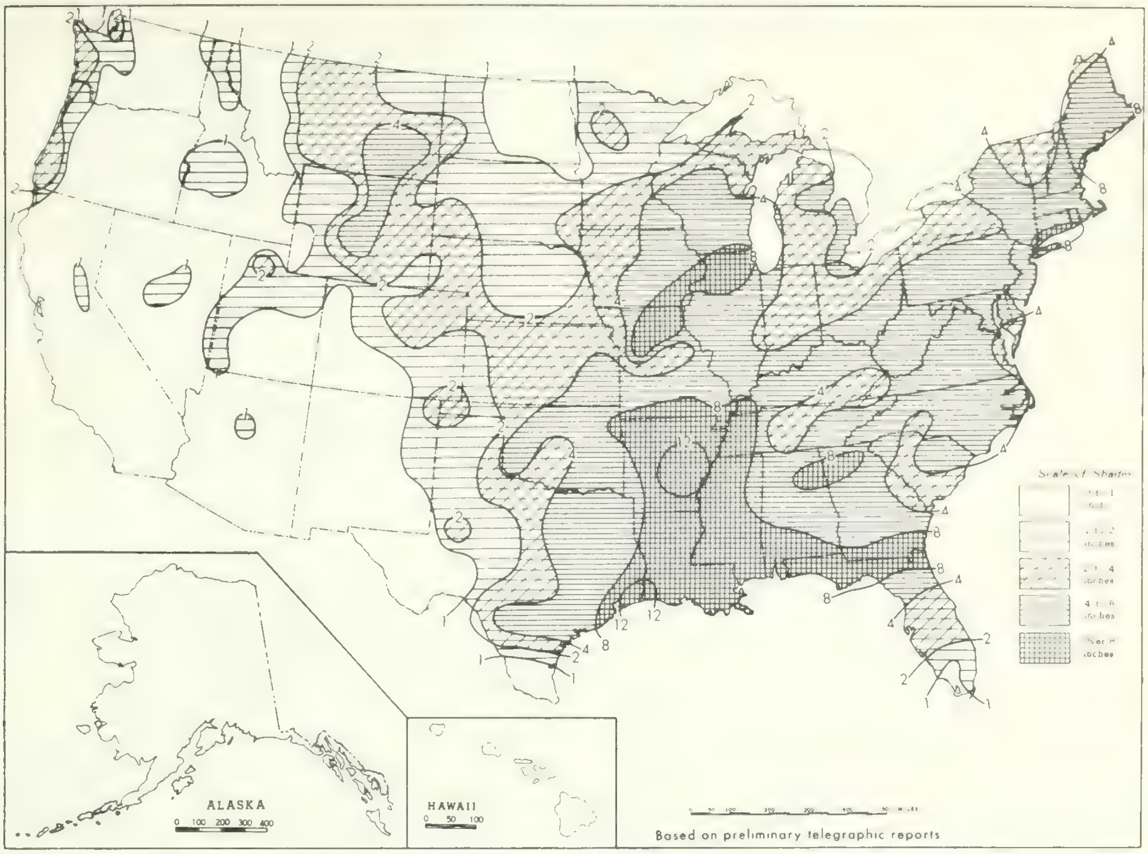
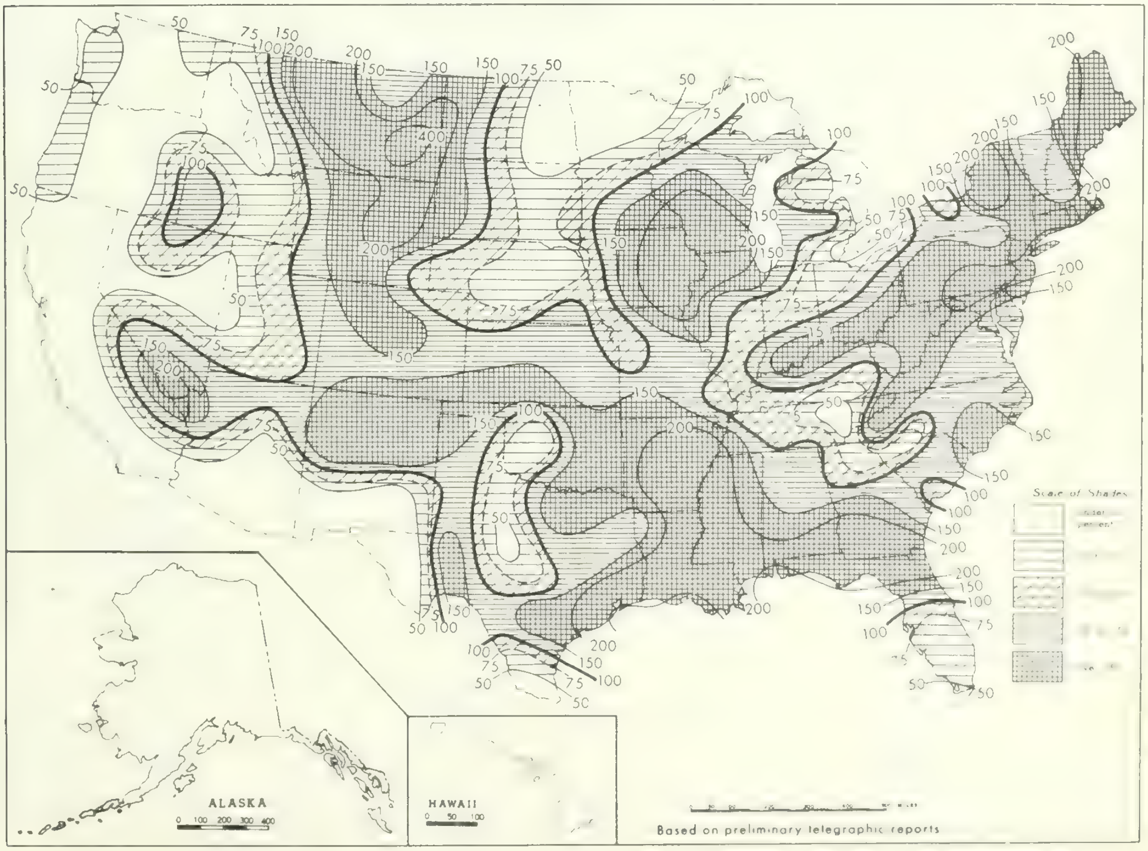

Shaded Areas Normal or Above
ALASKA
HAWAII
Based on preliminary telegraphic reports

Chart II. A. Total Precipitation (Inches), April 1973


Scale of Shades
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 8 inches
Over 8 inches
ALASKA
0 100 200 300 400
HAWAII
0 50 100

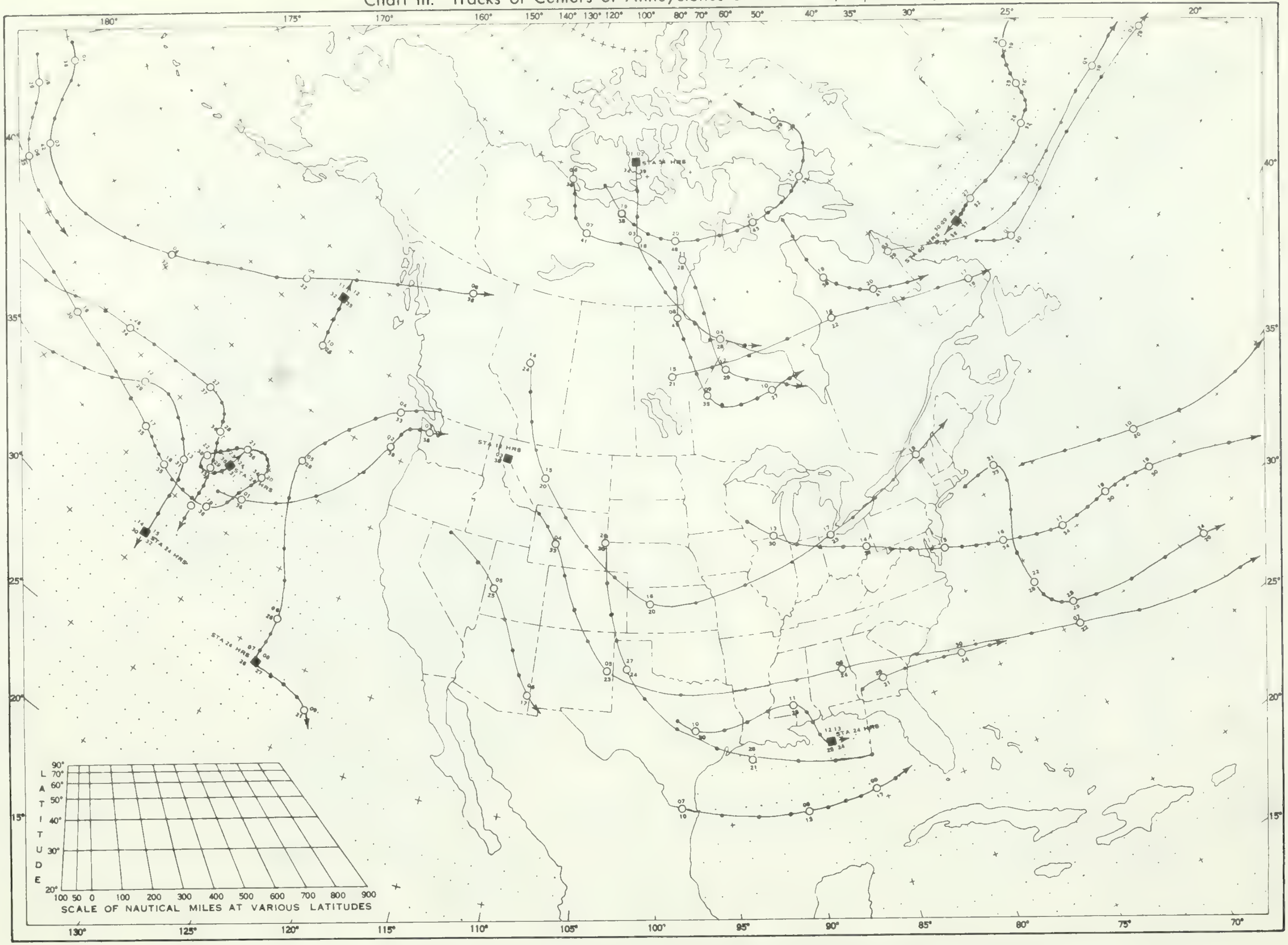
Based on preliminary telegraphic reports

B. Percentage of Normal Precipitation, April 1973


Scale of Shades
ALASKA
0 100 200 300 400
HAWAII
0 50 100

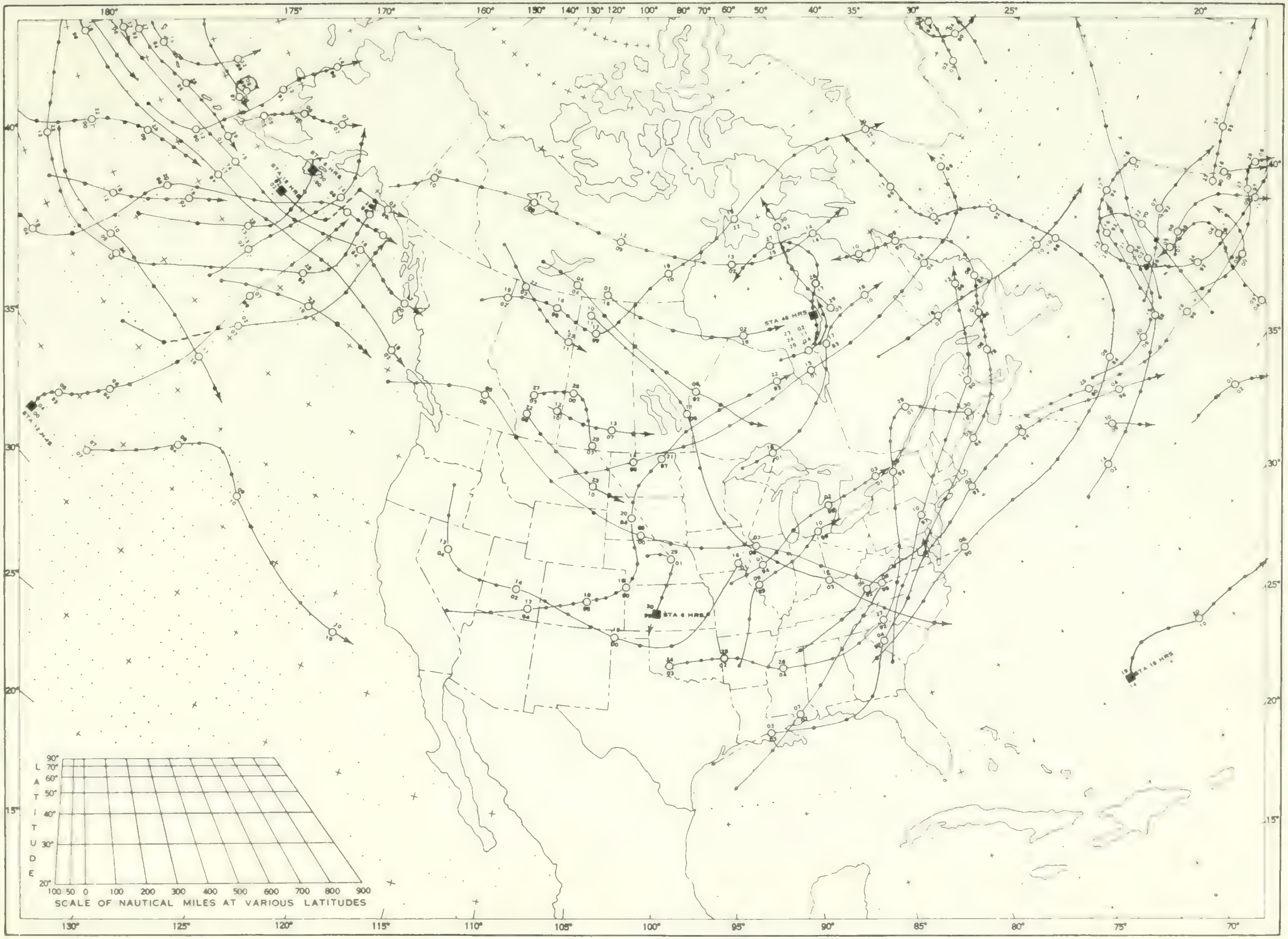
Based on preliminary telegraphic reports

Chart III. Tracks of Centers of Anticyclones at Sea Level, April 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
STA 24 HRS
STA 12 HRS
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, April 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
STA 12 HRS
STA 18 HRS
STA 6 HRS
STA 48 HRS
STA 6 HRS
STA 18 HRS
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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National Oceanic and Atmospheric Administration
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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

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I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina 28801.

William H. Haggard

Director, National Climatic Center

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

MAY 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

Dr. Richard E. Felch, Climatologist

HIGHLIGHTS:

1. While the West was warmer than normal, most of the Nation east of the Rockies was cooler than average.
2. The lower Mississippi Valley area experienced excessive precipitation for the third consecutive month.

PRECIPITATION--May started and ended wet, but dry weather at mid-month gave farmers a much needed break. Precipitation was above normal from the Mississippi eastward except for Ohio, Indiana, central Illinois, and parts of the East Coast. The western half of the Nation was below normal except for a band extending from Iowa through Nebraska, Colorado, Utah, and Arizona. The Pacific Northwest continued dry in most areas.

The month began with a continuation of the heavy rains which had fallen during March and April. The Lower Mississippi Valley, already flooded, received an additional 2 to 4 inches during the first week of May. Parts of Oklahoma, Kansas, Missouri, and Illinois, and nearly all of Iowa and Wisconsin received over 2 inches of rain, delaying fieldwork for another week.

While parts of the Corn Belt received a brief respite from the rains, violent weather continued in many areas during the second week of May. Much of the Deep South received an additional 2 to 4 inches. On the 7th and 8th a low moved across the Corn Belt. Ahead of a cold front associated with the low, violent weather struck southeast Texas, Louisiana, Arkansas, and western Tennessee. Trimble, Miss., reported 3.00 inches of rain in 12 hours. At Geraldine, Ala., a tornado touched down, killing one and injuring 18. Another storm system later in the week repeated the weather of the first. When the storm finally cleared the East Coast, the first week of really clear, dry weather in many months covered the Nation's midsection.

Except for some rainfall over the Rockies, the western two-thirds of the Nation received virtually no rainfall during the week ending on the 21st. The remains of the previous storm dropped heavy rains on portions of the East Coast early in the week, but once it cleared the entire Nation was dry.

The last decade of May was again wet in many areas. Heavy rains fell over the Upper Mississippi Valley and the Ohio River southward to the Gulf with a slightly drier area between. A large low over Canada brought cold, murky weather to much of the Nation over the Memorial Day weekend. Violent weather in the South caused several deaths. On the 26th some 40 tornadoes were reported, mostly in Oklahoma, Kansas, Missouri, Arkansas, and Florida. During the period from the 26th to the 29th at least 195 tornadoes occurred.

TEMPERATURE--From the Rockies eastward, temperatures were below normal for the month, while to the west, temperatures were 3° to 6° above normal. Temperatures were generally below normal during the first week of May over the entire Nation. The only exceptions were the New England area and parts of the California coast. Temperatures in most areas were 3° to 6° below normal, with the Rocky Mountain area 6° to 9° above normal.

Most of the Nation's midsection and the Northwest continued below normal as the result of a large high late in the second week. Warmer than average temperatures prevailed over most of the East and West Coasts, the Gulf areas of the Deep South, and the Southwest.

The middle week brought both extreme warmth and cold, depending on which half of the country one lived. From the Rockies westward, temperatures were generally 3° to 12° above normal, while to the east, temperatures were 3° to 12° below normal.

As the month ended, temperature variations were large, with conditions generally averaging below normal.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

MAY 1973

STATE	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Brewton 3 SSE	95	23	Redstone Arsenal	31	16	Elrod	15.08	Gulf Shores P O	1.19
Alaska	Sitka Magnetic Obsy	81	15	2 Stations	-3	2+	Little Port Walter	18.88	Eklutna Lake	.00
Arizona	3 Stations	111	30+	Sunrise Mountain	11	[illegible]	Williams Cr Fish Htchy	3.91	24 Stations	.00
Arkansas	Waldron	94	10	2 Stations	33	15+	Paragould	12.11	Stamps	1.28
California	El Centro 2 SSW	116	29	White Mountain 2	0	1	Shingletown 2 E	3.72	99 Stations	.00
Colorado	2 Stations	92	20+	Twin Lakes Reservoir	2	12	Palmer Lake	8.83	Kauffman 4 SSE	.20
Connecticut	3 Stations	85	30+	Falls Village	28	7	Middletown 4 W	7.08	West Thompson Dam	3.55
Delaware	Georgetown 5 SW	84	29	Newark University Farm	36	18	Wilmgton Porter Resvr	6.05	Georgetown 5 SW	3.09
Florida	La Belle	104	29	3 Stations	40	6+	Chipley 3 E	9.42	Sarasota	.13
Georgia	Camilla	99	11	Blairsville Exp Sta	28	18	Carters	13.03	Midville Exp Sta	1.02
Hawaii	Keawakapu Beach 260.2,Maui	90	18+	Mauna Loa Slope Obs,Hawaii	31	23	Mount Waialeale 1047,Kauai	34.60	Waiopai Ranch 256, Maui	.00
Idaho	Glenns Ferry	98	18	Dixie	11	1	Clarkia Ranger Station	2.81	Mackay Ranger Station	.13
Illinois	McLeansboro	88	27	2 Stations	29	5+	Cobden 2 S	9.80	Paris Waterworks	1.77
Indiana	Shoals Hiway 50 Bridge	88	27	2 Stations	25	17	Princeton 1 W	7.69	Marion 2 N	1.48
Iowa	Le Mars 2 N	98	21	Elkader 3 SSW	25	17	Bloomfield	10.08	Sioux City WSO AP	1.72
Kansas	Aetna 2 S	96	21	Oskaloosa	28	3	Harveyville 3 N	10.71	Preston 7 NW	.30
Kentucky	Greensburg	88	27	2 Stations	28	6+	Hickman 1 E	13.02	Warsaw Markland Dam	3.40
Louisiana	Natchitoches	100	11	Ashland 2 S	39	16	Mamou 4 S	10.26	Houma	56
Maine	Saco	83	30	2 Stations	24	8+	Jonesboro	7.48	Orono	3.90
Maryland	Chestertown	91	29	2 Stations	28	6	Hagerstown	6.24	Prince Frederick 1 N	2.27
Massachusetts	2 Stations	87	29	Chester 2	25	7	Chester 2	9.92	Taunton	2.73
Michigan	Ontonagon	79	31	Herman	16	4	Rock	8.45	2 Stations	2.71
Minnesota	Worthington 2 NNE	91	22	Cass Lake	17	4	Bricelyn	7.74	Leech Lake Dam	1.19
Mississippi	Merrill	95	24	Fulton 3 W	36	18	Rockport	10.38	Biloxi City	2.45
Missouri	4 Stations	91	22+	Berryman 6 NW	28	14	Cape Girardeau FAA AP	16.89	St Louis Gateway Arch	3.15
Montana	Loma 1 WNW	93	16	3 Stations	10	11+	Hebgen Dam	2.97	Loring 10 N	.11
Nebraska	2 Stations	96	22+	Nenzel 20 S	14	13	Osceola	8.71	Lyman	.42
Nevada	Sunrise Manr Las Vegas	108	18	Gibbs Ranch	13	2	Lamoille 3 E	2.19	3 Stations	.04
New Hampshire	Windham 3 NW	88	30	Mount Washington	20	7	Mount Washington	11.59	North Stratford	3.95
New Jersey	Paterson	87	31	2 Stations	30	19+	Sussex 1 SE	7.55	Atlantic City	2.83
New Mexico	Jal	104	19	Stanley 1 NNE	12	2	Beaverhead Ranger Sta	3.55	Deming FAA AP	.14
New York	2 Stations	86	31+	Angelica	23	19	Piseco	9.01	Lindley	1.91
North Carolina	10 Stations	93	31+	Transou	24	18	Rosman	15.20	Trenton	1.67
North Dakota	Upham 3 N	90	18	2 Stations	17	14+	Drayton 2 N	3.59	Drake	.45
Ohio	Portsmouth	84	29	Tom Jenkins Lake	24	6+	Upper Sandusky	7.64	Cooperdale	2.20
Oklahoma	Mangum Research Sta	103	21+	2 Stations	30	15+	Flashman Tower	9.28	Gate 1 NNE	.72
Oregon	Spray	100	18	2 Stations	13	26+	2 Stations	5.14	Sheaville	.14
Pennsylvania	Marcus Hook	88	30	Clermont 4 NW	20	19	Milanville	7.77	Lawrenceville	2.26
Puerto Rico	San Sebastian 2 WNW, P.R.	98	28	2 Stations, P.R.	55	10+	Coloso, P.R.	10.94	2 Stations, P.R.	.00
Rhode Island	Providence WSO AP	88	29	Kingston	32	8	Kingston	4.89	Newport	3.57
South Carolina	2 Stations	96	23	Ninety Nine Islands	30	18	Caesars Head 1 NE	13.51	Charleston WSO CI	98
South Dakota	Winner	94	20	2 Stations	19	14+	Bonesteel	5.95	Aberdeen WSO AP	1.00
Tennessee	3 Stations	89	10+	Mountain City No 2	22	18	Crossville Exp Sta	14.99	Cleveland 6 NNE	4.60
Texas	Catarina	110	26+	Gruver	31	3	Kirbyville Forest Serv	7.72	5 Stations	00
Utah	Saint George	98	31	Silver Lake Brighton	8	2	City Creek Water Plant	3.68	Hanna	10
Vermont	Vernon	81	30	West Burke	23	2	Mount Mansfield	11.87	South Newbury	4.38
Virginia	Bohannon 1 NE	92	29	Blacksburg 3 SE	23	5	Copper Hill 1 NNE	8.12	Corbin	2.12
Washington	2 Stations	99	14	Rainier Paradise RS	21	10	Naselle 1 ENE	8.37	2 Stations	T
West Virginia	Williamson	88	2	2 Stations	24	6+	Dunlow 4 SE	7.51	Iaeger	2.00
Wisconsin	Gordon	85	31	Drummond 6 W	17	4	Marshfield Exp Farm	10.41	Superior	3.00
Wyoming	Worland FAA AP	91	31	Lake Yellowstone	4	2	Alva 5 SE	3.55	Greybull	T

+ And also on an earlier date or dates.

NOTE: Dates in the above table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See indivdual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M	Mb.	Mb.	C.	C	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	992.2	1014.5	26.5	12.9	19.7	-2.4	32.2	11	5.6	5+	1	0	12.8	67	211	124	67	14	11	0	0	1.1	22	25.9		11	7	12	12	6.0	66
HUNTSVILLE	190	991.5	1014.3	24.9	12.9	18.9	-2.4	30.0	10	6.7	18+	0	0	12.2	67	111	25	38	10	8	0	0	1.0	23	12.5	31	22	10	12	9	5.4	
MOBILE	64	1006.8	1014.7	29.3	17.9	23.7	-0.1	32.8	23+	10.0	16	7	0	16.1	67	75	-49	42	4	3	0	0	1.8	22	14.3	20	8	9	9	13	5.9	
MONTGOMERY	56	1007.5	1014.8	27.9	15.4	21.7	-0.8	32.8	28+	7.8	5	4	0	14.4	66	101	13	26	14	10	0	0	1.3	23	15.2	S	27	11	9	11	5.5	60
ALASKA																																
ANCHORAGE	35	1002.7	1007.8	10.1	2.8	6.4	-2.1	13.9	30	-2.8	7	B 0	5	-0.6	63	4	-10	2	3	0	0	0	2.7	17	13.0	13	B 15	3	8	20	8.0	77
ANNETTE	34	1011.2	1015.2	11.8	5.1	8.4	-1.1	25.0	14	1.7	20	1	0	3.9	77	241	62	31	26	0	0	0	3.0	15	13.0	14	7	2	8	21	8.2	
BARROW	9			-4.2	-10.2	-7.2	0.4	3.9	27	-19.4	2	0	31			5	2	1	9	0	84	305			11.6	9	3+	2	5	24	8.6	
BARTER ISLAND	12	1011.9	1013.9	-2.6	-8.3	-5.4	0.8	5.6	26	-17.8	3+	0	31	-6.1	92	15	9	9	5	1	109	406	2.8	8	17.9	9	24	2	6	23	8.5	
BETHEL	38	999.3	1004.9	9.7	-1.1	4.3	0.4	16.1	30	-11.1	1	0	18	-0.6	73	25	1	13	9	0	142	102	0.3	8	11.6	8	3	5	7	19	7.6	
BETTLES	196			12.5	2.3	7.4		20.0	27	-4.4	2	0	8			13		4	6	0	T	762			10.3	4	24	4	12	15	6.6	
BIG DELTA	386			13.8	3.1	8.4		18.9	27+	-4.4	2	0	5			13			5	0	178											
COLD BAY	29	999.3	1002.9	4.8	-0.4	2.2	-1.9	9.4	19+	-7.8	22	0	20	0.0	88	27	-31	5	17	0	89	25	1.7	29	21.0	16	30	0	2	29	9.2	
FAIRBANKS	133	989.5	1006.6	16.2	4.4	10.3	1.9	22.2	27+	0.0	8	3	1	-0.6	50	25	7	13	9	0	T	0	0.7	4	10.3	5	14	3	9	19	7.6	
GULKANA	479			12.2	0.4	6.3		20.6	14	-4.4	12+	0	13			3		2	3	0	5	0			11.2	17	25	1	10	20	7.5	
HOMER	20			9.1	1.4	5.3		12.8	29	-2.8	6	0	11			58	31	41	12	0	0	0			10.3	9	4	1	5	25	8.9	
JUNEAU	4	1012.5	1013.4	11.7	3.7	7.7	0.2	18.9	14	-1.7	23	0	1	3.3	79	104	22	14	25	0	0	0	3.1	12	13.0	12	17	0	2	29	9.0	38
KING SALMON	15	1001.0	1003.1	10.1	1.9	6.1	-0.2	14.4	13	-1.1	25+	0	7	0.0	67	46	22	11	12	1	15	T	2.4	10	17.4	9	4	1	6	24	8.7	
KODIAK	34	1000.0	1004.4	7.7	2.6	5.1	-1.1	12.2	24	-1.1	3+	0	3	1.7	82	273	163	39	30	0	38	0	3.3	8	14.3	9	28	0	4	27	9.3	
KOTZEBUE	3			3.3	-4.9	-0.8	-0.2	11.1	31+	-16.7	1	0	28			2	-6	2	3	0	33	1092			16.1	16	26					
MC GRATH	105	992.6	1005.3	14.2	1.8	8.1	1.3	20.6	14	-1.1	9+	0	14	-1.7	54	25	2	9	9	1	T	76	0.3	5	9.4	19	15	3	6	22	7.9	
NOME	4	1006.1	1006.8	5.4	-1.9	1.8	0.1	15.0	30+	-19.4	1	0	18	-2.8	74	7	-11	3	7	0	36	25	1.4	5	14.8	4	14	7	9	15	6.6	72
ST. PAUL ISLAND	7	1004.4		0.9	-2.8	-0.9	-2.4	4.4	14	-8.9	2+	0	30	-2.2	89	27	-6	8	17	0	201	178			20.6	34	3	0	1	30	9.6	
SUMMIT	732			7.4	-2.0	2.7		13.3	27+	-7.2	8+	0	24			10		3	5	0	86	483										
TALKEETNA	105			13.7	-0.7	6.5	-0.6	21.1	14	-5.6	7	1	21			26	-8	9	8	1	0	0			9.4	19	25					
YAKUTAT	9			9.8	3.1	6.4	-0.6	25.0	14	-1.7	4	1	3			229	26	45	22	0	T	76			12.5	13	25	1	5	25	8.8	
ARIZONA																																
FLAGSTAFF	2135	788.4	1014.6	20.7	2.3	11.6	1.1	26.7	30+	-3.9	3	0	9	0.0	50	30	17	15	6	7	76	25	1.3	20	14.8	SW	25	14	10	7	4.3	84
PHOENIX	340	971.6	1009.7	35.8	18.4	27.2	3.3	40.6	30+	10.6	1	27	0	3.9	24	3	-1	3	1	3	0	0	0.6	16	21.9Y	NW	31	25	5	1	1.5	95
TUCSON	788	923.8	1010.1	31.2	14.3	22.8	-0.3	36.7	30	6.7	6+	15	0	1.7	27	2	-1	2	2	1	0	0	1.4	18	15.6	SW	5	20	11	0	2.4	97
WINSLOW	1492	851.3	1013.3	26.8	7.4	17.1	-1.1	33.3	30	0.0	2	2	1	1.1	39	2	-6	1	3	6	0	0	1.9	23	19.7	22	31	13	10	8	4.5	
YUMA	59	1002.7	1009.7	35.7	18.4	27.1	1.5	42.2	29	10.6	6	28	0	6.1	30	0	T	0	0	0	0	0	1.7	20	14.3		25	27	2	2	1.2	97
ARKANSAS																																
FORT SMITH	136	995.9	1012.5	25.8	11.5	18.7	-2.4	32.2	19+	3.3	15	2	0	11.1	66	96	-38	38	13	9	0	0	1.0	28	15.2		24	11	12	8	4.8	68
LITTLE ROCK	78	1003.4	1012.7	26.5	13.7	20.1	-1.3	32.2	10	7.2	16	1	0	12.8	65	101	-34	35	12	11	0	0	1.4	24	15.6	NW	23	11	11	9	4.7	88
CALIFORNIA																																
BAKERSFIELD	145	995.9	1013.2	32.7	16.9	24.8	3.5	41.7	28	10.6	26	16	0	8.9	39	T	-6	T	0	2	0	0	2.1	34	15.6	9	14	23	5	3	2.5	
BISHOP	1252	872.7		28.8	8.3	18.6	1.6	35.0	29	-0.6	1	8	1			2	-3	1	4		0	0										
BLUE CANYON	1609	839.8		19.5	8.8	14.2	2.9	27.2	29+	-2.8	4	0	2			35	-44	14	7		71	51	0.8	20	8.9	19	4	11	11	9	4.9	
EUREKA U	13			13.7	8.6	11.1	-0.6	17.2	23	5.6	26+	0	0			22	-34	14	8		0	0			12.5	N	5	3	13	15	7.1	66
FRESNO	100	1001.4	1013.0	31.6	13.8	22.7	2.6	40.0	29	6.1	5	14	0	9.4	48	T	-8	T	0	0	0	0	1.9	30	10.3	NW	4	18	6	7	3.4	87
LONG BEACH	8	1013.9	1015.3	23.2	14.2	18.7	1.2	37.8	28	10.0	7	2	0	11.1	66	T	-3	T	0	0	0	0	1.4	22	9.8	28	2	9	13	9	5.6	
LOS ANGELES	30	1011.2	1014.7	20.2	13.6	16.9	0.2	28.9	28	11.1	6+	0	0	12.2	78	T	-3	T	1	0	0	0	2.7	24	11.2Y	77	5	7	10	14	6.4	
LOS ANGELES U	82			23.4	14.1	18.8	0.6	38.3	28	11.7	5	2	0			T	-4	T	0		0	0			7.2	SW	26	10	14	7	4.9	60
MT SHASTA R	1080			23.7	5.7	14.7	2.6	32.8	29+	0.0	1	2	1			9	-42	4	3		25	T										
OAKLAND	2	1016.3	1016.4	19.3	11.7	15.6	0.2	32.8	28	8.9	8+	1	0	10.6	78	1	-15	1	2	0	0	0	3.9	27	11.2	27	25	13	12	6	4.1	
RED BLUFF	104	1000.7	1013.0	30.3	13.6	21.9	1.8	39.4	17	8.3	9+	13	0	7.8	44	7	-22	7	2	1	0	0	0.4	16	20.6	S	18	14	6	11	4.8	93
SACRAMENTO	5	1012.9	1013.6	29.5	12.0	20.8	3.0	38.9	29	7.2	5	11	0	8.9	52	3	-12	3	2	1	0	0	2.8	21	12.1	SW	19	19	9	3	3.3	91
SANDBERG R	1377	862.2		21.8	10.0	15.9	2.2	30.6	28	-0.6	5	0	1			1	-7	1	2		0	0	3.1	33	23.2	34	27					
SAN DIEGO	4	1014.2	1015.2	20.0	14.8	17.4	-0.3	27.2	28+	12.8	5+	0	0	11.1	70	T	-4	T	0	0	0	0	2.1	26	8.9		1	6	9	16	6.5	47
SAN FRANCISCO	2	1015.6	1016.4	19.5	11.1	14.8	0.2	31.7	28	7.2	5	0	0	9.4	75	2	-10	1	2	0	0	0	4.6	28	14.3	27	25	12	13	6	4.4	
SAN FRANCISCO U	16			16.7	10.3	13.5	-0.6	28.3	28	8.3	2	0	0			2	-14	1	2													74
SANTA MARIA	72			20.9	9.6	15.3	1.1	33.9	27	5.0	26+	2	0			1	-5	1	2		0	0						10	15	6	5.1	
STOCKTON	7	1012.9	1013.9	30.3	13.3	21.8	2.8	39.4	29	7.2	5	12	0	7.8	46	1	-10	1	1	0	0	0	3.5	28	12.5	25	19	17	10	4	3.8	
COLORADO																																
ALAMOSA	2297	771.8		18.9	1.3	10.1	-0.3	26.1	18	-4.4	3+	0	11			47	28	18	10		310	76						9	17	5	5.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

MAY 1973

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
COLORADO	M	Mb.	Mb	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
COLORADO SPRINGS	1873	811.0	1014.3	17.9	5.7	11.8	-0.9	26.7	20+	-1.1	2	0	3	-0.6	48	108	54	43	12	8	20	51	1.8	2	17.9	36	27	5	12	14	6.5	
DENVER	1610	836.1	1012.9	20.2	6.0	13.1	-0.3	28.3	20+	-0.6	2	0	2	1.7	50	129	60	90	11	4	25	51	0.3	33	16.5	N	27	8	9	14	6.1	60
GRAND JUNCTION	1476	851.3	1012.1	24.2	8.6	16.4	-0.4	31.1	18	2.2	27	0	0	1.7	42	37	22	19	8	5	T	T	0.3	14	16.1	NW	19	14	8	9	4.4	75
PUEBLO	1428	854.7	1012.5	22.5	7.9	15.2	-0.7	31.1	20	1.1	2+	0	0	4.4	54	47	1	27	8	5	15	T	1.1	3	20.6	NW	6	7	13	11	5.9	81
CONNECTICUT																																
BRIDGEPORT	2	1012.9	1013.5	17.0	9.1	13.1	-1.8	26.7	30	5.0	19	0	0	8.9	79	153	59	42	17	2	0	0	0.6	21	16.5	30	12	6	7	18	7.1	
HARTFORD	52	1006.1	1012.6	20.3	8.6	14.4	-1.1	29.4	29	3.9	7	0	0	7.2	67	151	65	34	18	5	0	0	1.1	22	11.6		29	3	7	21	7.8	50
DELAWARE																																
WILMINGTON	23	1010.2	1013.2	21.3	11.4	16.3	-0.7	27.[illegible]	30+	5.0	18	0	0	10.0	68	141	52	34	14	3	0	0	0.8	24	10.3	33	30+	4	9	1[illegible]	7.2	
DIST.OF COLUMBIA																																
WASHINGTON DULLES	88	1001.4	1012.9	21.8	9.1	15.4		28.9	10+	0.6	18	0	0	9.4	70	101		29	13	1	0	0	1.0	24	12.5	30	11	2	13	16	7.2	
WASHINGTON NATIONAL	3	1010.8	1013.1	22.4	11.8	17.1	-1.7	29.4	29	4.4	18	0	0	10.0	66	86	-19	24	13	2	0	0	0.7	26	13.4	N	4	2	15	14	7.0	52
FLORIDA																																
APALACHICOLA U	4			27.1	19.2	23.2	-0.6	30.6	31+	13.9	5	0	0			65	-8	29	6	5	0	0			10.3		30+	10	9	12	5.5	89
DAYTONA BEACH	9	1014.9	1016.5	29.9	18.1	24.0	0.6	35.6	28	10.6	6	8	0	16.7	66	61	-11	20	9	8	0	0	1.1	18	9.8	22	28+	12	6	13	5.6	
FORT MYERS	5	1016.3	1016.5	31.8	19.5	25.7	0.4	36.1	31+	12.8	17	15	0	19.4	71	20	-78	20	1	3	0	0	0.8	21	13.0	27	9	16	11	4	4.0	
JACKSONVILLE	8	1014.9	1015.8	29.9	16.2	23.1	-1.3	35.0	11	7.2	6	8	0	16.1	70	135	47	42	9	8	0	0	1.5	22	15.2	NW	25	8	13	10	5.6	68
KEY WEST	1	1015.2	1016.0	29.1	24.4	26.8	0.7	31.7	29	21.1	16	0	0	21.1	72	21	-49	19	4	2	0	0	2.5	12	13.0	S	15	6	14	11	6.1	88
LAKELAND U	65			30.2	19.0	24.6	-0.3	34.4	30	14.4	17	9	0			55	-35	28	4		0	0						12	10	9	5.1	78
MIAMI	2	1015.9	1016.3	29.9	23.0	26.4	1.1	32.8	10	17.2	18	6	0	20.6	72	27	-136	8	8	2	0	0	1.8	12	11.2	26	10	3	16	12	6.7	
ORLANDO	33	1011.9	1016.4	31.7	19.8	25.7	0.4	37.2	29	15.0	6	14	0	17.2	64	120	30	57	8	6	0	0	1.4	22	10.3	20	28+	10	10	11	5.5	
PENSACOLA	34	1010.8	1015.2	28.3	19.4	23.9	-0.3	33.3	12	13.3	5	3	0	18.3	74	96	-20	32	8	6	0	0	1.7	22	14.3	29	26	9	9	13	5.9	
TALLAHASSEE	17	1013.2	1015.6	29.4	15.3	22.4	-1.4	35.0	11	4.4	5	6	0	16.7	73	213	109	76	6	8	0	0	1.1	23	13.0	29	26	7	12	12	5.9	
TAMPA	6	1015.9	1016.3	30.4	19.3	24.9	0.0	35.0	30	11.7	17	9	0	17.8	68	4	-68	4	3	1	0	0	1.5	24	8.9	20	27	9	14	8	5.3	80
WEST PALM BEACH	5	1015.6	1016.3	30.8	21.6	26.2	0.9	34.4	25	15.6	17	9	0	18.9	66	105	-25	52	9	8	0	0	1.9	12	14.3	18	26	3	15	13	6.7	
GEORGIA																																
ATHENS	244	985.8	1014.4	25.0	12.1	18.6	-2.6	31.1	11	3.9	18	0	0	11.7	68	204	112	114	11	7	0	0	1.7	24	10.3	18	27	10	8	13	5.7	
ATLANTA	308	978.0	1014.4	24.6	12.1	18.3	-2.3	30.0	11	3.9	16	0	0	11.7	68	181	101	66	11	9	0	0	2.0	26	18.8		19	8	9	14	6.2	69
AUGUSTA	41	1009.1	1014.2	27.3	12.8	20.1	-1.9	32.8	28	3.9	5	2	0	12.2	63	65	-11	32	8	5	0	0	1.6	24	12.5	30	11	8	10	13	6.1	
COLUMBUS	117	1000.7		26.8	14.3	20.6	-1.7	32.2	11	6.1	5	1	0	13.9	70	115	26	43	11	9	0	0	0.8	26	16.1	36	11	12	6	13	5.8	
MACON	108	1002.0	1014.9	28.3	14.0	21.2	-2.1	35.0	23	6.1	16	2	0	13.9	68	108	24	66	9	6	0	0	1.5	25	14.8	NW	19	9	9	13	6.1	73
ROME	194			25.9	10.9	18.4	-1.9	31.1	11	2.8	18	0	0			260	163	101	12		0	T										
SAVANNAH	14	1013.5	1015.3	29.2	16.9	23.1	0.1	35.0	23	8.9	5	5	0	15.6	67	31	-65	11	7	6	0	0	1.7	23	17.4		29	10	6	15	5.8	68
HAWAII																																
HILO	8	1017.3	1018.4	27.1	18.3	22.7	-0.1	28.3	28+	16.7	25	0	0	19.4	85	23	-3	9	12	1	0	0	5.8	6	13.0	NE	29	6	19	6	5.6	66
HONOLULU	2	1017.6	1018.1	29.1	20.9	25.1	0.7	30.6	31+	17.8	15	0	0	17.2	65	212	-25	51	28	0	0	0	0.3	29	8.0	NE	4	0	12	19	8.2	44
KAHULUI	15	1015.2	1017.7	27.6	18.2	22.9	-1.1	28.9	28+	15.6	26+	0	0	16.7	70	14	-3	5	8	0	0	0	6.3	5	14.3	E	31	12	14	5	4.9	75
LIHUE	31	1014.6	1019.7	27.4	20.7	24.1	0.4	28.9	29	17.2	15+	0	0	20.0	81	47	-18	10	23	1	0	0	5.8	4	10.7	E	20+	1	20	10	6.8	61
IDAHO																																
BOISE	865	915.0	1014.4	24.1	7.6	15.8	1.3	32.2	17+	0.6	26	2	0	1.1	41	19	-14	10	6	1	0	0	0.8	31	13.4	NW	19	13	8	10	4.6	81
LEWISTON	431			24.1	8.2	16.2	1.5	34.4	15+	1.1	1	4	0			40	1	21	8		T	T			21.5Y		8	10	9	12	5.4	
POCATELLO	1358	862.9	1014.3	22.2	4.1	13.2	0.3	30.0	18+	-3.3	2	0	4	-1.7	40	11	-18	5	8	1	0	0	2.5	24	18.8	SW	19	14	7	10	4.4	79
ILLINOIS																																
CAIRO U	96			23.1	14.1	18.6	-1.9	28.9	26	8.3	3	0	0			194	82	66	15		0	0			18.8	NW	10	9	13	9	5.4	66
CHICAGO O HARE	201	985.8	1010.2	17.8	7.4	12.7	-1.7	25.0	31	0.6	5	0	0	6.7	70	94	-2	30	19	4	T	T	0.8	22	16.5	27	10	4	8	19	7.4	
CHICAGO MIDWAY	185	988.2	1010.7	18.3	8.0	13.2	-2.4	26.1	31	1.1	4	0	0	7.2	69	106	11	38	19	4	T	0	0.7	22	13.4	SW	10+	4	8	19	7.5	45
MOLINE	177	988.8	1010.2	19.7	8.7	14.2	-2.0	25.6	31+	1.7	17+	0	0	7.8	69	177	80	57	17	7	0	0	1.6	26	15.2	NW	11	7	9	15	6.6	53
PEORIA	199	986.8	1010.8	20.1	8.7	14.4	-2.0	26.7	24	1.1	17+	0	0	8.3	70	115	6	36	15	6	0	0	1.5	24	14.8	SW	1	5	10	16	6.9	42
ROCKFORD	221	983.1	1010.0	18.6	7.9	13.2	-1.8	25.6	31	1.1	4	0	0	8.3	74	177	80	51	18	5	0	0	0.5	26	13.0	28	10+	4	10	17	7.4	
SPRINGFIELD	179	988.8	1010.8	21.4	9.2	15.3	-2.4	27.8	24+	1.7	17	0	0	8.3	67	67	-32	24	10	4	0	0	1.9	24	14.8	S	1	7	11	13	6.4	55
INDIANA																																
EVANSVILLE	116	998.3	1012.3	22.4	11.4	16.9	-2.4	29.[illegible]	26	3.9	15	0	0	11.7	73	141	35	50	13	5	0	0	1.6	24	13.4	S	2	7	7	17	6.6	56

CLIMATOLOGICAL DATA

METRIC UNITS

MAY 1973

State and Station	Elevation ground	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C.				C	%	Mm.	Mm.	Mm			Mm.	Mm.	M.p.s.		M p.s.							%
INDIANA																																
FORT WAYNE	241	981.4	1011.2	19.1	8.1	13.6	- 2.3	25.6	9	- 1.7	5	0	5	7.2	70	56	- 39	13	15	5	0	0	2.1	25	14.8	SW	16+	3	5	23	7.8	46
INDIANAPOLIS	241	982.7	1011.6	21.3	9.3	15.3	- 1.1	26.7	9	1.7	18+	0	0	8.9	69	45	- 56	16	13	7	0	0	2.1	24	14.3		1	1	12	18	7.6	39
SOUTH BEND	236	982.4	1010.3	18.6	8.2	13.4	- 1.4	26.7	9	- 1.1	17	0	1	7.8	71	92	T	28	15	4	0	0	1.3	25	12.5	24	9	4	9	18	7.5	
IOWA																																
BURLINGTON	211			20.3	9.9	15.1	- 1.4	25.6	24	3.3	15+	0	0	8.3	67	169	67	96	11	5	0	0	1.6	27	10.7	31	11	7	9	15	6.6	
DES MOINES	286	975.6	1010.2	21.2	9.7	15.4	- 0.4	30.0	18	1.7	3	0	0	7.2	61	127	24	56	11	6	0	0	1.5	30	15.2	E	27	9	10	12	6.1	56
DUBUQUE	322	971.2		18.1	8.0	13.1	- 1.4	25.0	31	0.0	4	0	1			136	29	38	17		0	0										
SIOUX CITY	334	971.6	1010.9	22.5	8.8	15.7	- 0.7	34.4	21	1.1	15	1	0	4.4	51	44	- 38	12	10	3	0	0	2.2	32	17.0		23	9	11	11	5.6	67
WATERLOO	265	978.3	1009.9	19.3	7.9	13.6	- 1.9	27.2	18	0.6	15+	0	0	5.6	62	184	89	73	15	5	0	0	1.2	31	16.1	28	11	7	9	15	6.6	
KANSAS																																
CONCORDIA	448	958.7	1011.2	22.6	9.0	15.8	- 1.5	31.7	21	2.8	3	0	0	7.2	61	80	- 19	53	10	5	0	0	1.3	30	15.2	NE	16	14	9	8	4.7	79
DODGE CITY	787	922.1	1012.0	21.9	7.8	14.9	- 2.7	28.9	21+	1.1	3+	0	0	6.1	59	19	- 63	8	6	4	0	0	1.3	31	25.0	NW	27	12	12	7	4.8	80
GOODLAND	1114	886.6	1012.6	20.8	6.4	13.7	- 1.1	29.4	20+	0.0	1	0	1	5.6	64	75	14	27	8	2	33	25	2.0	31	24.1	32	27	9	10	12	5.5	
TOPEKA	267	980.0	1011.5	23.0	9.6	16.3	- 1.7	31.7	21	2.8	15	0	0	9.4	68	111	T	41	10	6	0	0	1.3	28	19.2	SW	6	9	10	12	5.7	58
WICHITA	403	964.4	1011.7	23.9	9.3	16.6	- 2.3	31.7	21+	2.2	15	0	0	8.9	63	13	- 88	37	9	6	0	0	1.2	31	17.9	NW	26	14	8	9	4.7	78
KENTUCKY																																
COVINGTON	265	981.0	1012.3	20.2	9.1	14.7	- 2.3	25.6	25+	0.6	5	0	0	10.0	75	88	- 3	20	17	6	0	0	2.1	22	15.6	31	19	1	11	19	7.6	
LEXINGTON	294	978.0	1013.2	21.1	10.1	15.6	- 2.4	26.7	26+	2.8	18+	0	0	10.0	71	209	111	73	15	11	0	0	2.2	21	12.5	24	23	3	11	17	7.3	
LOUISVILLE	145	994.9	1012.7	21.7	11.1	16.4	- 1.6	27.2	26+	3.9	5	0	0	10.0	68	179	80	71	13	7	0	0	1.7	23	13.4	S	2	4	9	18	7.2	39
LOUISIANA																																
ALEXANDRIA	28	1009.8	1014.2	27.6	15.3	21.4	- 1.3	32.2	10	7.8	16	1	0			196	55	71	9	8	0	0	1.5	20	9.8	15	2	13	10	8	4.6	
BATON ROUGE	20	1011.9	1014.5	28.9	17.9	23.4	- 0.4	31.7	30+	10.6	16+	0	0	16.7	69	142	20	91	7	5	0	0	1.2	19	15.6	32	24	11	10	10	5.1	
LAKE CHARLES	3	1012.9	1014.1	27.3	17.9	22.6	- 1.6	32.2	30	11.1	4	1	0	17.8	77	190	73	104	6	6	0	0	2.1	18	19.2	32	7	13	9	9	4.8	
NEW ORLEANS	1	1013.9	1014.6	27.8	17.2	22.5	- 1.1	32.2	22	7.8	16	1	0	17.8	76	119	8	52	7	4	0	0	1.3	20	24.6	36	24	8	13	10	5.5	76
SHREVEPORT	77	1004.1	1013.1	28.4	15.7	22.1	- 0.8	33.3	10	7.8	16	2	0	13.9	63	51	- 71	27	8	7	0	0	1.2	22	15.6	27	7	15	9	7	4.4	76
MAINE																																
CARIBOU	190	989.2		13.6	5.2	9.4	- 0.6	21.1	30	0.0	8	0	1			128	51	42	15		0	0						2	5	24	8.5	
PORTLAND	13	1010.8	1013.2	14.6	6.9	10.7	- 0.9	26.1	29	1.1	8	0	0	7.8	83	160	73	39	17	1	0	0	0.5	17	14.8	E	21	3	10	18	7.6	37
MARYLAND																																
BALTIMORE	45	1007.8	1013.4	20.8	9.8	15.3	- 2.7	28.9	2	1.7	18	0	0	[illegible].9	66	95	- 6	27	11	0	0	0	1.0	25	16.1		30	3	15	13	7.0	46
MASSACHUSETTS																																
BLUE HILL OBS'R	192			17.9	8.0	13.0	- 0.7	27.8	30+	3.9	6	0	0			96	8	27	12		0	0			20.1		29					42
BOSTON	5	1011.9	1012.7	17.9	9.8	13.9	- 1.0	30.6	29	5.6	1	0	0	7.8	71	96	11	25	13	3	0	0	0.7	21	13.4		21+	2	11	18	7.7	54
WORCESTER	301	976.0	1013.0	17.4	7.3	12.3	- 0.6	27.2	29	2.8	6	0	0	6.7	71	120	24	35	13	3	0	0	1.8	27	12.5	28	12	2	8	21	7.8	
MICHIGAN																																
ALPENA	210	985.1	1010.4	15.9	3.1	9.5	- 0.8	23.3	31	- 3.9	15	0	9	2.8	66	123	49	64	16	5	T	0	0.3	13	11.6	NE	28	8	8	15	6.2	52
DETROIT	189			17.8	9.0	13.4	- 1.6	25.0	31+	2.2	16+	0	0	5.6	61	71	- 19	14	12	3	T		1.1	24	13.0	22	16+					
DETROIT METRO	193	986.5	1010.6	18.3	7.8	13.1	- 1.2	24.4	28+	- 0.6	17	0	2	7.8	73	94	5	18	15	4	T	T	1.4	25	16.1	SW	16	2	10	19	7.7	41
FLINT	235	982.4	1010.2	16.8	6.2	11.5	- 2.1	22.8	31	- 1.7	18+	0	5	6.7	73	95	9	38	17	4	8	T	1.4	25	10.7	25	16+	4	8	19	7.6	
GRAND RAPIDS	239	981.4	1010.5	17.9	6.2	12.1	- 1.7	23.9	31+	- 2.2	18	0	4	6.1	69	109	22	36	18	5	T	T	1.3	24	17.4	SW	11	1	6	24	8.4	28
HOUGHTON LAKE	350	968.5	1010.4	16.5	4.1	10.3	- 0.9	23.3	31	- 4.4	18	0	5	4.4	70	124	50	49	14	6	20	25	0.6	27	10.3	28	11+	3	9	19	7.5	
LANSING	256	978.7	1010.4	17.5	5.7	11.6	- 2.3	23.3	31+	- 3.9	18	0	5	6.1	70	96	1	27	18	3	T	T	1.6	25	15.2	SW	2	2	9	20	8.0	44
MARQUETTE	206			10.9	3.9	7.4	- 2.5	22.8	30	- 0.6	3	0	2			182	107	61	14		79	25			12.1	NW	15	8	3	20	7.0	42
MUSKEGON	191	987.5	1010.6	15.8	6.2	11.1	- 2.2	23.3	24	- 1.1	18	0	2	5.6	73	96	20	26	12	5	T	T	1.1	23	12.5	20	1	3	7	21	7.6	
SAULT STE MARIE	220			12.9	2.9	7.9	- 1.8	21.1	24	- 3.3	18	0	7			132	62	43	14	2	13	T			14.3	NW	16	8	5	18	6.7	53
MINNESOTA																																
DULUTH	435	960.0	1011.5	14.3	3.2	8.8	- 0.8	26.1	30	- 2.8	4	0	8	2.2	70	97	13	42	13	1	38	T	1.7	6	18.8	SW	15	5	6	20	7.4	39
INTERNATIONAL FALLS	359	968.8	1011.9	18.2	4.1	11.2	0.8	27.2	30	- 3.9	4	0	5	1.7	55	43	- 23	16	10	3	0	0	2.1	3	13.4	33	15	9	6	16	6.3	
MINNEAPOLIS	254	980.0	1010.2	18.6	7.2	12.9	- 1.2	28.3	31	0.0	17	0	1	4.4	61	63	- 18	36	16	4	0	0	1.3	1	16.1	NE	27	4	12	15	6.9	49
ROCHESTER	395	962.8	1010.4	17.8	5.9	11.9	- 1.8	26.1	31	- 1.1	17	0	3	6.1	70	134	41	27	15	5	5	T	1.3	34	17.4	28	9	7	12	12	6.5	
ST CLOUD	313	973.9	1011.2	18.7	5.2	11.9	- 1.2	27.2	31	- 2.8	4	0	7			73	- 16	40	12		0	0						5	10	16	7.0	

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Ice pellets: Total	Precipitation: Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile (1.6 kilometers): Direction	Wind: Fastest mile (1.6 kilometers): Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover tenths (sunrise to sunset)	Possible sunshine
MISSISSIPPI	M	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
JACKSON	94	1002.7	1014.3	28.2	15.1	21.6	- 1.2	34.4	10	7.2	18+	3	0	14.4	65	151	40	41	11	9	0	0	1.2	20	15.6	NW	23	13	9	9	4.7	57
MERIDIAN	88	1003.7	1014.6	28.1	14.5	21.3	- 1.1	32.2	10	7.2	18+	1	0	13.3	65	168	69	75	12	12	0	0	0.9	20	13.0	27	23	12	10	9	5.1	
MISSOURI																																
COLUMBIA REGIONAL	270	979.3	1011.4	21.7	10.4	16.1	- 1.9	29.4	21	4.4	17+	0	0	8.9	67	111	- 8	36	12	8	0	0	1.6	25	22.4		7	7	11	13	6.4	74
KANSAS CITY	309	974.3	1010.7	22.2	10.6	16.4	- 1.4	32.2	21	4.4	15+	1	0	7.8	61	144	35	39	8	7	0	0	1.2	26	17.0	SW	1	12	8	11	5.3	69
ST JOSEPH	247			23.4	10.3	16.8	- 1.0	32.8	21	2.2	17	2	0	7.2	57	150	38		9				1.5	28	13.0	32	19	14	5	12	5.5	
ST LOUIS	163	991.2	1011.4	22.5	10.5	16.5	- 1.4	28.3	21	4.4	17+	0	0	11.1	72	100	5	39	13	8	0	0	2.0	24	15.6	SE	26	9	9	13	6.1	60
SPRINGFIELD	386	967.2	1012.1	22.7	9.4	16.1	- 2.0	29.4	10	2.2	15	0	0	10.0	70	109	- 25	28	11	9	0	0	1.7	23	13.4	SW	24	9	10	12	5.5	67
MONTANA																																
BILLINGS	1087	891.3	1014.8	19.6	5.2	12.4	- 1.4	30.0	31	- 0.6	2	0	2	- 0.6	45	19	- 29	14	8	1	46	25	2.3	29	16.1	NW	8	10	8	13	5.7	72
GLASGOW	696			21.4	5.5	13.4	0.6	31.1	31	0.0	12	0	1			14	- 24	11	7	1	T	T			15.6	28	8	6	13	12	6.1	
GREAT FALLS	1116	887.9	1014.7	20.5	5.4	13.0	1.3	30.6	16	- 1.7	1	0	2	- 2.2	38	24	- 29	19	8	0	8	T	3.6	24	18.3		8	7	12	12	6.2	71
HAVRE	788	922.1	1013.6	21.4	5.8	13.6	1.0	30.6	16+	- 1.7	12	0	2	0.0	44	26	- 13	15	7	2	T	0	1.7	27	17.4		8	8	12	11	5.6	88
HELENA	1167	881.1	1015.9	19.8	3.3	11.6	0.0	29.4	16	- 3.3	11	0	6	- 3.3	40	27	- 12	18	7	1	T	0	2.5	27	16.5	NW	20	8	10	13	5.7	82
KALISPELL	904	911.6	1016.1	20.1	2.5	11.3	0.1	30.0	17+	- 5.6	1	0	8	0.0	50	23	- 19	12	8	0	T	T	1.2	21	12.5	33	10	9	7	15	6.0	
MILES CITY	801	921.1	1013.5	20.9	6.0	13.4	- 0.7	31.7	31	0.6	12	0	0	2.2	52	49	5		6	2	0		2.0	31								
MISSOULA	972	905.2	1016.8	21.1	2.5	11.8	0.3	30.6	17+	- 5.0	11	0	10	0.0	49	14	- 34	8	7	0	T	0	1.5	28	13.4		10	11	8	12	5.4	69
NEBRASKA																																
GRAND ISLAND	561	946.2	1011.8	21.4	7.1	14.3	- 1.6	32.2	21	- 0.6	15	1	1	5.6	59	98	0	55	12	8	T	T	1.9	32	13.0	18	4	13	8	10	5.0	
LINCOLN	360	968.8	1011.2	22.1	7.9	15.0	- 1.7	33.9	21	0.0	15	1	1	6.1	60	149	60	69	12	8	0	0	1.9	32	18.8	NE	27	12	6	13	5.5	65
NORFOLK	471			21.5	7.9	14.7	- 0.9	32.2	21	0.6	15	1	0			141	48	105	8		0	0						10	10	11	5.4	
NORTH PLATTE	846	915.7	1012.9	21.4	5.2	13.3	- 1.4	30.6	18	- 3.3	3	0	5	3.9	56	98	23	60	6	3	0	0	2.1	34	21.0	NW	27	11	10	10	5.4	71
OMAHA	298	975.6	1010.7	22.0	8.4	15.2	- 2.0	32.8	21	1.1	15+	1	0	7.2	62	125	37	40	13	7	0	0	1.8	33	22.4	N	9	12	8	11	5.3	64
SCOTTSBLUFF	1206	878.8	1013.8	21.4	4.0	12.7	- 1.1	30.0	18	- 2.2	3	0	5	1.1	50	20	- 48	17	7	2	T	T	2.6	33	20.1	33	27	11	11	9	5.2	
VALENTINE	789			21.6	4.8	13.2	- 0.7	33.3	20	- 3.3	14	1	4			89	21	63	8		T	0			17.0	NW	21+	14	9	8	4.6	76
NEVADA																																
ELKO	1539	844.6	1014.0	22.4	4.3	13.4	2.3	29.4	30	- 2.2	2	0	3	- 0.6	41	18	- 7	10	5	3	0	0	0.8	26	9.8	17	5+	12	10	9	4.9	
ELY	1906	809.0	1012.9	21.3	1.7	11.5	1.3	28.3	18	- 6.1	2	0	9	- 4.4	38	10	- 12	6	6	4	10	0	1.3	22	17.9	SW	4	6	15	10	5.5	82
LAS VEGAS	659	935.3	1010.3	32.7	16.9	24.8	1.6	39.4	18	7.2	1	20	0	1.7	25	2	T	2	1	2	0	0	1.8	21	15.6	NE	13	17	8	6	3.5	84
RENO	1342	865.9	1013.9	25.7	4.1	14.9	2.7	32.2	29+	- 7.2	1	3	3	1.1	43	19	6	15	5	5	T	T	1.4	27	21.5	SW	30	11	13	7	5.1	89
WINNEMUCCA	1311	868.9	1014.6	25.1	4.2	14.7	2.6	32.8	17	- 2.8	2+	2	6	1.1	45	34	10	17	6	2	0	0	0.5	32	15.2		18	9	8	14	5.7	80
NEW HAMPSHIRE																																
CONCORD	104	1000.0	1012.7	17.7	5.6	11.6	- 1.4	26.7	29	- 2.2	1	0	1	7.2	78	107	26	26	15	4	0	0	0.2	28	10.7	SE	20	1	8	22	8.2	38
MT WASHINGTON OBS	1909			3.2	- 2.0	0.6	- 1.1	9.4	28	- 6.7	7	0	26			294	146	53	20	3	643	203			43.4Y	E	21	1	5	25	8.8	19
NEW JERSEY																																
ATLANTIC CITY	20	1010.8	1013.2	19.6	10.2	14.9	- 1.4	27.8	29	3.9	7	0	0	11.1	81	78	- 11	20	14	2	0	0	1.3	22	15.6	31	11	5	9	17	7.0	45
ATLANTIC CITY U	3			16.9	11.1	14.0	- 1.3	24.4	29+	5.0	18	0	0			72	- 8	17	13						20.1	NW	11					
NEWARK	2	1011.9	1012.7	19.9	11.6	15.8	- 0.9	28.3	29	5.6	19	0	0	9.4	68	90	- 2	21	19	4	0	0	0.8	23	12.1	28	12	5	11	15	7.0	
TRENTON U	17			19.6	10.5	15.1	- 1.8	28.3	30	4.4	18	0	0			96	4	26	14		0	0			11.6	NW	11	5	8	18	7.2	38
NEW MEXICO																																
ALBUQUERQUE	1619	837.8	1012.1	25.2	8.9	17.1	- 1.3	32.2	19	2.8	2	1	0	1.7	40	17	- 2	7	8	7	0	0	0.4	31	20.1		5	11	15	5	4.4	71
CLAYTON	1515			21.3	6.9	14.1	- 1.3	29.4	21	0.0	3	0	1			22	- 48	6	8		T	0						10	13	8	4.9	
ROSWELL	1112	888.3	1010.8	27.2	10.8	19.0	- 2.1	34.4	19+	2.8	15	7	0	3.3	40	19	- 7	15	2	3	0	0	0.6	27	21.0	N	27	17	9	5	3.9	
NEW YORK																																
ALBANY	84	1002.0	1012.7	19.1	6.8	12.9	- 1.4	26.1	30+	1.7	20+	0	0	7.8	75	138	50	34	20	3	0	0	1.3	22	13.0	S	10	2	5	24	8.3	40
BINGHAMTON	485	953.9	1012.5	15.4	6.3	10.8	- 2.0	23.3	10	0.0	18+	0	3	6.7	77	84	- 5	16	21	7	46	25	1.5	22	16.5		11	1	3	27	8.6	30
BUFFALO	215	986.5	1012.0	16.5	8.4	12.5	- 0.2	23.9	28	2.8	19+	0	0	7.2	73	76	1	18	23	3	T	0	2.8	23	13.0		31+	2	5	24	8.4	32
NEW YORK U	40	1009.8	1013.1	19.5	11.0	15.3	- 1.6	27.8	29	5.0	18	0	0	8.3	69	115	21	23	19	2	0	0	0.3	25	11.6	NE	25					40
NEW YORK KENNEDY	4	1012.2	1013.1	17.7	10.3	14.0	- 1.7	26.1	29	5.6	18	0	0	8.9	75	101	8	24	16	3	0	0	1.2	21	19.7	16	28	6	10	15	6.8	
NEW YORK LA GUARDIA	3	1012.2	1013.2	18.6	11.3	14.9	- 1.8	27.2	29	6.7	18	0	0	8.3	68	107	16	21	18	5	0	0	0.7	23	13.9	SW	12	4	10	17	7.2	
ROCHESTER	167	991.9	1012.0	18.2	8.6	13.4	- 0.3	25.6	28+	1.7	19+	0	0	7.8	73	68	- 2	25	17	4	T	0	1.8	24	12.1		3	3	3	25	8.4	37
SYRACUSE	125	997.0	1011.8	17.2	7.6	12.4	- 1.9	23.9	28+	1.1	17	0	0	8.9	82	142	59	34	18	5	30	T	0.8	24	12.1		11	3	2	26	8.5	24

CLIMATOLOGICAL DATA

METRIC UNITS

MAY 1973

State and Station	Elevation ground	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	Clear 0-3	Partly cloudy 4-7	Cloudy 8-10		
	M	Mb	Mb.	C.	C.	C.	C	C.		C				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							
NORTH CAROLINA																																
ASHEVILLE	652	939.0	1014.6	22.8	8.6	15.7	-1.5	28.3	23	-1.1	18	0	1	9.4	71	224	131	126	10	8	0	0	0.5	32	13.4	31	23	8	11	12	5.8	61
CAPE HATTERAS R	2	1014.6	1014.9	23.9	15.2	19.6	-0.4	27.8	29	5.6	6	0	0	15.0	76	122	21	29	9	9	0	0	2.2	23	12.5	30	20	8	8	15	6.0	69
CHARLOTTE	224	986.8	1014.0	24.5	11.8	18.2	-2.4	30.6	23	1.1	18	0	0	10.6	64	109	30	36	13	8	0	0	1.7	22	13.0	NW	10	7	7	17	6.5	75
GREENSBORO	273	982.7	1014.1	23.2	10.9	17.1	-2.3	28.9	23	2.2	6	0	0	10.6	70	145	61	78	8	7	0	0	1.7	22	17.4		23	6	10	15	6.7	57
RALEIGH	132	998.3	1014.0	24.9	11.2	18.1	-1.7	31.1	28	1.1	6	0	0	11.7	73	101	12	30	8	5	0	0	1.6	22	15.6	29	28	9	6	16	6.3	66
WILMINGTON	9	1013.2	1014.6	26.3	15.3	20.8	-0.6	33.3	11	7.2	6	1	0	15.0	73	88	-1	28	10	4	0	0	1.7	21	17.4		11	7	10	14	6.2	73
NORTH DAKOTA																																
BISMARCK	502	952.9	1012.8	20.3	4.3	12.3	-1.0	28.3	17	-5.0	14	0	5	2.2	56	45	-5	30	7	2	0	0	1.6	34	17.9	NW	11	8	13	10	5.8	80
FARGO	273	979.0	1011.6	20.3	4.3	12.3	-0.7	27.8	15	-6.1	3	0	7	2.8	56	42	-10	16	8	3	0	0	2.2	1	16.1	N	15	9	11	11	5.8	68
WILLISTON	579	945.1	1013.5	20.3	5.0	12.7	0.1	30.0	31	-2.2	2	0	4	2.8	57	27	-9	15	9	1	0	0	1.2	33	18.3	NW	11	8	9	14	6.0	68
OHIO																																
AKRON	368	967.5	1012.0	18.7	9.2	14.0	-1.4	25.6	28	1.7	5+	0	0	7.2	69	101	3	15	24	7	T	0	1.7	23	10.3	30	12+	2	7	22	8.1	
CINCINNATI ABBE OB	232			20.7	10.8	15.8	-2.1	26.7	26+	3.3	17+	0	0			82	-14	22	19		0	0			8.5		1					25
CLEVELAND	237	982.7	1011.7	18.3	9.1	13.7	-0.7	25.6	28+	1.1	5	0	0	8.9	75	122	32	27	24	8	15	T	1.8	22	14.8	SW	16	3	9	19	7.7	38
COLUMBUS	247	982.4	1012.2	20.2	10.3	15.3	-1.1	26.1	28	0.6	5	0	0	8.3	68	85	-16	18	19	6	0	0	2.2	23	13.9	S	2	0	12	19	7.9	35
DAYTON	305	976.0	1011.9	20.2	9.5	14.8	-1.6	26.1	9	1.1	5	0	0	8.3	69	79	-16	29	16	6	0	0	2.5	22	13.9	SW	10	2	10	19	7.6	48
MANSFIELD	395			19.2	9.6	14.4	-1.5	25.6	28	1.7	18+	0	0	8.3	71	105	11	35	20	8	T	0	2.5	23	13.4	20	16	2	11	19	7.7	
TOLEDO	204	985.8	1010.9	18.6	7.7	13.2	-1.4	24.4	28	-1.7	14	0	4	6.1	64	72	-5	20	20	7	0	0	1.8	25	13.9	SW	16+	1	12	18	7.7	34
YOUNGSTOWN	359	969.5	1012.0	16.8	8.0	12.4	-1.9	25.0	28	0.0	5	0	1	7.8	78	130	26	25	21	7	T	0	1.5	22	11.2	24	16	3	5	23	8.2	
OKLAHOMA																																
OKLAHOMA CITY	392	966.1	1011.9	26.4	12.2	19.3	-0.9	35.6	19	4.4	3	3	0	10.6	62	92	-40	48	9	8	0	0	0.6	27	21.5		27	14	12	5	4.1	69
TULSA	198	987.8	1011.9	26.2	13.2	19.7	-0.2	33.9	19	6.1	3+	1	0	11.1	62	135	1	64	8	6	0	0	1.1	22	17.0	N	11	11	14	6	4.7	71
OREGON																																
ASTORIA	2	1018.3	1019.2	16.8	6.9	11.9	0.1	28.9	13	2.2	21+	0	0	7.2	76	80	-1	43	16	0	T	0	1.7	26	11.2	31	30	4	11	16	7.1	
BURNS O	1265			21.6	4.1	12.8	0.9	30.6	17+	-3.9	1	0	5			27	4	14	5		T	0						12	11	8	5.0	
EUGENE	109	1004.7	1018.2	20.9	5.7	13.3	-0.1	29.4	29+	0.6	26	0	0	8.3	74	22	-33	9	6	1	0	0	0.8	27	7.6	36	28	6	10	15	6.5	
MEACHAM	1234	877.8	1016.6	16.5	4.2	10.4	1.5	28.3	14	-2.2	26	0	8			45	-17	19	9		T	0			8.9	24	24	10	8	13	5.7	
MEDFORD	396	969.5	1016.8	26.0	7.7	16.9	2.7	36.7	29	1.1	1	8	0	5.0	51	11	-26	6	6	2	0	0	1.7	32	9.8	31	3	10	10	11	5.2	
PENDLETON	452	962.8	1016.2	24.2	8.4	16.3	0.9	35.0	14	2.8	11+	4	0	1.1	39	17	-11	9	6	0	0	0	2.0	27	13.0	28	24	13	10	8	5.0	
PORTLAND	6	1016.9	1018.1	21.8	8.7	15.2	1.1	33.3	13	4.4	11	2	0	6.7	62	36	-14	20	11	2	0	0	1.2	31	11.6	S	8	7	11	13	6.4	63
SALEM	60	1010.5	1018.1	21.1	5.3	13.2	-0.3	32.2	13	0.6	11	1	0	5.0	59	28	-25	16	5	0	0	0	1.0	27	10.3	18	8	8	8	15	6.3	
SEXTON SUMMIT R	1163	885.2	1016.6	18.5	5.7	12.1	2.1	29.4	29+	-1.1	25+	0	2			11	-44	6	4		8	T			16.1	34	31					
PACIFIC AREA																																
GUAM TAGUAC R	110			30.8	22.6	26.7	-0.2	31.7	24+	20.0	18	0	0			76	-30	29	19		0	0			11.6	E	29					67
JOHNSTON	2	1014.6	1015.2	27.2	23.6	25.4	-0.8	28.3	27	20.6	30	0	0	20.6	75	21	-4	8	16	0	0	0	8.2	8	15.2	E	17	2	12	17	7.3	72
KOROR R	29			31.6	24.8	28.2	0.8	32.8	24+	23.3	23+	12	0			258	-114	49	26	2	0	0			10.7	E	8	0	7	24	8.5	65
KWAJALEIN	2	1009.8	1010.4	30.4	25.2	27.8	0.5	31.1	23+	22.2	14	0	0	24.4	82	201	-7	33	23	0	0	0	5.6	7	14.8	10	31	0	4	27	9.1	
MAJURO	3			29.2	24.8	27.0	0.1	30.6	21	22.8	28	0	0			364	40	59	27	1	0	0			13.0	E	22	0	7	24	8.7	56
PAGO PAGO	4	1011.2	1011.3	30.1	24.6	27.4		31.7	14	22.2	2	0	0	23.9	84	201		92	19	3	0	0	2.6	12	12.1	E	23	0	8	23	8.4	25
PONAPE R	37			30.9	24.1	27.5	0.6	32.2	14	22.2	8	1	0			414	-102	96	28	0	0	0			8.5		14+	0	6	25	8.8	61
TRUK MOEN ISLAND	2			30.7	25.1	27.9	0.8	32.2	17+	23.3	25+	2	0			228	-131	45	24	1	0	0			9.8	SE	25	0	2	29	9.3	48
WAKE	3	1015.2	1015.5	29.9	23.5	26.7	0.2	31.1	25+	21.1	11	0	0	21.1	73	51	-1	15	14	0	0	0	6.3	8	11.6	E	29+	13	14	4	4.5	81
YAP R	13			31.2	24.6	27.9	0.1	32.2	17	22.8	20+	1	0			152	-90	46	22	0	0	0			10.7	E	31	0	17	14	7.1	70
PENNSYLVANIA																																
ALLENTOWN	118	999.0	1013.1	18.5	8.4	13.4	-2.3	26.1	30+	1.7	19	0	0	8.3	73	140	36	41	16	7	0	0	0.9	25	13.0	31	21	4	10	17	7.4	
ERIE	223	984.8	1011.7	15.6	7.2	11.4	-1.4	23.3	28	0.6	6	0	0	7.8	81	116	26	28	22	7	T	0	2.5	21	14.8	15	27	2	8	21	7.9	
HARRISBURG	103	1000.3	1013.1	19.7	8.9	14.3	-2.7	27.8	30	1.7	19	0	0	8.3	72	162	63	56	16	7	0	0	0.6	28	15.2		11	4	9	18	7.3	36
PHILADELPHIA	2	1011.9	1012.9	20.6	10.8	15.7	-1.3	28.9	30	4.4	16	0	0	11.1	78	105	10	25	14	3	0	0	1.0	24	15.2	NW	11	6	9	16	7.0	43
PITTSBURGH	347	968.5	1012.4	18.6	8.5	13.6	-1.9	26.1	28	0.6	5	0	0	7.2	71	149	50	59	20	7	T	0	1.8	25	14.8	27	30	3	5	23	8.3	29
SCRANTON	283	978.3	1012.5	16.8	6.9	11.9	-3.4	24.4	10	-0.6	17	0	1	6.7	72	97	-4	28	20	5	10	T	1.1	23	13.0	S	3	2	6	23	8.2	34
WILLIAMSPORT	160	993.6	1012.8	17.9	7.6	12.7	-3.1	24.4	28	-1.7	19	0	1	7.8	75	132	28	38	21	6	0	0	0.4	24	13.4	25	11	4	4	23	8.2	
RHODE ISLAND																																
BLOCK ISLAND	34			15.4	9.4	12.4	0.3	24.4	30	4.4	8	0	0			105	29	41	11		0	0										
PROVIDENCE	16	1010.5	1013.0	18.8	8.7	13.7	-0.4	31.1	29	3.3	8+	0	0	9.4	77	101	16	31	16	1	0	0	1.1	22	10.3	26	29+	3	8	20	7.5	45

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station ⊙	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover tenths, sunrise to sunset	Possible sunshine
SOUTH CAROLINA	M	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CHARLESTON	12	1013.2	1015.0	28.2	15.9	22.1	- 0.7	34.4	23+	6.7	6	5	0	15.6	71	46	- 45	15	7	4	0	0	2.1	22	26.4Y		29	8	10	13	6.1	81
CHARLESTON U	3			26.8	18.8	22.8	- 0.1	33.3	11	11.7	5	1	0			25	- 54	13	6		0	0			18.8	S	24					
COLUMBIA	65	1006.4	1014.6	27.0	12.7	19.9	- 2.4	32.8	11	3.3	5	3	0	12.8	67	103	13	30	8	7	0	0	1.5	24	12.5	33	11	7	9	15	6.3	47
GRNVLLF-SPRTNBRG	292	979.7	1013.9	25.6	11.9	18.8	- 2.0	31.7	23	2.2	18	0	0	10.6	63	142	60	37	12	8	0	0	1.2	23	15.6		27	10	7	14	5.7	58
SOUTH DAKOTA																																
ABERDEEN	395	964.8	1011.5	22.4	5.8	14.2	0.1	30.0	31	- 2.8	14	0	3	3.9	54	25	- 34	19	6	2	0	0	2.5	35	16.5	33	11	10	12	9	5.2	
HURON	390	964.8	1011.3	20.9	5.9	13.4	- 0.7	29.4	20	- 3.3	14	0	3	5.0	60	52	- 8	24	8	0	T	T	1.9	33	19.2	N	11	12	9	10	4.9	75
RAPID CITY	964	903.8	1014.0	19.9	4.2	12.1	- 1.1	30.6	31	- 2.2	14	0	3	1.7	52	60	- 7	26	8	4	0	0	3.8	33	18.8	NW	27+	11	10	10	5.3	65
SIOUX FALLS	432	960.0	1011.2	20.8	6.8	13.8	- 0.8	31.7	21	- 0.6	17+	0	3	5.0	60	49	- 37	27	7	3	0	0	2.5	32	18.3	30	23	9	14	8	5.3	
TENNESSEE																																
BRISTOL	459	960.4	1014.0	21.9	9.9	15.9	- 2.8	28.3	28	1.1	18	0	0	9.4	68	164	76	41	14	7	0	0	1.5	26	13.0	30	23+	8	5	18	6.6	
CHATTANOOGA	203	989.5	1014.1	25.1	11.3	18.2	- 2.9	30.6	10	3.9	18+	0	0	11.1	65	162	72	57	10	7	0	0	1.3	21	15.2	SW	28	7	12	12	6.0	59
KNOXVILLE	299	979.3	1014.2	23.4	11.6	17.5	- 2.3	28.3	26	3.3	18	0	0	10.6	68	145	56	53	12	7	0	0	1.5	27	15.2		23	5	10	16	6.5	62
MEMPHIS	79	1003.1	1013.0	25.7	14.6	20.2	- 1.1	31.1	26+	7.2	5	0	0	13.3	67	158	51	54	12	8	0	0	1.6	20	17.0	33	11	12	7	12	5.0	68
NASHVILLE	180	991.5	1013.2	23.8	11.9	17.9	- 2.4	30.0	26	3.9	16+	0	0	11.7	71	145	51	52	13	9	0	0	1.7	21	14.3	SE	7	7	16	8	5.7	62
OAK RIDGE R	276			23.0	10.3	16.7	- 2.5	27.8	26	1.7	18+	0	0			265	170	112	13		0	0			20.6Y		28	5	12	14	6.7	
TEXAS																																
ABILENE	544	949.9	1011.8	28.8	14.1	21.4	- 0.6	37.2	19	5.0	3	11	0	11.1	58	35	- 75	22	8	9	0	0	1.6	20	14.8	N	27	19	6	6	3.5	83
AMARILLO	1098	889.6	1011.5	24.6	9.7	17.2	- 2.0	32.8	21	2.2	3	2	0	6.7	55	36	- 49	17	7	6	0	0	0.8	25	19.2	NW	27	16	11	4	3.8	85
AUSTIN	182	991.2	1012.8	29.1	17.2	23.2	- 0.8	34.4	19	8.9	4	9	0	14.4	63	35	- 59	15	7	7	0	0	1.3	18	11.2	NW	6	14	6	11	4.9	65
BROWNSVILLE	6	1011.9	1012.3	30.2	20.7	25.4	- 0.7	37.2	27	15.6	9+	7	0	20.0	76	31	- 28	27	3	2	0	0	3.2	14	12.5	SE	1	13	6	12	5.7	75
CORPUS CHRISTI	12	1011.2	1012.7	30.7	19.4	25.1	- 0.2	37.2	27	10.6	16	13	0	18.9	72	15	- 61	14	2	1	0	0	3.6	12	17.9	NW	12	13	7	11	5.0	68
DALLAS	147			28.5	16.4	22.4	- 0.3	35.0	19	7.8	3	7	0	13.3	58	102	- 21	39	7	7	0	0	1.7	18	15.6	27	24+	14	9	8	4.0	
DEL RIO	313	976.0	1011.2	32.9	18.1	25.5	- 0.3	40.6	20	11.1	16	22	0	11.7	48	5	- 64	4	3	5	0	0	2.7	11	13.4	36	12	11	7	13	5.3	
EL PASO	1194	881.5	1011.2	28.9	11.8	20.4	- 1.8	35.0	30	3.3	2	8	0	1.7	32	7	- 3	5	4	3	0	0	1.4	27	20.1	E	13	18	10	3	3.1	88
FORT WORTH	164	992.6	1012.6	28.3	15.8	22.1	- 0.6	34.4	21+	7.8	3	6	0	14.4	66	81	- 36	23	8	10	0	0	1.3	19	15.6	27	8	15	9	8	4.2	
GALVESTON U	2			25.8	21.2	23.5	- 0.8	29.4	31+	15.6	3	0	0			41	- 30	34	5		0	0			13.4	SE	6					68
HOUSTON INTERCON	29	1010.2	1013.7	29.1	16.3	22.7	- 1.3	33.9	27	8.3	16+	4	0	17.2	75	107	- 2	66	7	3	0	0	1.2	17	16.1	13	31	13	8	10	5.4	67
LUBBOCK	992	902.1	1011.5	27.5	12.2	19.9	- 0.2	37.8	19	4.4	3	8	0	5.6	45	11	- 70	7	4	5	0	0	0.5	24	16.5	24	6	20	7	4	3.3	85
MIDLAND	869	914.3	1011.3	28.7	12.2	20.4	- 2.6	37.2	19	3.3	3	11	0	3.9	40	22	- 31	10	7	5	0	0	0.4	25	17.4	26	6	19	7	5	3.2	
PORT ARTHUR	5	1013.2		28.1	17.0	22.6	- 1.2	33.9	27	10.6	16	2	0	17.8	78	139	13	59	8	8	0	0	1.9	19	12.1	SE	6	11	13	7	4.9	70
SAN ANGELO	580	946.2	1011.6	31.1	14.4	22.8	- 0.7	38.9	26+	6.7	3	16	0	10.0	52	36	- 45	25	5	6	0	0	1.5	21	16.5	8	12	17	10	4	3.5	
SAN ANTONIO	240	985.4	1012.9	29.7	17.7	23.7	- 0.3	35.0	27	8.9	4	9	0	15.6	64	69	- 18	37	6	4	0	0	1.5	12	17.9	NW	12	12	6	13	5.3	64
VICTORIA	32	1008.8	1012.9	30.0	19.2	24.6	0.1	35.0	27	11.1	16	9	0	17.8	70	31	- 74	26	4	1	0	0	1.9	14	22.4Y	11	12	12	6	13	5.7	
WACO	153	994.9	1012.7	28.2	15.8	22.0	- 1.5	33.9	19	8.3	4	4	0	15.0	66	80	- 36	51	9	7	0	0	2.2	17	16.5	36	25	14	10	7	4.0	
WICHITA FALLS	303	976.0	1012.1	28.1	12.3	20.2	- 2.2	37.2	21	4.4	3	7	0	11.1	61	19	- 98	7	5	6	0	0	0.7	23	20.6	29	22	18	7	6	3.6	
UTAH																																
MILFORD	1533	845.9		23.6	4.0	13.8	0.2	30.0	18	- 3.3	2	0	4			24	7	19	5		84	T			18.8		4	12	13	6	4.7	75
SALT LAKE CITY	1286	871.0	1013.4	24.0	8.9	16.4	1.5	32.2	18	1.1	2	1	0	2.2	42	44	9	33	7	6	0	0	0.3	16	14.8	NW	24	14	9	8	4.3	80
WENDOVER	1291	870.0	1013.7	23.5	11.4	17.4	1.1	30.6	17	2.2	2	0	0	- 2.2	29	10	- 7	6	5		0	0						15	8	8	4.4	
VERMONT																																
BURLINGTON	101	999.3	1011.6	17.1	6.9	12.0	- 0.1	24.4	10	- 1.1	7	0	3	7.8	78	137	61	36	19	4	0	0	1.2	21	12.1	SW	10	3	4	24	8.0	39
VIRGINIA																																
LYNCHBURG	279			22.3	9.7	16.1	- 2.4	27.2	29+	0.0	18	0	1			97	15	43	11		0	0			13.9	S	28	9	9	13	6.1	66
NORFOLK	7	1012.9	1013.8	24.2	14.6	19.4	- 0.3	32.8	28	8.3	5	1	0	11.7	64	92	7	26	10	6	0	0	1.4	20	11.2	23	29	6	12	13	6.4	59
RICHMOND	50	1007.1	1013.4	24.8	12.0	18.4	- 1.1	31.1	28	3.3	18+	0	0	11.7	69	90	- 4	27	11	3	0	0	1.1	22	13.0	NW	17	4	15	12	6.8	63
ROANOKE	350	971.9	1013.6	22.4	9.8	16.2	- 2.6	28.9	28	1.1	18+	0	0	7.8	61	142	45	101	11	2	0	0	1.5	27	13.0	30	4	7	12	12	6.3	
WALLOPS ISLAND	3			20.0	12.8	16.4		30.0	29	6.7	5	0	0			93		27	14		0	0			18.8Y	SW	29					
WASHINGTON																																
OLYMPIA	59	1010.8	1018.1	19.8	4.4	12.2	- 0.7	31.7	14	- 1.1	11	0	4	6.7	72	68	17	34	9	0	0	0	1.4	21	10.7	25	19+	6	9	16	6.6	
QUILLAYUTE	55	1011.2	1018.6	16.4	5.4	10.9	- 0.2	31.7	13	0.0	21	0	1	6.1	75	189	76	90	16	0	T	0	1.0	25	11.6	SE	23	2	9	20	7.5	46
SEATTLE	6			19.2	9.0	14.1	0.3	31.1	14	5.6	11	0	0			28	- 9	17	8		0	0			13.9Y	SSW	8					
SEATTLE-TACOMA	122	1001.7	1017.9	18.7	8.5	13.6	0.6	30.6	14	4.4	11	0	0	6.1	64	41	- 3	18	10	0	0	0	0.7	23	10.7	SW	8	4	13	14	6.8	69
SPOKANE	718	931.9	1015.2	20.8	6.4	13.6	0.2	32.2	15	0.6	21+	1	0	1.1	47	34	3	17	6	1	0	0	2.4	22	14.8		8	10	11	10	5.5	71

CLIMATOLOGICAL DATA

METRIC UNITS

MAY 1973

State and Station	Elevation (ground)	Pressure		Temperature								No. of days				Precipitation			No. of days		Snow, Ice pellets		Wind					No. of days (sunrise to sunset)				
																									Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm	Mm	M.p.s.		M.p.s.							%
WASHINGTON																																
STAMPEDE PASS R	1206	881.1		10.7	2.6	6.7	0.1	25.0	14	- 2.2	20+	0	12			92	- 16	25	13		483	965						4	7	20	7.8	
WALLA WALLA U	289			24.1	10.3	17.2	1.1	35.0	14	3.3	11	5	0			28	- 10	17	5		0	0			16.5	NW	24	11	11	9	5.0	76
YAKIMA	321	978.0	1016.1	24.6	4.8	14.7	0.0	35.0	14	- 1.1	11	5	6	1.1	42	2	- 12	2	2	0	0	0	2.1	29	15.6	31	19	12	8	11	5.0	
WEST INDIES																																
SAN JUAN P.R.	4	1014.2	1016.6	31.9	24.7	28.3	2.3	34.4	25	23.3	2	14	0	21.1	66	12	-169	6	7	3	0	0	3.0	9	12.5	E	23	10	18	3	4.9	64
WEST VIRGINIA																																
BECKLEY	763	925.5	1013.1	19.3	8.2	13.8	- 2.2	26.1	28	- 0.6	18	0	2	6.7	66	118	16	31	14	4	0	0	2.6	24	15.6	29	8	2	6	23	8.0	
CHARLESTON	286	979.3	1013.1	22.1	9.9	16.0	- 2.2	28.3	28	0.6	18	0	0	8.3	65	136	42	28	17	9	0	0	1.8	24	15.6	28	30	1	12	18	7.7	
ELKINS	594	942.8		19.7	6.3	13.0	- 2.2	28.3	28	- 3.9	16	0	5			95	- 21	24	18		T	0										
HUNTINGTON	252	982.7	1012.7	21.9	10.4	16.2	- 1.9	30.0	28	1.1	6	0	0	8.9	65	124	25	20	14	9	0	0	1.7	22	11.2	28	30	1	11	19	8.0	
PARKERSBURG U	187			21.0	11.1	16.1	- 1.7	27.2	28+	1.7	5	0	0			85	- 9	21	15		0	0			13.9		11					54
WISCONSIN																																
GREEN BAY	208	984.8	1010.2	16.9	6.4	11.7	- 1.0	26.1	31	0.0	15+	0	2	6.1	72	209	131	83	19	4	T	T	0.8	35	20.6		10	2	8	21	7.8	48
LA CROSSE	19[illegible]	98[illegible].1		18.2	7.6	12.9	- 2.2	27.8	31	- 1.7	4	0	1	7.2	74	158	62		16	2	0		0.8	32								
MADISON	262	978.3	1009.7	18.5	6.3	12.4	- 0.9	26.7	31	0.0	4	0	1	6.7	71	134	49	29	19	5	T	0	0.4	28	15.2	NE	27	3	8	20	7.7	43
MILWAUKEE	205	985.1	1010.2	15.2	5.9	10.6	- 1.3	26.1	31	- 1.1	5	0	1	5.6	74	86	6	33	14	2	T	T	0.8	25	16.1	SW	9	3	10	18	7.5	46
WYOMING																																
CASPER	1627	837.5	1014.6	18.8	2.4	10.6	- 1.1	28.3	18	- 2.2	12+	0	9	0.6	56	26	- 26	12	12	3	43	305	1.8	27	20.6	26	20	10	12	9	5.4	
CHEYENNE	1867	812.1	1014.2	18.0	3.6	10.8	- 0.8	27.2	18	- 3.3	2	0	4	- 2.2	44	8	- 56	7	6	3	30	25	3.3	31	24.1	NW	27	9	11	11	5.6	67
LANDER	1696	829.3	1014.3	18.9	3.8	11.4	- 0.2	27.8	31+	- 5.0	2	0	6	- 2.2	44	23	- 44	14	8	3	193	178	1.2	27	15.6		9	11	11	9	5.1	76
SHERIDAN	1208	878.8	1015.3	19.7	2.8	11.3	- 0.7	30.6	31	- 2.8	12	0	7	0.6	50	13	- 52	12	9	1	36	127	2.2	32	17.0	NW	20	9	11	11	5.5	78

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

B Number of days maximum 21.1 C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations" table of the annual issue of this publication.

Conversion formulae to English Units are as follows:

1 foot = 0.3048 meters
°F = $\frac{9}{5}$ x °C + 32
1 inch = 25.4 millimeters
1 mile per hour=0.447 meters per second

HEATING DEGREE DAYS

(Base 65°F.)

MAY 1973

State and station	Current season: This month	Current season: Period July through this month	Normals July through this month
ALABAMA			
BIRMINGHAM	[illegible]	[illegible]	2551
HUNTSVILLE	13	3180	3070
MOBILE	0	1596	1693
MONTGOMERY	18	2191	2291
ALASKA			
ANCHORAGE	[illegible]	11156	10366
ANNETTE	[illegible]	6907	6748
BARROW	[illegible]	18552	19217
BARTER ISLAND	[illegible]	[illegible]	[illegible]
BETHEL	[illegible]	12713	[illegible]
BETTLES	600	15382	
BIG DELTA	642	13301	
COLD BAY	895	[illegible]	9289
FAIRBANKS	439	13397	14057
GULKANA	664	13889	
HOMER	720	9163	
JUNEAU	564	[illegible]	8694
KING SALMON	679	10950	[illegible]
KODIAK	[illegible]	[illegible]	[illegible]
KOTZEBUE	[illegible]	14850	[illegible]
MC GRATH	[illegible]	13683	14025
NOME	[illegible]	13349	13598
ST. PAUL ISLAND	1064	10764	10473
SUMMIT	[illegible]	[illegible]	
TALKEETNA	[illegible]	11861	11259
YAKUTAT	657	9100	8657
ARIZONA			
FLAGSTAFF	370	[illegible]	6972
PHOENIX		1553	1765
TUCSON	19	[illegible]	[illegible]
WINSLOW	99	4735	[illegible]
YUMA	[illegible]	1190	1217
ARKANSAS			
FORT SMITH	59	3919	3292
LITTLE ROCK	28	3260	3219
CALIFORNIA			
BAKERSFIELD	[illegible]	2218	2122
BISHOP	66	4791	4191
BLUE CANYON	266	6109	5312
EUREKA U	[illegible]	4303	4358
FRESNO	12	2851	2492
LONG BEACH	29	1490	1693
LOS ANGELES	[illegible]	1414	1745
LOS ANGELES U	32	1066	1331
MT SHASTA R	227	5934	5563
OAKLAND	159	[illegible]	2780
RED BLUFF	19	[illegible]	[illegible]
SACRAMENTO	15	2862	2767
SANDBERG R	188	5083	4152
SAN DIEGO	61	1195	1403
SAN FRANCISCO	197	2984	2889
SAN FRANCISCO U	267	2956	2821
SANTA MARIA	180	3094	2802
STOCKTON	12	2759	2675
COLORADO			
ALAMOSA	449	9594	8361
COLORADO SPRINGS	359	7101	6339
DENVER	290	6449	6217
GRAND JUNCTION	139	6494	[illegible]
PUEBLO	197	6036	[illegible]
CONNECTICUT			
BRIDGEPORT	290	5609	5590
HARTFORD	229	5913	6148
DELAWARE			
WILMINGTON	143	4342	4924
DIST.OF COLUMBIA			
WASHINGTON DULLES	109	3921	4224
WASHINGTON NATIONAL	186	4838	
FLORIDA			
APALACHICOLA U	[illegible]	1172	1308
DAYTONA BEACH	0	745	879
FORT MYERS	0	348	442
JACKSONVILLE	7	1189	1239
KEY WEST	0	61	108
LAKELAND U		526	661
MIAMI	0	138	214
ORLANDO	0	509	766
PENSACOLA	0	1428	1463
TALLAHASSEE	15	1528	1485
TAMPA	0	623	683
WEST PALM BEACH	0	188	253
GEORGIA			
ATHENS	65	2797	2929
ATLANTA	72	2999	2983
AUGUSTA	42	2412	2397
COLUMBUS	28	2146	2383
MACON	27	2085	2136
ROME	72	3237	3326
SAVANNAH	4	1597	1819
IDAHO			
BOISE	182	5725	5728
LEWISTON	173	5343	5452
POCATELLO	290	7431	6892
ILLINOIS			
CAIRO	52	3941	3821
CHICAGO O HARE	311	6301	6567
CHICAGO MIDWAY	284	6083	6107
MOLINE	223	6153	6369
PEORIA	216	6073	5992
ROCKFORD	[illegible]	6566	6770
SPRINGFIELD	174	5553	5411
INDIANA			
EVANSVILLE	106	[illegible]	[illegible]
FORT WAYNE	259	5985	[illegible]
INDIANAPOLIS	184	5298	5660
SOUTH BEND	268	5887	6379
IOWA			
BURLINGTON	181	6067	6081
DES MOINES	173	6621	6769
DUBUQUE	285	7175	7298
SIOUX CITY	[illegible]	6659	6912
WATERLOO	264	7357	7266
KANSAS			
CONCORDIA	154	5784	5461
DODGE CITY	201	5815	4977
GOODLAND	265	[illegible]	6099
TOPEKA	129	5388	[illegible]
WICHITA	125	5232	[illegible]
KENTUCKY			
COVINGTON	206	5046	5241
LEXINGTON	167	[illegible]	4683
LOUISVILLE	129	4279	4651
LOUISIANA			
ALEXANDRIA	14	2386	1921
BATON ROUGE	0	1640	1560
LAKE CHARLES	1	1795	1459
NEW ORLEANS	9	1628	1385
SHREVEPORT	[illegible]	2453	2184
MAINE			
CARIBOU	491	9814	[illegible]
PORTLAND	419	7319	7400
MARYLAND			
BALTIMORE	191	4639	4654
MASSACHUSETTS			
BLUE HILL OBS R	304	6208	6299
BOSTON	258	[illegible]	5598
WORCESTER	338	[illegible]	6891
MICHIGAN			
ALPENA	486	8116	8350
DETROIT	267	6041	6190
DETROIT METRO	289	6276	6455
FLINT	374	6633	6810
GRAND RAPIDS	341	[illegible]	6927
HOUGHTON LAKE	442	7941	8204
LANSING	370	7055	[illegible]
MARQUETTE U	598	8383	8216
MUSKEGON	401	6694	6618
SAULT STE MARIE	574	8766	8847
MINNESOTA			
DULUTH	526	9905	9802
INTERNATIONAL FALLS	393	9867	10432
MINNEAPOLIS	299	7946	8301
ROCHESTER	353	8267	8202
ST CLOUD	348	8786	8774
MISSISSIPPI			
JACKSON	19	[illegible]	2203
MERIDIAN	19	[illegible]	[illegible]
MISSOURI			
COLUMBIA REGIONAL	142	[illegible]	5106
KANSAS CITY	127	5377	5152
ST JOSEPH	115	[illegible]	5469
ST LOUIS	121	4913	[illegible]
SPRINGFIELD	145	4773	4555
MONTANA			
BILLINGS	333	7579	6947
GLASGOW	277	8269	8846
GREAT FALLS	303	7495	7564
HAVRE	266	7983	8538
HELENA	[illegible]	[illegible]	7934
KALISPELL	[illegible]	[illegible]	7984
MILES CITY	281	7685	7624
MISSOULA	353	7653	7906
NEBRASKA			
GRAND ISLAND	240	6655	6485
LINCOLN	199	6462	6256
NORFOLK	221	6955	6931
NORTH PLATTE	283	7217	6627
OMAHA	191	6380	6188
SCOTTSBLUFF	312	7162	6598
VALENTINE	297	7405	7341
NEVADA			
ELKO	273	7448	7241
ELY	376	8074	7508
LAS VEGAS	12	3041	2709
RENO	199	6368	6143
WINNEMUCCA	218	[illegible]	6608
NEW HAMPSHIRE			
CONCORD	370	7796	[illegible]
MT WASHINGTON OBS	983	13019	13214
NEW JERSEY			
ATLANTIC CITY	[illegible]	4625	4797
ATLANTIC CITY U	245	4181	4717
NEWARK	163	4547	5058
TRENTON U	202	4773	4968
NEW MEXICO			
ALBUQUERQUE	113	4917	4348
CLAYTON	250	5872	5137
ROSWELL	73	3837	3242
NEW YORK			
ALBANY	299	6661	6830
BINGHAMTON	411	7187	7187
BUFFALO	318	6531	6984
NEW YORK U	188	4737	4862
NEW YORK KENNEDY	242	4427	5207
NEW YORK LA GUARDIA	195	4899	[illegible]
ROCHESTER	279	6267	6700
SYRACUSE	325	6487	6711
NORTH CAROLINA			
ASHEVILLE	158	3975	4457
CAPE HATTERAS R	[illegible]	2331	2612
CHARLOTTE	74	3381	3191
GREENSBORO	111	3990	3805
RALEIGH	88	3462	[illegible]
WILMINGTON	30	2293	2347
NORTH DAKOTA			
BISMARCK	332	8500	8734
FARGO	328	8979	9127
WILLISTON	316	8743	9102
OHIO			
AKRON	243	5616	5998
CINCINNATI ABBE OB	152	4733	4797
CLEVELAND	254	5701	6137
COLUMBUS	184	5236	[illegible]
DAYTON	204	5394	5592
MANSFIELD	219	5636	5747
TOLEDO	285	6288	6434
YOUNGSTOWN	324	6377	6357
OKLAHOMA			
OKLAHOMA CITY	55	4222	3725
TULSA	42	4050	3860
OREGON			
ASTORIA	357	4912	4955
BURNS U	313	7121	[illegible]
EUGENE	276	4884	4591
MEACHAM	443	7907	7535
MEDFORD	139	4694	4930
PENDLETON	169	5394	5064
PORTLAND	202	4341	4530
SALEM	288	5011	4610
SEXTON SUMMIT R	364	6312	5975
PENNSYLVANIA			
ALLENTOWN	275	5670	5786
ERIE	379	6468	6829
HARRISBURG	227	5118	5239
PHILADELPHIA	176	4706	5089
PITTSBURGH	264	5561	5948
SCRANTON	354	6451	6221
WILLIAMSPORT	306	6102	[illegible]
RHODE ISLAND			
BLOCK ISLAND	325	5407	5705
PROVIDENCE	268	5617	5903
SOUTH CAROLINA			
CHARLESTON	18	1973	2033
CHARLESTON U	5	1703	1794
COLUMBIA	47	2517	2484
GRNVLLE-SPRTNBRG	61	3176	3044
SOUTH DAKOTA			
ABERDEEN	238	7809	8383
HURON	271	7580	8136
RAPID CITY	350	7450	7219
SIOUX FALLS	256	7622	7761
TENNESSEE			
BRISTOL	152	4006	4143
CHATTANOOGA	80	3781	3254
KNOXVILLE	97	3581	3494
MEMPHIS	32	3490	[illegible]
NASHVILLE	83	3544	3578
OAK RIDGE R	122	3749	3817
TEXAS			
ABILENE	43	3351	2624
AMARILLO	113	4934	3985
AUSTIN	3	2128	1711
BROWNSVILLE	0	921	600
CORPUS CHRISTI	0	1235	914
DALLAS	12	2603	2363
DEL RIO	0	1748	[illegible]
EL PASO	31	2944	2700
FORT WORTH	12	2703	2405
GALVESTON U	0	[illegible]	1235
HOUSTON INTERCON	5	1898	1676
LUBBOCK	58	4150	3578
MIDLAND	55	3402	2591
PORT ARTHUR	2	1905	1447
SAN ANGELO	20	2761	2255
SAN ANTONIO	1	1857	1546
VICTORIA	0	1515	1173
WACO	13	2677	2030
WICHITA FALLS	47	3453	2832
UTAH			
MILFORD	243	7400	6410
SALT LAKE CITY	135	6195	5968
WENDOVER	113	6157	5727
VERMONT			
BURLINGTON	345	7855	8179
VIRGINIA			
LYNCHBURG	158	4230	4166
NORFOLK	47	3215	3421
RICHMOND	79	3701	3865
ROANOKE	144	4225	4150
WALLOPS ISLAND	136	3993	
WASHINGTON			
OLYMPIA	345	5666	5059
QUILLAYUTE	409	5696	5469
SEATTLE	235	4611	4366
SEATTLE-TACOMA	272	4987	4986
SPOKANE	286	6492	6520
STAMPEDE PASS R	644	8876	8800
WALLA WALLA U	138	4894	4760
YAKIMA	230	5820	5872
WEST VIRGINIA			
BECKLEY	258	5320	5352
CHARLESTON	157	4432	4467
ELKINS	304	5530	5627
HUNTINGTON	158	4596	4434
PARKERSBURG U	156	4594	4748
WISCONSIN			
GREEN BAY	367	7547	7930
LA CROSSE	299	7364	7520
MADISON	325	7304	7761
MILWAUKEE	426	7176	7500
WYOMING			
CASPER	424	8295	7281
CHEYENNE	414	7931	7176
LANDER	386	9364	7717
SHERIDAN	387	7961	7533

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

COOLING DEGREE DAYS

(Base 65°F.)

State and station	Current season: This month	Current season: Period January through this month	Normals January through this month
ALABAMA			
BIRMINGHAM	132	184	
HUNTSVILLE	93	130	
MOBILE	303	482	
MONTGOMERY	212	330	
ALASKA			
ANCHORAGE	0	0	
ANNETTE	0	0	
BARROW	0	0	
BARTER ISLAND	0	0	
BETHEL	0	0	
BETTLES	0	0	
BIG DELTA	0	0	
COLD BAY	0	0	
FAIRBANKS	0	0	
GULKANA	0	0	
HOMER	0	0	
JUNEAU	0	0	
KING SALMON	0	0	
KODIAK	0	0	
KOTZEBUE	0	0	
MC GRATH	0	0	
NOME	0	0	
ST. PAUL ISLAND	0	0	
SUMMIT	0	0	
TALKEETNA	0	0	
YAKUTAT	0	0	
ARIZONA			
FLAGSTAFF	0	0	
PHOENIX	499	608	
TUCSON	272	293	
WINSLOW	38	38	
YUMA	493	633	
ARKANSAS			
FORT SMITH	86	128	
LITTLE ROCK	135	190	
CALIFORNIA			
BAKERSFIELD	371	450	
BISHOP	86	87	
BLUE CANYON	38	38	
EUREKA U	0	0	
FRESNO	264	296	
LONG BEACH	57	60	
LOS ANGELES	14	19	
LOS ANGELES U	64	100	
MT SHASTA R	36	36	
OAKLAND	13	13	
RED BLUFF	231	260	
SACRAMENTO	156	175	
SANDBERG R	59	62	
SAN DIEGO	17	27	
SAN FRANCISCO	7	7	
SAN FRANCISCO U	5	7	
SANTA MARIA	18	18	
STOCKTON	213	241	
COLORADO			
ALAMOSA	0	0	
COLORADO SPRINGS	0	0	
DENVER	2	2	
GRAND JUNCTION	35	35	
PUEBLO	29	29	
CONNECTICUT			
BRIDGEPORT	6	6	
HARTFORD	19	30	
DELAWARE			
WILMINGTON	42	61	
DIST.OF COLUMBIA			
WASHINGTON DULLES	30	50	
WASHINGTON NATIONAL	47	70	
FLORIDA			
APALACHICOLA U	280	426	
DAYTONA BEACH	324	679	
FORT MYERS	416	1015	
JACKSONVILLE	278	479	
KEY WEST	479	1524	
LAKELAND U	357	754	
MIAMI	459	1377	
ORLANDO	421	942	
PENSACOLA	318	474	
TALLAHASSEE	247	432	
TAMPA	374	810	
WEST PALM BEACH	446	1258	
GEORGIA			
ATHENS	87	115	
ATLANTA	78	104	
AUGUSTA	149	209	
COLUMBUS	160	252	
MACON	189	289	
ROME	86	126	
SAVANNAH	275	401	
HAWAII			
HILO	353	1127	
HONOLULU	382	1528	
KAHULUI	266	1120	
LIHUE	325	1336	
IDAHO			
BOISE	51	51	
LEWISTON	60	60	
POCATELLO	7	7	
ILLINOIS			
CAIRO U	71	94	
CHICAGO O HARE	3	8	
CHICAGO MIDWAY	2	7	
MOLINE	2	4	
PEORIA	3	10	
ROCKFORD	1	6	
SPRINGFIELD	12	24	
INDIANA			
EVANSVILLE	35	58	
FORT WAYNE	2	10	
INDIANAPOLIS	20	31	
SOUTH BEND	1	8	
IOWA			
BURLINGTON	10	10	
DES MOINES	19	21	
DUBUQUE	0	0	
SIOUX CITY	38	38	
WATERLOO	8	8	
KANSAS			
CONCORDIA	21	22	
DODGE CITY	15	15	
GOODLAND	13	13	
TOPEKA	21	34	
WICHITA	39	46	
KENTUCKY			
COVINGTON	7	24	
LEXINGTON	21	51	
LOUISVILLE	28	64	
LOUISIANA			
ALEXANDRIA	196	305	
BATON ROUGE	292	499	
LAKE CHARLES	248	406	
NEW ORLEANS	247	451	
SHREVEPORT	223	305	
MAINE			
CARIBOU	0	0	
PORTLAND	1	1	
MARYLAND			
BALTIMORE	29	44	
MASSACHUSETTS			
BLUE HILL OBS R	14	15	
BOSTON	18	25	
WORCESTER	11	12	
MICHIGAN			
ALPENA	0	0	
DETROIT	4	8	
DETROIT METRO	2	5	
FLINT	0	4	
GRAND RAPIDS	0	10	
HOUGHTON LAKE	0	1	
LANSING	0	7	
MARQUETTE U	0	0	
MUSKEGON	0	4	
SAULT STE MARIE	0	0	
MINNESOTA			
DULUTH	0	0	
INTERNATIONAL FALLS	0	0	
MINNEAPOLIS	4	5	
ROCHESTER	1	1	
ST CLOUD	1	1	
MISSISSIPPI			
JACKSON	210	339	
MERIDIAN	193	315	
MISSOURI			
COLUMBIA REGIONAL	21	29	
KANSAS CITY	30	34	
ST JOSEPH	38	49	
ST LOUIS	25	43	
SPRINGFIELD	26	37	
MONTANA			
BILLINGS	13	13	
GLASGOW	13	13	
GREAT FALLS	14	14	
HAVRE	9	9	
HELENA	4	4	
KALISPELL	1	1	
MILES CITY	15	15	
MISSOULA	0	0	
NEBRASKA			
GRAND ISLAND	19	19	
LINCOLN	23	25	
NORFOLK	24	24	
NORTH PLATTE	11	11	
OMAHA	23	26	
SCOTTSBLUFF	4	4	
VALENTINE	18	18	
NEVADA			
ELKO	3	3	
ELY	0	0	
LAS VEGAS	382	436	
RENO	13	13	
WINNEMUCCA	18	18	
NEW HAMPSHIRE			
CONCORD	2	5	
MT WASHINGTON OBS	0	0	
NEW JERSEY			
ATLANTIC CITY	21	31	
ATLANTIC CITY U	9	12	
NEWARK	26	46	
TRENTON U	26	40	
NEW MEXICO			
ALBUQUERQUE	48	48	
CLAYTON	21	21	
ROSWELL	118	120	
NEW YORK			
ALBANY	6	13	
BINGHAMTON	0	4	
BUFFALO	2	8	
NEW YORK U	23	43	
NEW YORK KENNEDY	7	16	
NEW YORK LA GUARDIA	16	30	
ROCHESTER	6	21	
SYRACUSE	0	7	
NORTH CAROLINA			
ASHEVILLE	16	17	
CAPE HATTERAS R	128	159	
CHARLOTTE	72	108	
GREENSBORO	46	63	
RALEIGH	81	131	
WILMINGTON	174	240	
NORTH DAKOTA			
BISMARCK	1	1	
FARGO	0	0	
WILLISTON	7	7	
OHIO			
AKRON	5	14	
CINCINNATI ABBE OB	17	41	
CLEVELAND	7	20	
COLUMBUS	17	34	
DAYTON	18	33	
MANSFIELD	8	19	
TOLEDO	3	8	
YOUNGSTOWN	2	6	
OKLAHOMA			
OKLAHOMA CITY	119	138	
TULSA	124	159	
OREGON			
ASTORIA	0	0	
BURNS U	17	17	
EUGENE	2	2	
MEACHAM	6	6	
MEDFORD	64	64	
PENDLETON	63	63	
PORTLAND	34	34	
SALEM	6	6	
SEXTON SUMMIT R	24	24	
PACIFIC AREA			
GUAM TAGUAC R	478	2011	
JOHNSTON	400	1731	
KOROR R	555	2586	
KWAJALEIN	533	2631	
MAJURO	490	2481	
PAGO PAGO	513	2621	
PONAPE R	520	2498	
TRUK MOEN ISLAND	540	2572	
WAKE	475	1979	
YAP R	538	2516	
PENNSYLVANIA			
ALLENTOWN	7	10	
ERIE	0	6	
HARRISBURG	13	21	
PHILADELPHIA	35	51	
PITTSBURGH	5	15	
SCRANTON	3	4	
WILLIAMSPORT	0	4	
RHODE ISLAND			
BLOCK ISLAND	2	2	
PROVIDENCE	17	25	
SOUTH CAROLINA			
CHARLESTON	243	326	
CHARLESTON U	264	347	
COLUMBIA	143	204	
GRNVLLE-SPRTNBRG	92	119	
SOUTH DAKOTA			
ABERDEEN	10	12	
HURON	4	4	
RAPID CITY	7	7	
SIOUX FALLS	13	13	
TENNESSEE			
BRISTOL	26	41	
CHATTANOOGA	79	[illegible]	
KNOXVILLE	56	79	
MEMPHIS	143	195	
NASHVILLE	61	100	
OAK RIDGE R	34	52	
TEXAS			
ABILENE	224	268	
AMARILLO	53	56	
AUSTIN	277	390	
BROWNSVILLE	404	864	
CORPUS CHRISTI	381	736	
DALLAS	250	356	
DEL RIO	410	648	
EL PASO	152	159	
FORT WORTH	230	297	
GALVESTON U	296	431	
HOUSTON INTERCON	253	410	
LUBBOCK	153	172	
MIDLAND	178	196	
PORT ARTHUR	244	369	
SAN ANGELO	274	347	
SAN ANTONIO	310	516	
VICTORIA	358	618	
WACO	225	297	
WICHITA FALLS	155	179	
UTAH			
MILFORD	0	0	
SALT LAKE CITY	38	38	
WENDOVER	69	69	
VERMONT			
BURLINGTON	3	3	
VIRGINIA			
LYNCHBURG	34	53	
NORFOLK	112	155	
RICHMOND	91	146	
ROANOKE	29	47	
WALLOPS ISLAND	35	39	
WASHINGTON			
OLYMPIA	5	6	
QUILLAYUTE	2	2	
SEATTLE	7	7	
SEATTLE-TACOMA	16	16	
SPOKANE	31	31	
STAMPEDE PASS R	0	0	
WALLA WALLA U	81	81	
YAKIMA	34	34	
WEST INDIES			
SAN JUAN P.R.	562	2264	
WEST VIRGINIA			
BECKLEY	9	16	
CHARLESTON	34	60	
ELKINS	11	14	
HUNTINGTON	40	58	
PARKERSBURG U	35	61	
WISCONSIN			
GREEN BAY	0	2	
LA CROSSE	4	4	
MADISON	2	2	
MILWAUKEE	0	0	
WYOMING			
CASPER	1	1	
CHEYENNE	0	0	
LANDER	4	4	
SHERIDAN	1	1	

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

WB FORM 614
10-59

STORM SUMMARY

MAY 1973

STATE	TORNADOES NUMBER	TORNADOES DAYS	TORNADOES DEATHS	TORNADOES INJURIES	TORNADOES †DAMAGE	HAILSTORMS DEATHS	HAILSTORMS INJURIES	HAILSTORMS †DAMAGE PROPERTY	HAILSTORMS †DAMAGE CROPS	WINDSTORMS DEATHS	WINDSTORMS INJURIES	WINDSTORMS +DAMAGE PROPERTY	WINDSTORMS +DAMAGE CROPS	LIGHTNING DEATHS	LIGHTNING INJURIES	LIGHTNING †DAMAGE PROPERTY	LIGHTNING †DAMAGE CROPS	‡HEAVY SNOWSTORMS AND BLIZZARDS DEATHS	‡HEAVY SNOWSTORMS AND BLIZZARDS INJURIES	‡HEAVY SNOWSTORMS AND BLIZZARDS +DAMAGE PROPERTY	‡HEAVY SNOWSTORMS AND BLIZZARDS +DAMAGE CROPS	#ICE STORMS DEATHS	#ICE STORMS INJURIES	#ICE STORMS +DAMAGE PROPERTY	#ICE STORMS +DAMAGE CROPS	ØALL OTHER DEATHS	ØALL OTHER INJURIES	ØALL OTHER †DAMAGE PROPERTY	ØALL OTHER †DAMAGE CROPS
Alabama	16	6	10	361	7					2	4	6	C																
Alaska *																													
Arizona								1						1	4														
Arkansas	9	3	3	320	7			[illegible]	C		3	5		1	1														
California	Report Incomplete																												
Colorado	3			[illegible]	4			4	5			5	5															6	4
Connecticut *																													
Delaware *																													
Florida	6	4	1	15	8							5		1															
Georgia	8	4	1	66	7			3	4	1	5	4	3			3													
Hawaii	1	1																											
Idaho	1	1			3				1	2	3	4																	
Illinois	6	2		6	5			3	3			5	3			4													
Indiana	12	7			6																								
Iowa	2	1						4			1	4			4	4												4	4
Kansas	9	5	3	22	6			5	5	1	5	5				4										2		4	5
Kentucky	3	2		7	5			5	3			[illegible]	3		1	6	4												
Louisiana	2	2		[illegible]	4		3	4	1		3	5	1			5													
Maine																										1		6	
Maryland																4													
Massachusetts								3	3					1		3													
Michigan	4	2			1			[illegible]	C		2	4		2		4		1	?	3									
Minnesota	2	1	1	11	5			3				4			2	3												5	
Mississippi	15	6	1	47	6			6				6				4													
Missouri	26	7	2	28	8			5	5	3	100	5	5			1										7		5	
Montana	1	1			1																								
Nebraska	4	2		[illegible]	5		?	?	?		[illegible]	5	?			5													
Nevada	No Storm Data Report received for this State																												
New Hampshire	1	1			3																								
New Jersey	2	1		12	5																								
New Mexico *																													
New York	Report Incomplete																												
North Carolina	32	8	1	14	6			3	6		7	6		1		5										12	?	7	7
North Dakota *																													
Ohio	15	5	6	128	7			4	?																				
Oklahoma	18	7	7	38	6			4	4	2	7	6	6	1		3												4	
Oregon *																													
Pacific	No Storm Data Report received for this State																												
Pennsylvania	Report Incomplete																												
Puerto Rico *																													
Rhode Island									2																				
South Carolina	12	5		56	6			3	6		9	6	3	1		5													
South Dakota	1	1			3																								
Tennessee	14	6			6			2	2		14	6		1	3	6										3		°7	C
Texas	21	9		13	6			5	4		1	5																	
Utah *																													
Vermont *																													
U.S. Virgin Is. *																													
Virginia	2	2			3									1		4										[illegible]	2		
Washington *																													
West Virginia *																													
Wisconsin	1	1			3																							6	6
Wyoming *																													

† Includes crop damage.
C Crop damage.
* No occurrence of storms or unusual weather phenomena reported.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
Ø For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
+ Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5 Million
7 $5 Million to $50 Million
8 $50 Million to $500 Million
9 $500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

MAY 1973

Ray Haley, Office of Hydrology

This month saw the beginning of the end of the history-making floods in the Mississippi River Basin. At many points along the central reach of the Mississippi and the lower Missouri, crest stages were the highest of record. At St. Louis the crest stage was the highest in 188 years.

Elsewhere, runoff was generally above normal through the Northeast, the Atlantic Coast States, and the South, with numerous streams in those areas slightly above flood stage for varying periods of time.

In contrast, the Pacific Northwest was well below normal in runoff, with several U.S. Geological Survey gaging stations recording new record minimum daily flows for the month. The average stage for May at Vancouver, Wash., on the Columbia River was the lowest in about 100 years of record.

The month was further marked by the melting of an unusually heavy snowpack in the West and Southwest. As a result, flooding was reported from areas where such problems are relatively rare.

A relatively mild spring break-up was observed in Alaska.

Hydrologic events of unusual significance or involving loss of life or property damage are discussed in more detail below.

Stream	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	EAST GULF COAST DRAINAGE		
Choctawhatchee River Basin	Unusually heavy rainfall occurred from the 26th to 28th. Three-day totals ranged from 4 to 10 inches. Crests were 1 to 2 feet above flood stages. Damage was divided about equally between highways, railroads, and agriculture.	0	61
Oostanaula River Basin	Considerable damage, primarily agricultural, occurred along the Oostanaula River, a tributary of the Coosa River in northwest Georgia, on the 29th-31st. Rainfall totals ranged up to more than 10 inches. Maximum overflow was 5.8 feet at Resaca, Ga.	0	1,030
	Upper Mississippi Basin		
Upper Mississippi Tributaries	Precipitation over most of this area was much above normal for the third consecutive month. Monthly totals were 2 to 6 inches above normal. At Moline, Ill., the total for the first five months of the year was nearly equal to the annual normal for the station. Much of this month's rainfall occurred during the first few days of the month with resultant rises of 4 to 11 feet on the lower Minnesota and the Chippewa, Black, Zumbro, and Wisconsin Rivers. Minor flooding occurred at many points on these streams, but no serious damage has been reported. Runoff over the Wisconsin River Basin was particularly noteworthy. The ground water index for the basin was the second highest since records began in 1942, and the mean stage for the Wisconsin River at Portage, Wis., was 15.4 feet - the highest mean stage for any month in 44 years of record. In the Rock River Basin, the Meridosia, Ill, drainage district was inundated when its dikes gave way in late April and remained flooded since the dikes	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

Stream	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	EAST GULF COAST DRAINAGE-Continued		
	Upper Mississippi Basin-Continued		
	then helped to hold the water in. The lower Illinois and Big Muddy Rivers remained above flood stage the entire month.		
Upper Mississippi River Main Stem	The above-normal rainfall during the month produced still another crest along the main stem of the Mississippi River. However, above Dubuque, Iowa, this crest was not above flood stage. At and below Dubuque down to Gregory Landing, Mo., this crest ranged from 1 to about 5 feet over flood stage, but was not as high as that which had occurred late in April and which was of recordbreaking proportions at several points. Below Gregory Landing, the Mississippi did not go below flood stage during May, and below Keobuck, Iowa, still another crest occurred near the end of May and into June. These secondary crests, while not as high as the earlier major crest, served to prolong the flood situation, preventing rehabilitation and reconstruction, and the planting of field crops. At Cape Girardeau, Mo., the major crest of 45.6 feet occurred May 1. This was a new record and was more than 3 feet higher than the previous record crest which occurred in July 1844.	0	N.A.
	Missouri Basin		
Platte River Basin	Serious flooding occurred along the South Platte River and its tributaries in the vicinity of Denver, Colo., on the 6th as a result of rains totaling at least 4 inches falling on ground already saturated from snowmelt and earlier rains. The town of Roggen, Colo., was flooded by Kiowa Creek and the town of Wiggins, Colo., by Bijou Creek. Crests over flood stage also occurred on Lost, Beaver, and Bear Creeks. River gages at Fort Lupton and Kersey, Colo., were washed out and telemark gage at Littleton was damaged. Crests at Kersey and Weldona, Colo., are believed to be the highest of record. Damage was estimated at approximately $50 million. The main Platte River was over flood stage throughout its length for much of the month. Crests were generally due to the previously described flood on the South Platte. Some flooding of businesses and highways occurred around Brady, Nebr. Otherwise, damage was generally to low-lying pastures and was estimated at $500,000 to $800,000 along the main Platte.	0	50,800
Kansas River Basin	There were four periods of excessive runoff during the month, with flash flooding on some smaller streams and minor overflows on some larger streams in each case. Streams affected included Stranger Creek and the Wakarusa, Black, Vermillion, and Big Blue	2	526

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

Stream	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	EAST GULF COAST DRAINAGE-Continued		
	Missouri Basin-Continued		
	Rivers. Major agricultural flooding was reported along the Wakarusa and Black Vermillion Rivers with the storm of the 6th-8th and the headwaters of the Wakarusa River with the storm of the 21st-22d. During the latter storm two flood-related fatalities resulted when a car was driven into Bury's Creek near Carbondale, Kans.		
Lower Missouri River Basin	Two periods of heavy rainfall were reported during the month. In Missouri flooding occurred during the first week on the Missouri River from St. Joseph to Napoleon and from Glasgow to Jefferson City. Again during the last week major flooding occurred on the Missouri River at Lexington and Waverly and also on the lower reaches of the North Grand and the Chariton Rivers. Minor flooding occurred on several streams in northwest and north-central Missouri, including the Tarkio, 102, Platte, Little Platte, and Blackwater Rivers. Damage was light since the area flooded was the same as that flooded during March and April. Losses were mainly due to further delay in planting spring crops, particularly on the lower Grand River. On the extreme lower end of the Missouri River flooding continued until the 18th at Herman and St. Charles. The river again went over flood stage near the end of May which carried over into June.	0	N.A.
	Ohio Basin		
New River Basin	Serious flooding occurred in the headwaters of the New River in North Carolina and Virginia on the 28th-29th, resulting from an average storm rainfall of more than 5 inches in North Carolina. Four people are known dead and three are missing and presumed dead.	7	7,750
Cumberland River Basin	Serious flooding developed in the upper Cumberland River Basin on the 28th and persisted until the 31st. Crests were about 8 feet above flood stage at Barbourville and Williamsburg, Ky. Rainfall amounts for the storm totaled 3 to 4 inches. Damage was primarily agricultural because of protective structures around the towns. In Whitley County damage was estimated at $142,000 and in Knox County, 2,000 acres were inundated with damage estimated at $64,000 and one life lost.	1	206
French Broad River	Serious flooding and flash flooding occurred in the mountainous area of western North Carolina on the 27th and 28th. Rainfall amounts totaled 6 to 9 inches over the basin above Asheville, N.C. Downstream, amounts totaled 2 to 4 inches. Many mobile homes were washed away and numerous families were evacuated. Twelve lives were lost and damage to highways,	12	30,000

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

Stream	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	EAST GULF COAST DRAINAGE-Continued		
	Ohio Basin-Continued		
	bridges, private property, and agriculture is estimated at $30 million.		
Lower Tennessee River Basin	A significant rise occurred on the 27th-28th on the Elk and Duck Rivers. Average rainfall over the Elk River Basin was nearly 4 inches and over the Duck River Basin from 5 to 7 inches. Crests of 4 feet over flood stage on the Elk River at Fayetteville, Tenn., and 9 feet over flood stage on the Duck River at Shelbyville, Tenn., were reported. Adequate warnings permitted evacuation of equipment, machinery, and supplies from low-lying areas, and flood protection work prevented overflow in the city. The lower Tennessee River went over flood stage at Whitesburg and Florence, Ala., as a result of this storm.	0	N.A.
Lower Ohio River Basin	The lower Ohio continued over flood stage below Cypress, Ind., at the beginning of the month, as did the Little Wabash and lower Wabash Rivers. Late April rains upstream caused a secondary crest during the first few days of the month on the lower Ohio, which was several feet lower than the major crest earlier in the spring. The Ohio River at Cairo, Ill., continued above flood stage the entire month except for a few hours on the 26th. However, on the night of the 26th, an intense storm struck the area around Cairo with rainfall amounts totaling 8 to 10 inches in less than three hours. Ten people were killed by flash floods in the area. The storm caused only minor rises on the major rivers but did serve to bring the Ohio River at Cairo back over flood stage for the remainder of the month.	10	N.A.
	Arkansas-White-Red Basins		
Arkansas Basin	Flooding continued from April on some lower reaches of the Arkansas River. Two to 3-inch rains on May 1-2 and again on the 6th-7th helped to maintain the high stages and caused minor secondary crests on the Arkansas River at Morrilton, Ark. Moderate flooding occurred on Polecat Creek at Sapulpa, Okla., Spring River at Quapaw, Okla., and the Poteau River at Panama, Okla., on the 7th.	0	N.A.
White, Black, and Cache River Basins	The lower reaches of the Black and White Rivers were above flood stage the entire month as was the Cache River at Patterson, Ark., which has been above flood stage continuously since Oct. 29, 1972. Much farmland remained flooded, and planting of crops was delayed well beyond normal planting dates. Cumulative rainfall totals for 1973 through May were up to 18 inches above normal in the White Basin	0	N.A.

Stream	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	EAST GULF COAST DRAINAGE-Continued		
	Arkansas-White-Red Basins-Continued		
	and up to 16 inches above normal in the Black Basin. The crest on the Black River at Jonesville Lock was the highest since the crest of April 28, 1945, and was the third highest of record after those of 1945 and 1927. The Ouachita River was above flood stage at Monroe, La., and Columbia Lock during all of May. The crest at Monroe on the 9th-11th was the highest since 1958.		
Red River Basin	The Red River remained above flood stage the entire month at Alexandria, La., cresting 3.7 feet above flood stage on the 3d and again on the 9th-10th as a result of heavy rains in the area. Moderate flooding was reported on the Clear Boggy River at Caney, Okla., on the 8th and on the Blue River at Blue, Okla., on the 7th.	0	N.A.
	Lower Mississippi Basin		
St. Francis River Basin	Extensive lowland flooding continued over the entire length of the river from Wappapello Dam to the mouth. Several periods of heavy rainfall served to keep the river over flood stage with secondary crests on the 8th, 13th, and 28th.	0	N.A.
Mississippi River	A second major rise of the flood season moved down the lower Mississippi River during the first part of May. At some points this crest was higher than that of April. At Memphis, Tenn., the crest of 40.5 feet on the 8th was 0.1 feet higher than that of April 5 and was the highest since that of 1950, which was at the same stage. The May crest of 50.15 feet at Helena, Ark., was also higher than that of April. At Red River Landing, La., the crest of 54.7 feet on the 13th-16th was the highest since 1945. Diversions from the Mississippi River through the old River Control Structure, Bonnet Carre Spillway, and the Morganza Spillway continued throughout the month.		
Atchafalaya River	The crest at Simmesport, La., of 49.0 feet, the 14th-16th, was the highest since 1945. At Morgan City, La., the crest of 13.7 feet on the 27th was the highest in 70 years of record.	0	N.A.
	WEST GULF OF MEXICO DRAINAGE		
East Texas Drainage	Flooding that began in April continued in May on the Upper Sabine, the Trinity, and the Angelina Rivers. Crests on the Upper Sabine ranged up to the 9.2 feet above flood stage reported at Longview, Tex., on the 1st. An additional $119,000 damage in Ellis County in the Upper Trinity Basin was reported with three flood-related fatalities. Crests 2 to 5 feet above flood stage occurred along the	3	119

Stream	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate of Thousands of Dollars
	WEST GULF OF MEXICO DRAINAGE (Continued)		
	lower Sabine during the second week of May augmented by releases from Toledo Bend Reservoir and by 3- to 4-inch rains on the 1st-3d.		
Guadalupe River	Sharp rises occurred on the Guadalupe River as a result of heavy rains on the 3d and the 12th. The river went slightly over flood stage at Dupont on each occasion.	0	N.A.
San Antonio Basin	Two drownings occurred on the 12th as a result of flash flooding in north San Antonio, Tex.	2	N.A.
Rio Grande Basin	A record snowpack with water contents of up to five times the 15-year (1953-67) average accumulated in the mountains of the southwestern United States this past winter. Melting of this snowpack caused unusually high runoff with crests over flood stage at some points along the Rio Grande and flooding on some of its tributaries during May. Taos, N.Mex., was partially flooded by the Rio de Fernando de Taos on the 13th. Four families had to be evacuated. Flood problems were reported at the towns of Embudo, Dixon, and Penasco, N. Mex. Elevations of most reservoirs in the basin were well above their 15-year average and many of them were at or near capacity. Elephant Butte Reservoir reported the highest total storage since January 1966 and highest May storage volume since 1960. The excessive snowmelt runoff in the basin continued into June.	0	N.A.
	GULF OF CALIFORNIA DRAINAGE		
Colorado River Basin	Excessive runoff from melting of the heavy snowpack occurred also in the Colorado Basin. Heaviest runoff was in the San Juan River Drainage.	0	N.A.
	GREAT BASIN		
Jordan River Drainage	Two small earthfill dams failed during the peak runoff from snowmelt when both reservoirs were nearly full. One of the dams was located on Lake Creek above the town of Heber, Utah, and failed on the 16th. Reported damage was $170,000, mostly to the dam itself. The other dam was located on Payson Creek above Payson, Utah, and failed on the 21st. Damage to the community was extensive but estimates are not complete.	0	N.A.
Reese River Basin	Several hundred acres of farmland were flooded along the Reese River and Kingston Canyon near Austin, Nev., from snowmelt runoff. There was minimum damage to the village of Kingston but severe damage was reported to several highways and a campground in the area.	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

Stream	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	ALASKA		
Kuskokwim Eiver	The town of Bethel was flooded by the Kuskokwim River which crested there at 11.0 feet, 1 foot over flood stage, during the spring breakup. Damage to the town was light.	0	N.A.
Kobuk River	The airport at Kobuk was flooded by backwater from an ice jam downstream during the spring breakup. No damage estimate has been made.	0	N.A.
Yukon River Basin	The village of Chalkyitsik received major flooding for four hours on the 13th when an ice jam upstream on the Black River broke suddenly, releasing a large volume of water which caused a flood wave. Eleven Houses were damaged. Numerous ice jams occurred on the Yukon during the spring break-up but no other flooding was reported.	0	N.A.

1/ Flooding continued at end of month.
N.A. Not available.

FLOOD STAGE DATA

(All dates in May unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–		Above flood stages -dates To–		Crest Stage	Crest Date	
	Ft.					Ft.		
ST. LAWRENCE DRAINAGE								
Lake Michigan								
Wolf:								
New London, Wis.	9		6		17	9.85		12
Lake Erie								
St. Josephs:								
Montpelier, Ohio	10		29		1	12.39		31
Lake Champlain								
Otter Creek:								
Center Rutland, Vt.	7		21		22	8.15		21
ATLANTIC SLOPE DRAINAGE								
Merrimack:								
Hartford, Conn.	16		23		24	16.7		24
Bodkin Rock, Conn.	8		23		25	8.5		24
James:								
Lick Run, Va.	16		28		29	19.44		28
Buchanan, Va.	17		28		29	20.2		29
Breno Bluff, Va.	19		29		30	23.3		30
Richmond, Va., Westham	12		29		31	14.79		30
Richmond, Va., City Locks	9		30		31	10.5		31
Roanoke:								
Roanoke, Va.	10		28		28	12.4		28
Randolph, Va.	21		29		30	23.1		30
Williamston, N.C.	10		1		23	11.2		1-14
Neuse:								
Neuse, N.C.	14	Apr	29		1	15.3	Apr	30
Smithfield, N.C.	13	Apr	28		2	15.8		1
Cape Fear:								
Elizabethtown, N.C.	20	Apr	29		1	23.8	Apr	29
Lumber:								
Lumberton, N.C.	9	Dec	17		8	14.4		5
Pee Dee:								
Peedee, S.C.	19		2		4	19.5		3
Broad:								
Gaffney, S.C.	10		28		29	13.3		28
Blair, S.C.	14		29		31	21.7		30
Reedy:								
Greenville, S.C.	9		28		29	12.0		28
Saluda:								
Pelzer, S.C.	9		29		30	11.8		29
Chappells, S.C.	14		29		31	17.8		30
Catawba:								
Lookout Shoals Reservoir, N.C.	100		28		1	103.5		28
Savannah:								
Wade Plantation, Ga.	15	Mar	19		2	18.5	Apr	12
Clyo, Ga.	11	Feb	6		11	17.3	Apr	15
Ocmulgee:								
Macon, Ga.	18		29		31	19.4		31
Satilla:								
Waycross, Ga.	16		1		4	17.1		2
EAST GULF OF MEXICO DRAINAGE								
Apalachicola:								
Blountstown, Fla.	15	Apr	27 10 28	 Jun	6 16 11	20.6 16.55 #20.1	 Jun	29 11 1
Choctawhatchee:								
Newton, Ala.	19		17 30		27 30	#21.30 #19.9		27 30
Geneva, Ala.	23		29		31	#24.32		30
EAST GULF OF MEXICO DRAINAGE (Continued)								
Choctawhatchee-Continued:								
Caryville, Fla.			1 25	 Jun	1 3	#12.05 #13.78		1 31
Oostanaula:								
Resaca, Ga.	22		29	Jun	1	27.8		30
Tallapoosa:								
Tallapoosa Water Plant, Ala.	25		11		11	#25.1		11
Alabama:								
Millers Ferry L&D, Ala.	66	Apr	27		3	#74.8	Apr	29
Claiborne, Ala.	40	Apr	28		5	45.3		2
Black Warrior:								
Warrior L&D, Ala.	30	Apr	27		1	#33.6	Apr	29
Tombigbee:								
Fulton, Miss.	16		28		31	16.32		28
Gainesville, Ala.	36	Apr	28		3	#37.1		1-2
Demopolis L&D, Ala.	48	Apr	27		3	#53.5	Apr	30
Coffeeville L&D, Ala.	43	Apr	26 12		10 13	#50.1 #45.4		3 12
Leaf:								
Beaumont, Miss.	20	Apr	28		3	23.29	Apr	30
Pascagoula:								
Merrill, Miss.	22		1		5	23.2		2
Pearl:								
Carthage, Miss.	17		1		3	17.2		2
Monticello, Miss.	19	Apr	17		7	26.55	Apr	27
Columbia, Miss.	17	Apr	19		5	22.5	Apr	28
Bogalusa, La.	15		1 26		21 29	20.2 16.5		1 27
Pearl River, La.	12		1		21	15.5		1,2,3
MISSISSIPPI SYSTEM								
Upper Mississippi Basin								
Chippewa:								
Eau Claire, Wis.	773		3		4	774.0		3
Durand, Wis.	11		2		6	12.30		4
South Fork Zumbro River:								
Rochester, Minn.	12		1		2	13.23		1
Zumbro River:								
Zumbro Falls, Minn.	18		1		3	25.0		[illegible]
Theilman, Minn.	38		1		5	43.50		2
Trempealeau River:								
Dodge, Wis.	7		2		5	8.69		3
Black River:								
Galesville, Wis.	12		4		6	13.24		4
Root River:								
Hokah, Minn.	47		2		4	48.3		3
Upper Iowa River:								
Dorchester, Iowa	14		2		3	15.0		2
Kickapoo River:								
Soldiers Grove, Wis.	723		3 8		4 10	723.30 723.70		4 9
Gays Mills, Wis.	9		6		17	9.85		12
Steuben, Wis.	8		2		15	9.25		11
Green River:								
Geneseo, Ill.	8	Apr	21 8 28		5 11 30	11.72 12.44 10.1		2 8 28
Rock River:								
Afton, Wis.	8		M		M	10.83		8
Rockton, Ill.	10	Apr	21		20	13.2		10

FLOOD STAGE DATA

(All dates in May unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest	
		From—	To—	Stage	Date
MISSISSIPPI SYSTEM-Continued	*Ft.*			*Ft.*	
Upper Mississippi Basin-Contd.					
Rock River-Continued:					
Rockford, Ill.	13.5	Apr 20	20	15.5	11
Joslin, Ill.	12	Apr 21	Jun 8	16.3	4
Moline, Ill.	12	Apr 21	23	14.6	5-6
Blackhawk Creek:					
Hudson, Iowa	12	7	9	13.53	9
Iowa River:					
Marshalltown, Iowa	13	7 28	14 Jun 6	15.54 14.39	8 29
Wapello, Iowa	10	1 28	18 Jun 1	12.80 12.60 11.20	4 10 30
South Skunk River:					
Oskaloosa, Iowa	15	2 8 27	2 12 31	15.54 17.02 16.16	2 10 29
North Skunk River:					
Sigourney, Iowa	16	2 27	4 Jun 1	17.08 19.28	2 29
Skunk River:					
Brighton, Iowa	14	1 9 28	6 9 Jun 1	15.53 14.32 15.88	3 9 29
Augusta, Iowa	15	2 28	5 Jun 1	18.8 18.7	3 29
Wisconsin River:					
Merrill, Wis.	11	2	4	12.6	3
Portage, Wis.	17	M	M	18.37	7
Muscoda, Wis.	9	8	10	9.23	9
Turkey Creek:					
Garber, Iowa	17	8	9	19.13	8
Maquoketa River:					
Maquoketa, Iowa	13	2	3	13.59	3
Wapsipinicon River:					
Independence, Iowa	12	9	9	12.45	9
De Witt, Iowa	10	2 28	20 Jun 8	11.48 11.36 10.36	3 14 31
Pecatonica River:					
Darlington, Wis.	11	2	3	11.24	3
Martintown, Wis.	11	Apr 29 28	19 Jun 1	15.84 12.3	5 30
Freeport, Ill.	13	3	14	14.1	9
Shirland, Ill.	P12	Apr 18 30	21 Jun 2	15.7 12.4	11 31
Kishwaukee River:					
Perryville, Ill.	P12	3	3	13.23	3
North Raccoon River:					
Perry, Iowa	13	9	11	14.47	10
Jefferson, Iowa	10	3 7 29	5 12 Jun 1	11.1 13.3 12.7	4 9 31
South Raccoon River:					
Redfield, Iowa	14	7	8	18.10	8
Raccoon River:					
Van Meter, Iowa	13	7	12	17.5	8
Des Moines SW 18th, Iowa	12	8	11	14.8	9
North River:					
Norwalk, Iowa	14	7	8	#20.27	8
South River:					
Ackworth, Iowa	19	27	28	23.70	27
Whitebreast Creek:					
Dallas, Iowa	22	28	28	22.65	28
Cedar Creek:					
Bussey, Iowa	16.5	28	29	23.68	28
MISSISSIPPI SYSTEM-Continued	*Ft.*			*Ft.*	
Upper Mississippi Basin-Contd.					
Des Moines River:					
Saylorvills, Iowa	P13	3 28	16 Jun 7	17.71 15.69	10 30
Des Moines 14th St., Iowa	21	7 31	13 Jun 1	24.90 M	9 M
Tracy, Iowa	14	6 15	13 23	15.41 14.60	8 19
Eddyville, Iowa	15	Apr 14	13	18.15	8
Ottumwa, Iowa	10	1 7 28	2 9 28	11.28 11.74 10.54	2 8 28
Salt River:					
New London, Mo.	19	9	9	19.8	9
Fox River:					
Dayton, Ill.	12	1	3	12.82	2
Illinois River:					
Morris, Ill.	13	M	M	13.15	1
La Salle, Ill.	20	Mar 30	14	25.3	2
Peoria, Ill.	18	Mar 14	19	23.9	3
Havana, Ill.	14	Mar 9	1/	23.8	1
Beardstown, Ill.	14	Mar 9	1/	26.85	1
Meramec River:					
Valley Park, Mo.	16	Apr 3	3	32.45	Apr 28
Kaskaskia River:					
New Athens, Ill.	25	Apr 25	4	M	M
Big Muddy River:					
Murphysboro, Ill.	16	M	Jun 15	M	M
Mississippi River:					
Dam 10 TW, Guttenburg, Iowa	15	8	13	15.92	11
Dubuque, Iowa	17	8	17	19.25	11
Clinton, Iowa	16	10	20	17.95	13
Dam 14 TW, LeClaire, Iowa	10	10	20	12.18	14
Davenport, Iowa	15	Apr 22 10	4 20	18.5 17.9	25-26 14
Muscatine, Iowa	16	Apr 21	22	20.26	15
Keithsburg, Ill.	12	Apr 12	27	17.4	16
Burlington, Iowa	15	Apr 15	24	19.0	16
Keokuk, Iowa (Dam 19 TW)	16	Apr 21 26	23 29	20.6 19.1 17.3	3 17 28
Gregory Landing, Mo.	15	Mar 15 28	25 31	21.62 18.36	3 28
Quincy, Ill.	17	Mar 12	Jun 13	24.45	4
Hannibal, Mo.	16	Mar 10	Jun 15	24.5 22.25 21.85	4 18 29
Louisiana, Mo.	15	Mar 9	Jun 16	22.50 20.28 20.36	5 19 30
Dam 24 TW, Clarksville, Mo.	25	Mar 9	Jun 16	32.3	5
Dam 25 TW, Winfield, Mo.	26	Mar 10	Jun 16	36.93	Apr 27
Grafton, Ill.	18	Mar 8	Jun 18	33.12	Apr 28
Dam 26 TW, Alton, Ill.	21	Mar 8	Jun 14	36.89	Apr 28
St. Louis, Mo.	30	Mar 10	Jun 5	43.23	Apr 28
Chester, Ill.	27	Mar 9	Jun 14	43.32	Apr 30
Cape Girardeau, Mo.	32	Mar 10	Jun 15	45.55	1
Missouri Basin					
Little Sioux River:					
Linn Grove, Iowa	12	30	Jun 2	12.53	31
North Platte River:					
North Platte, Nebr.	6	6	Jun 28	5.98	Jun 5
Bear Creek:					
Morrison, Colo.	6.5	6 22	13 22	7.07 6.60	7 22

FLOOD STAGE DATA

(All dates in May unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest	
		From–	To–	Stage	Date
MISSISSIPPI SYSTEM-Contd. Missouri Basin	Ft.			Ft.	
South Platte River:					
Littleton, Colo.	8	6	7	U	U
Denver, Colo.	8	6	7	10.85	7
Henderson, Colo.	7	6	14	11.73	6
Kersey, Colo.	9	8	U	11.81	8
Weldona, Colo.	8	7	28	11.65	8
Balzac, Colo. (Channel No. 1)	P9	7 9	7 11	10.43 10.72	7 9
Julesburg, Colo. (Channel No 2)	P8	10	29	11.58	11
North Platte, Nebr.	8	12	14	12.7	13
Platte:					
Brady, Nebr.(Channel No. 1)	P5	4	Jun 28	9.6 9.0	14 27
Cozad, Nebr. (So. Channel)	P4.5	5	Jun 27	9.0 9.3	15 29-30
Overton, Nebr. (No. Channel)	P6	9	Jun 10	6.38	15
Odessa, Nebr.	P4.5	15	Jun 8	5.80	17
Grand Island, Nebr.	4	11	Jun 28	5.63	18
North Bend, Nebr.	6	18	Jun 9	6.79 7.98	21 28
Agency, Mo.	20	7	10	24.61	8
East Nishnabotna River:					
Red Oak, Iowa	18	7	8	18.95	8
Nishnabotna River:					
Hamburg, Iowa (Rural FS)	18	1 7 28	3 13 30	19.63 23.94 20.46	1 9 26
Tarkio River:					
Fairfax, Mo.	17	7	8	17.97	7
One Hundred and Two River:					
Maryville, Mo.	14	7	[illegible]	14.4	8
Rosendale, Mo.	13	7	8	16.7	8
Little Platte River:					
Smithville, Mo.	24	1 5	3 9	32.06 31.60	2 7
Buffalo Creek:					
Jamestown, Kansas	16	7	9	17.67	8
Solomon River:					
Glasco, Kansas	22	8	8	22.70	8
Niles, Kansas	24	9	10	25.3	10
Mill Creek:					
Washington, Kansas	18	7	7	20.59	7
Black Vermillion River:					
Frankfort, Kansas (Hway 9)	19	7	8	26.55	7
Fancy Creek:					
Winkler, Kansas	11	7	7	12.75	7
Wakarusa River:					
Lawrence, Kansas	23	1 6 23	2 8 23	23.5 29.1 24.95	1-2 7 23
Stranger Creek:					
Easton, Kansas	15	7	7	16.70	7
Tonganoxie, Kansas	22	1 7	2 8	23.60 23.00	2 7
Grand River:					
Pattonsburg, Mo.	25	7	9	29.25	8
Gallatin, Mo.	21	7	10	23.1	9
Chillicothe, Mo.	24	2 7	4 10	30.3 29.0	3 9
Sumner, Mo.	26	2	13	34.52	4
Brunswick, Mo.	12	2 29	15 31	21.23 14.70	11 30

River and station	Flood stage	Above flood stages -dates		Crest	
		From–	To–	Stage	Date
MISSISSIPPI SYSTEM-Contd. Missouri Basin-Continued	Ft.			Ft.	
Chariton River:					
Novinger, Mo.	20	2 27	3 29	22.95 23.45	2 27
Prairie Hill, Mo.	15	2 7 26	5 9 31	18.9 17.4 21.1	3 8 29
Blackwater River:					
Valley City, Mo.	22	2 7	2 8	26.60 22.63	2 7
Marais Des Cygnes River:					
Reading, Kansas	18	22 27	22 27	19.60 21.50	22 27
Ottawa, Kansas	27	7	8	27.4	7
Lacygne, Kansas	25	9	10	25.40	9
Osage River:					
Osceola, Mo.	22	8	9	22.2	8
Missouri River:					
St. Joseph, Mo.	17	7 29	10 31	19.0 18.2	9 29
Leavenworth, Kansas	19	8	10	20.0	9
Silbey, Mo.	22	8	10	23.9	9
Napoleon, Mo.	17	8	11	20.1	9
Lexington, Mo.	22	2 7 31	4 13 31	22.8 27.0 22.0	3 9 31
Waverly, Mo.	18	1 7 30	4 13 37	19.1 22.8 18.1	3 9 30
Glasgow, Mo.	25	3 7	6 13	25.7 28.8	4 11
Boonville, Mo.	21	3	14	25.12	11
Jefferson City, Mo.	23	4	14	26.53	12
Hermann, Mo.	21	Mar 7 29	18 Jun 3	28.7 22.5	12 Jun 1
St. Charles, Mo.	25	Mar 7 31	18 Jun 3	31.5 25.4	13 Jun 1
Ohio Basin					
New River:					
Radford, Va.	14	28	28	20.0	28
Embarrass:					
Lawrenceville, Ill.	11	Apr 21	2	15.88	Apr 26
White:					
Petersburg, Ind.	16	Apr 19	2	22.15	Apr 26
Hazelton, Ind.	16	Apr 20	U	22.85	Apr 27
Little Wabash:					
Wilcox, Ill.	16	9	10	16.98	9
Carmi, Ill.	20	Apr 24	5	30.06	Apr 29
Wabash:					
New Harmony, Ind.	15	Apr 23	4	17.4	Apr 30
Vincennes, Ind.	16	Apr 24	2	18.85	Apr 30
Mt. Carmel, Ill.	17	Apr 21	4	22.84	Apr 29
Cumberland:					
Baxter Harlan W.W.O., Ky.	16	28	28	16.1	28
Barbourville, Ky.	27	28	30	35.8	29
Williamsburg, Ky.	21	28	31	29.2	29
Swannanoa:					
Biltmore, N.C.	12	28	28	13.3	28
French Broad:					
Rosman, N.C.	8	27	28	13.1	28
Blantyre, N.C.	17	28	30	20.5	25
Asheville. N.C.	8	28	30	10.9	28
Marshall, N.C.	10	28	29	12.7	28
Hot Springs, N.C.	13	28	28	14.5	28

FLOOD STAGE DATA

(All dates in May unless otherwise specified)

MAY 1973

River and station	Flood stage	Above flood stages -dates From—	Above flood stages -dates To—	Crest Stage	Crest Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Contd.					
Ohio Basin-Continued					
Tuckasegee:					
Bryson City, N.C.	11	28	28	12.0	28
Emory:					
Harriman, Tenn.	755	27	28	763.80	28
Oakdale, Tenn.	25	27	28	38.66	28
South Chickamauga Creek:					
Chickamauga, Tenn.	10	28	29	12.08	29
Elk:					
Fayetteville, Tenn.	661	27	28	663.27	28
Duck:					
Shelbyville, Tenn.	721	27	29	731.0	28
Columbia, Tenn.	32	28	31	37.27	30
Tennessee:					
Whitesburg, Ala.	560	28	1	566.97	31
Florence, Ala.	419	28	1/	420.87	31
Gilbertville, Ky.	320	1	21	331.35	7
Ohio:					
Tell City, Ind.	38	2	5	39.5	4
Dam 47, Newburgh, Ind.	38	1	7	41.5	5
Dam 48, Cypress, Ind.	38	2	8	41.0	5
Mt. Vernon, Ind.	35	1	9	39.1	6
Dam 49, Uniontown, Ky.	37	Apr 26	10	41.7	6
Shawneetown, Ill.	33	Mar 19	12	40.9	6
Dam 50, Fords Ferry, Ky.	34	Mar 18	15	43.9	6
Golconda, Ill.	40	3	10	42.6	6
Paducah, Ky.	39	Apr 23	15	43.97	8
Cairo, Ill.	40	Mar 11	Jun 15	55.8	Apr 2
White Basin					
Cache:					
Patterson, Ark	7	Oct 29	Jun 19	10.6	5
Black:					
Poplar Bluff, Mo.	16	27	29	18.18	28
Pocahontas, Ark.	17	Mar 11 28	20 Jun 8	25.17 18.21	Apr 26 29
Black Rock, Ark.	14	Mar 8	Jun 17	25.5 24.5 22.8	2 8 28
White:					
Newport, Ark.	26	Apr 20	19	29.4	2
Augusta, Ark.	30	Apr 20	23	37.15	Apr 26
Georgetown, Ark.	21	Apr 19	Jun 26	30.1	Apr 27
Des Arc, Ark.	24	Mar 15	30	#33.5	1
Clarendon, Ark.	26	Mar 12	Jun 26	34.9	3
St. Charles, Ark.	25	Jan 29	Jun 21	36.5	7
Arkansas Basin					
Polecat Creek:					
Sapulpa, Okla.	21	7	[illegible]	#21.50	7
Cottonwood:					
Plymouth, Kansas	28	22	24	#32.39	22
Emporia, Kansas	20	23	24	21.45	23
Spring:					
Quapaw, Okla.	20	[illegible]	[illegible]	#22.70	7
Poteau:					
Panama, Okla.	24	[illegible]	[illegible]	#26.30	7

River and station	Flood stage	Above flood stages -dates From—	Above flood stages -dates To—	Crest Stage	Crest Date
	Ft			Ft.	
MISSISSIPPI SYSTEM-Contd.					
Arkansas Basin-Continued					
Fourche La Fave:					
Houston, Ark.	25	Mar 10	29	#32.64	1
Arkansas:					
Ozark L&D 12, TW, Ark.	357	[illegible]	21	362.50	Apr 24
Morrilton, Ark.	30	Apr 17 8	4 11	37.41 31.54	24 8
Red Basin					
Blue:					
Blue, Okla.	21	7	8	22.67	7
Clear Boggy Creek:					
Caney, Okla.	19	8	8	19.08	8
Ouachita:					
Camden, Ark.	26	Apr 19	8	#33.9	1
Monroe, La.	40	Mar 18	1/	48.7	9, 10,11
Columbia L&D, La.	65	Mar 24	1/	70.7	13
Black:					
Jonesville, La.	50	Mar 24	M	58.21	17
Jonesville L&D, La.	52	Mar 24	M	59.65	17
Acme, La.	48	M	M	58.0	14-17
Lower Mississippi Basin					
St. Francis:					
Fisk, Mo.	20	Mar 11	1/	22.14	8
St. Francis, Ark.	18	Mar 11	1/	22.33	3
Madison, Ark.	32	Apr 25	19	36.1	2
Tallahatchie:					
Swan Lake, Miss.	26	Apr 19	Jun 11	30.9	4
Yazoo:					
Greenwood, Miss.	35	4	26	36.5	14
Yazoo City, Miss.	29	Mar 16	Jun 27	35.2	Apr 19
Big Black:					
West, Miss.	12	Apr 8	17	20.1	Apr 27
Bovina, Miss.	28	3 8	5 13	28.1 30.5	3 9
Mississippi:					
New Madrid, Mo.	34	Mar 14	23	43.3 42.3	Apr 3-4 4, 6
Caruthersville, Mo.	32	Mar 13 31	25 1/	42.4 41.5	Apr 3-4 5-7
Memphis, Tenn.	34	Mar 21	23	40.48	8
Helena, Ark.	44	Mar 24	25	48.5 50.15	Apr 7-10 10
Arkansas City, Ark.	44	Apr 22	25	47.6	11-13
Greenville, Miss.	48	Mar 26	Jun 4	58.2	12-14
Vicksburg, Miss.	43	Mar 26	Jun 22	53.1	13
Natchez, Miss.	48	Mar 26	Jun 27	56.7	13
Red River Landing, La.	45	Mar 25	Jun 26	54.7	13-16
Baton Rouge, La.	35	Mar 28	Jun 23	42.1	10
Donaldsonville, La.	28	Mar 30	Jun 8	32.3	Apr 9
Reserve, La.	22	Apr 2	31	24.5	Apr 8-9
New Orleans, La.	17	2	23	17.5	13-14
Atchafalaya Basin					
Atchafalaya:					
Simmesport, La.	41	Apr 3	Jun 11	49.0	14-16
Melville, La.	41	Apr 17	Jun 2	44.3	14
Krotz Springs, La.	37	2	30	38.4	15
Butte La Rose, La.	28	M	M	27.58	23
Morgan City, La.	7	Dec 20	1/	13.7	27

FLOOD STAGE DATA

(All dates in May unless otherwise specified)

MAY 1973

River and station	Flood stage	Above flood stages -dates		Crest	
		From–	To–	Stage	Date
	Ft.			*Ft.*	
WEST GULF OF MEXICO DRAINAGE					
Mermentau:					
Mermentau, La.	5	6	12	5.9	8-9
Calcasieu:					
Hineston, La.	12	3	14	17.38	9
Oakdale, La.	12	10	11	12.9	11
Kinder, La.	16	4	14	18.1	6
Lake Charles 2 N, La.	3	2 22 24	13 22 24	4.0 3.0 3.0	7 22 22
Sabine:					
Emory, Tex.	12	Apr 22	9	15.31	Apr 25
Mineola, Tex.	14	Apr 16	17	18.91	Apr 26
Gladewater, Tex.	26	Apr 18	12	36.39	Apr 29
Longview, Tex.	25	Apr 20	16	34.2	1
Tatum, Tex.	25	Apr 26	9	26.45	3
Logansport, Tex.	28	Apr 28	14	30.00	8
Bon Weir, Tex.	17	3	15	21.73	9
Deweyville, Tex.	14	Mar 20	20	16.14 16.1	Apr 21 11
Neches:					
Alto, Tex. (Near)	16	M	15	18.4	26-30
Weis Bluff, Tex.	15	10	13	15.4	11
Lawsons Crossing, Tex.	4	Apr 16	16	5.6	12
Beaumont, Tex.	5	8 10	8 15	5.0 5.6	8 12
Trinity:					
Trinidad, Tex.	28	Apr 24	4	42.0	Apr 26
Long Lake, Tex.	35	Apr 20	9	45.1	Apr 29
Goodrich, Tex.	36	8	9	36.25	8
Liberty, Tex.	24	Apr 18	17	27.90	11
WEST GULF OF MEXICO DRAINAGE (Continued)					
Navasota:					
Easterly, Tex. (Near)	14	29	29	14.1	29
Bryan, Tex. (Near)	12	Apr 28 10 27	4 12 1/	13.43 12.03 12.99	1 11 31
Navidad:					
Ganado, Tex. (Near)	21	12	13	23.85	13
Guadalupe:					
Dupont, Tex.	20	4 13	7 17	20.5 21.6	5-6 15
Chama:					
Chamita, N. Mex.	5.6	10	13	5.97	11
Rio Grande:					
Monte Vista, Colo.	6	20	21	6.24	20
Lobatos Bridge, Colo.	4	21	29	4.70	23
Embudo, N. Mex.	8	19	29	9.92	22
Espanola, N. Mex.	7	20	26	7.78	22
Albuquerque, N. Mex.	6	1	30	7.40	15
ALASKA DRAINAGE					
Koskokwim:					
Bethel, Alaska	10	M	M	11.0	M
Black:					
Chalkyitsik, Alaska	96	13	13		

#	Highest stage observed
1/	Continued at end of month
___	Highest stage of record
M	Missing
P	Provisional (Flood stage)
U	Unknown

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
1012 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	86	10.2	7.6	20	1.0
1000	21	138	10.0	6.7	19	1.6
950	31	537	9.2	5.5	22	3.2
900	31	984	7.3	2.8	24	4.3
850	31	1,453	4.7	-.2	25	5.1
800	31	1,946	2.3	-2.2	26	5.6
750	31	2,465	-.8	-5.1	26	6.8
700	31	3,013	-3.4	-10.2	26	8.4
650	31	3,597	-6.4	-13.6	26	9.3
600	31	4,219	-10.0	-19.1	26	11.1
550	31	4,885	-13.7	-24.8	26	12.0
500	31	5,604	-18.2	-30.7	25	14.1
450	31	6,383	-23.4	[illegible]	25	15.5
400	31	7,233	-29.7	-41.6	25	17.5
350	31	8,175	-36.6	-45.7	25	21.0
300	31	9,223	-44.0		26	23.5
250	31	10,429	-50.4		26	26.3
200	31	11,872	-53.5		25	24.5
175	31	12,732	-52.9		26	20.6
150	30	13,723	-52.9		26	15.8
125	30	14,896	-54.1		26	13.7
100	30	16,323	-55.7		27	8.3
80	30	17,741	-56.5		26	4.9
70	30	18,589	-56.5		25	3.7
60	28	19,568	-56.7		26	2.2
50	24	20,730	-56.4		36	.8
40	21	22,151	-55.5		06	1.0
30	19	24,002	-52.1		05	1.6
25	19	25,189	-50.5		10	.5
20	17	26,649	-48.9		21	.2
15	12	28,564	-46.0		02	.5
10						
7						

ALBUQUERQUE, N. MEX.
838 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,619	10.5	2.0	07	.6
1000						
950						
900						
850						
800	31	2,008	11.2	-3.6	[illegible]	.7
750	31	2,544	8.3	-6.9	29	[illegible]
700	31	[illegible]	4.2	-9.4	30	6.8
650	31	3,708	-.3	-11.7	29	7.5
600	31	4,343	-4.9	-15.7	29	8.6
550	31	5,021	-9.6	-19.8	29	9.8
500	31	5,751	-14.3	-27.9	28	11.4
450	31	6,542	-19.5	-33.6	29	12.9
400	31	7,408	-25.9	-39.1	28	12.6
350	30	8,364	-33.1	-45.5	27	14.3
300	29	9,428	-41.4	-52.8	27	14.7
250	29	10,642	-50.3		27	17.1
200	29	12,071	-57.7		27	19.7
175	29	12,911	-58.9		27	20.4
150	29	13,879	-58.9		27	17.6
125	29	15,018	-61.1		27	15.8
100	28	16,394	-63.5		28	12.1
80	28	17,759	-64.3		28	7.1
70	27	18,577	-63.4		30	3.4
60	27	19,529	-61.8		31	1.0
50	27	20,664	-58.8		02	1.0
40	27	22,074	-56.4		06	1.9
30	26	23,913	-52.5		08	1.3
25	24	25,096	-50.6		05	1.4
20	24	26,560	-48.0		03	1.4
15	22	28,471	-45.0		29	.6
10	16	31,204	-40.4		29	4.2
7						

AMARILLO, TEXAS
890 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,095	11.4	[illegible]	[illegible]	1.7
1000						
950						
900						
850	31	[illegible]	14.0	1.6	27	3.9
800	31	1,990	[illegible]	[illegible]	28	5.0
750	31	2,527	8.4	-4.6	29	6.3
700	31	3,093	[illegible]	-6.8	28	7.9
650	31	3,692	.1	-9.3	28	9.1
600	31	4,328	-4.4	-13.1	28	10.6
550	31	5,008	-9.2	-19.1	28	11.9
500	31	5,739	-13.9	-26.3	28	13.3
450	31	6,531	-19.2	[illegible]	[illegible]	15.0
400	31	7,396	-25.7	-38.7	28	16.3
350	31	8,353	-32.8	-45.1	27	19.8
300	31	9,416	-41.1	-50.2	27	22.1
250	31	10,631	-50.3		27	24.0
200	30	12,064	-57.8		27	25.5
175	30	12,904	-58.4		28	26.0
150	30	13,873	-58.6		28	22.5
125	30	15,016	-60.3		27	20.1
100	30	16,398	-62.9		28	14.8
80	30	17,770	-63.6		28	8.7
70	30	18,590	-63.6		29	4.0
60	30	19,541	-61.3		32	2.0
50	30	20,680	-59.0		04	1.3
40	30	22,090	-56.1		06	1.8
30	29	23,937	-52.3		08	2.2
25	28	25,118	-50.3		07	1.7
20	26	26,580	-47.8		07	.4
15	22	28,500	-44.6		26	2.3
10	12	31,254	-40.5			
7						

*** ANCHORAGE, ALASKA**
[illegible] MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	45	5.2	-.7	14	3.0
1000	19	[illegible]	6.3	-1.6	14	[illegible]
950	31	[illegible]	4.1	-4.1	14	[illegible]
900	31	924	1.1	-6.4	12	[illegible]
850	31	1,380	-2.7	-8.4	12	[illegible]
800	31	[illegible]	-6.2	-10.4	12	[illegible]
750	31	2,360	-9.9	-13.6	13	[illegible]
700	31	2,898	-13.6	-17.7	13	[illegible]
650	31	3,448	-17.2	-21.5	14	[illegible]
600	31	4,044	-21.0	-26.4	13	[illegible]
550	31	4,681	-25.2	-30.8	13	[illegible]
500	31	5,367	-29.9	-36.1	13	[illegible]
450	31	6,110	-35.0	-41.0	13	[illegible]
400	31	6,921	-40.9	-41.6	[illegible]	[illegible]
350	31	7,820	-47.1		[illegible]	[illegible]
300	[illegible]	8,826	-51.6		[illegible]	[illegible]
250	30	10,012	-49.7		[illegible]	[illegible]
200	[illegible]	11,486	-46.2		[illegible]	[illegible]
175	[illegible]	12,375	-45.8		[illegible]	[illegible]
150	[illegible]	13,401	-46.3		[illegible]	4.7
125	30	14,610	-47.1		[illegible]	4.6
100	29	16,077	-48.2		[illegible]	4.4
80	28	17,544	-49.4		[illegible]	[illegible]
70	[illegible]	18,419	-49.6		[illegible]	[illegible]
60	28	19,427	-50.2		[illegible]	[illegible]
50	27	20,619	-50.7		[illegible]	2.9
40	27	22,072	-51.1		[illegible]	2.7
30	26	23,945	-51.0		[illegible]	[illegible]
25	26	25,133	-50.6		09	1.7
20	26	26,591	-49.7		08	3.4
15	22	28,514	-46.5		07	3.4
10	20	31,235	-41.8		07	3.9
7	[illegible]	33,658	-36.7			

*** ANNETTE, ALASKA**
1011 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	[illegible]	6.2	3.5	13	2.9
1000	28	142	6.2	3.5	14	3.9
950	31	545	3.6	1.6	15	6.8
900	31	982	.7	-1.0	16	8.1
850	31	1,439	-2.1	-3.8	17	9.0
800	31	1,919	-4.8	-8.5	18	[illegible]
750	31	2,424	-7.8	-13.0	19	10.6
700	31	2,958	-10.9	-16.2	19	11.7
650	31	3,524	-14.2	-19.6	19	[illegible]
600	31	4,127	-17.8	-24.7	19	12.9
550	[illegible]	4,773	-21.7	-30.0	[illegible]	14.1
500	31	5,469	-25.9	-33.7	20	13.8
450	31	6,225	-30.8	-38.4	20	14.6
400	31	7,051	-36.6	-42.5	21	15.0
350	31	[illegible]	-42.9	-46.9	21	15.6
300	31	8,990	-48.6		21	17.6
250	[illegible]	10,181	-51.3		22	17.0
200	31	11,632	-50.0		21	13.7
175	31	12,506	-49.3		22	12.0
150	31	13,516	-50.0		22	10.1
125	30	14,707	-50.7		22	9.0
100	[illegible]	16,158	-51.7		21	7.0
80	30	17,602	-52.6		21	5.2
70	29	18,468	-52.9		20	[illegible]
60	29	19,462	-53.3		19	3.1
50	28	20,640	-53.8		19	1.6
40	27	[illegible]	-53.5		13	1.0
30	27	23,931	-52.5		06	1.2
25	27	25,112	-51.6		07	1.7
20	23	26,582	-49.7		06	2.3
15	20	28,480	-46.1		07	2.2
10	17	31,220	-40.8		06	1.8
7	12	33,653	-34.9		05	2.5

ATHENS, GEORGIA
986 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	13.4	9.8	26	1.0
1000						
950	31	562	16.0	7.6	26	3.7
900	31	1,021	13.8	4.2	26	5.4
850	31	1,500	11.0	.6	26	7.1
800	31	2,004	8.6	-3.2	25	9.3
750	31	2,536	6.2	-6.9	26	11.2
700	31	3,099	3.0	-8.8	27	12.5
650	31	3,695	-.6	-11.7	27	13.4
600	31	4,331	-4.4	-15.8	26	15.2
550	31	5,011	-8.5	-21.1	26	16.3
500	31	5,744	-13.2	-26.4	26	17.7
450	31	6,538	-18.7	-30.4	27	18.7
400	30	7,403	-25.1	-35.9	27	20.3
350	30	8,362	-32.2	-42.0	27	21.4
300	29	9,428	-40.7	-46.0	27	24.0
250	29	10,645	-50.0		27	27.6
200	29	12,072	-58.8		27	32.5
175	29	12,908	-59.5		28	29.8
150	29	13,872	-60.1		28	25.0
125	29	15,007	-61.3		27	19.8
100	29	16,384	-63.4		27	14.7
80	28	17,759	-63.0		28	7.9
70	28	18,582	-62.3		27	5.2
60	28	19,537	-61.1		28	2.5
50	28	20,674	-59.4		06	1.4
40	26	22,080	-56.7		08	2.5
30	26	23,923	-52.4		08	3.3
25	26	25,109	-49.9		09	2.0
20	25	26,576	-47.2		09	1.1
15	21	28,497	-44.3		32	1.1
10	15	31,233	-39.6		26	2.3
7						

*** BARROW, ALASKA**
1015 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	21	8	-6.5	-7.9	07	2.0
1000	20	127	-5.3	-6.8	07	2.3
950	21	524	-5.1	-8.2	08	3.4
900	21	950	-3.5	-9.4	10	2.3
850	21	1,402	-4.2	-9.8	15	1.7
800	21	1,878	-5.9	-14.0	18	2.3
750	21	2,382	-8.4	-17.9	20	3.3
700	21	2,914	-11.7	-20.1	21	3.7
650	21	3,478	-14.7	-25.4	21	4.6
600	21	4,080	-18.3	-26.2	22	4.6
550	21	4,725	-22.3	-29.3	22	5.4
500	21	5,418	-27.0	-33.1	22	6.4
450	21	6,170	-32.3	-38.4	22	6.7
400	21	6,990	-38.2	-44.1	23	6.7
350						
300						
250						
200						
175						
150						
125						
100						
80						
70						
60						
50						
40						
30						
25						
20						
15						
10						
7						

BARTER IS., ALASKA
1012 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	15	-6.1	-7.0	09	2.4
1000	29	112	-4.7	-5.7	09	3.0
950	30	512	-3.8	-6.5	10	5.2
900	30	941	-1.4	-8.0	12	4.3
850	30	1,397	-2.1	-9.8	13	3.3
800	30	1,877	-4.4	-12.0	16	2.1
750	30	2,383	-7.4	-14.5	19	2.1
700	30	2,916	-10.8	-18.9	20	2.0
650	30	3,483	-14.2	-24.0	20	2.9
600	30	4,086	-18.0	-28.1	21	3.4
550	30	4,731	-22.4	-32.4	21	4.4
500	30	5,424	-27.5	-36.4	20	5.1
450	30	6,173	-33.0	-41.7	20	[illegible]
400	30	6,991	-39.0	-44.0	20	6.9
350	30	7,898	-45.2	-45.1	20	7.5
300	30	8,910	-51.4		19	7.0
250	30	10,091	-51.0		20	6.6
200	30	11,556	-47.4		20	5.6
175	30	12,441	-46.6		20	5.2
150	30	13,464	-46.4		20	4.8
125	30	14,674	-47.1		19	3.9
100	30	16,149	-47.7		20	3.5
80	30	17,619	-48.6		19	2.7
70	30	18,498	-48.7		20	2.7
60	30	19,511	-48.9		21	1.9
50	30	20,708	-49.1		18	1.5
40	29	22,176	-49.0		13	.9
30	28	24,068	-48.4		08	1.3
25	27	25,270	-48.1		07	2.1
20	25	26,744	-47.3		05	3.3
15	21	28,657	-45.1		06	4.3
10	19	31,416	-40.1		07	5.0
7	6	33,869	-34.7			

BETHEL, ALASKA
1000 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	.8	-1.3	33	1.2
1000	14	107	2.7	-1.5	02	1.9
950	31	454	2.0	-2.1	09	2.1
900	31	889	-.4	-4.4	12	2.8
850	31	1,344	-3.4	-6.9	12	3.9
800	31	1,821	-6.5	-9.3	12	4.3
750	31	2,322	-9.7	-12.7	12	4.4
700	31	2,852	-13.2	-17.3	12	5.9
650	31	3,413	-16.6	-23.0	12	6.3
600	31	4,010	-20.4	-27.4	12	6.4
550	31	4,649	-24.8	-30.9	11	6.9
500	31	5,335	-29.8	-37.0	[illegible]	6.7
450	31	6,078	-35.1	-41.8	11	6.4
400	31	6,889	-41.1	-44.4	[illegible]	[illegible]
350	31	7,787	-47.2		09	[illegible]
300	31	8,795	-51.0		09	[illegible]
250	31	9,985	-48.7		09	3.7
200	30	11,461	-46.0		11	1.5
175	30	12,350	-45.9		[illegible]	.7
150	29	13,375	-46.3		16	1.1
125	[illegible]	14,584	-47.2		[illegible]	1.3
100	[illegible]	16,063	-47.9		14	1.3
80	27	17,537	-49.0		13	1.8
70	[illegible]	18,416	-49.2		13	2.0
60	26	19,427	-49.3		[illegible]	2.4
50	[illegible]	20,621	-49.8		13	1.9
40	[illegible]	22,082	-49.8		[illegible]	2.4
30	[illegible]	23,961	-49.8		[illegible]	2.4
25	20	25,144	-49.6		[illegible]	[illegible]
20	19	26,605	-48.7		08	3.4
15	14	28,505	-46.4		07	3.7
10						
7						

*** BISMARCK, N. DAK.**
953 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	503	5.5	1.6	31	1.5
1000						
950	17	577	6.1	-1.6	32	1.7
900	31	981	9.7	-.7	33	[illegible]
850	31	1,454	7.1	-3.1	33	4.7
800	31	1,950	3.6	-5.9	33	6.2
750	31	2,470	.2	-8.8	33	7.3
700	31	3,019	-3.7	-12.4	33	7.9
650	31	3,602	-7.0	-16.9	32	8.0
600	31	4,222	-10.6	-22.1	32	7.8
550	31	4,886	-15.0	-26.4	32	8.5
500	31	5,600	-19.9	-30.3	32	9.4
450	31	6,373	-25.3	-35.5	31	10.9
400	31	7,218	-31.6	-41.3	31	11.9
350	31	8,152	-38.5	-45.9	31	13.4
300	31	9,192	-45.9		31	16.2
250	31	10,386	-52.6		31	16.8
200	31	11,819	-54.1		31	15.8
175	30	12,681	-53.4		31	13.5
150	30	13,675	-52.8		30	11.6
125	[illegible]	14,848	-53.8		31	10.3
100	29	16,277	-55.4		31	7.0
80	29	17,695	-56.5		31	5.4
70	29	18,543	-56.4		32	4.4
60	29	19,522	-56.1		32	3.1
50	29	20,683	-55.6		34	2.2
40	29	22,108	-54.6		01	2.0
30	27	[illegible]	-52.5		06	1.5
25	25	25,136	-51.4		05	2.1
20	24	26,586	-49.2		05	2.8
15	21	28,473	-45.9		07	2.7
10	14	31,205	-41.0		04	2.2
7						

BOISE, IDAHO
9[illegible]5 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	871	10.1	.7	16	1.1
1000						
950						
900	31	1,011	12.4	-1.2	23	.2
850	31	1,491	11.8	-4.6	32	2.3
800	31	1,995	8.4	-6.6	30	3.1
750	31	2,525	4.8	-9.2	29	4.8
700	31	3,082	.8	-11.2	28	6.2
650	31	3,674	-3.2	-14.5	28	7.9
600	31	4,302	-7.6	-19.6	27	9.6
550	31	4,973	-12.2	-24.0	27	10.4
500	31	5,696	-16.7	-29.0	27	10.8
450	31	6,479	-22.0	-33.0	28	12.8
400	30	7,337	-28.1	-38.4	28	13.6
350	30	8,285	-35.3	-44.4	28	14.8
300	30	9,337	-43.8		28	16.8
250	30	10,540	-51.9		28	[illegible]
200	30	11,962	-58.8		28	18.5
175	30	12,801	-58.3		28	16.9
150	30	13,773	-57.2		28	14.2
125	29	14,929	-57.9		28	11.2
100	29	16,331	-59.4		28	[illegible]
80	29	17,726	-59.8		29	4.7
70	29	18,561	-59.5		[illegible]	3.1
60	29	19,527	-58.8		32	1.4
50	29	20,675	-57.7		04	.9
40	29	22,090	-55.9		[illegible]	1.1
30	28	23,932	-53.1		07	2.0
25	27	25,113	-51.7		[illegible]	2.4
20	25	26,578	-49.3		[illegible]	[illegible]
15	24	28,467	-45.9		[illegible]	2.4
10	16	31,217	-39.6		08	2.9
7						

BOOTHVILLE, LA.
1015 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1	22.0	18.7	19	1.6
1000	30	129	21.8	17.7	19	2.1
950	30	573	19.3	14.3	20	3.7
900	3[illegible]	1,037	17.0	9.4	21	4.1
850	30	1,523	15.0	3.1	22	5.0
800	30	2,035	12.6	-.7	23	6.0
750	30	2,574	9.5	-4.1	25	6.9
700	30	3,143	6.1	-8.5	26	7.6
650	30	3,746	2.4	-10.8	27	8.6
600	29	4,388	-1.7	-14.1	27	11.0
550	29	5,075	-6.2	-17.1	27	12.6
500	29	5,814	-11.1	-25.0	27	14.5
450	29	6,615	-16.2	-31.1	27	16.1
400	29	7,492	-22.2	-36.3	27	19.8
350	29	8,463	-29.2	-42.4	28	21.8
300	29	9,542	-37.6	-49.4	28	25.0
250	29	10,775	-47.0		27	27.6
200	29	12,222	-56.4		28	33.6
175	29	13,062	-60.1		28	33.8
150	29	14,018	-62.4		28	31.1
125	29	15,140	-63.9		28	[illegible]
100	29	16,499	-66.4		28	16.8
80	27	17,836	-68.3		28	8.7
70	[illegible]	18,640	-67.0		29	3.8
60	26	19,576	-63.3		06	.1
50	[illegible]	20,705	-60.2		07	3.2
40	26	22,109	-56.8		09	4.7
30	24	[illegible]	-51.8		08	5.4
25	[illegible]	25,143	-49.2		08	5.8
20	21	26,620	-46.4		08	5.0
15	21	28,543	-43.5		08	3.7
10	9	31,313	-38.4			
7						

*** BROWNSVILLE, TEXAS**
101[illegible] MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	7	21.7	19.6	15	1.7
1000	30	108	22.6	21.0	14	2.9
950	31	550	21.0	15.6	16	6.7
900	31	1,019	20.7	9.0	17	5.7
850	31	1,512	19.2	4.2	18	3.5
800	31	2,031	16.9	.4	20	[illegible]
750	31	2,578	13.5	-2.7	24	1.8
700	31	3,154	9.7	-5.1	26	2.8
650	31	3,765	5.5	-8.5	27	4.4
600	31	[illegible]	.9	-13.3	28	6.4
550	31	5,107	-4.1	-17.1	28	9.2
500	31	5,851	-9.5	-22.7	27	11.3
450	31	6,657	-14.9	-26.7	27	12.7
400	31	7,537	-21.3	-32.4	27	14.7
350	29	8,514	-28.4	-39.2	27	17.7
300	28	9,600	-36.5	-48.7	27	21.4
250	28	10,838	-46.1		27	25.6
200	[illegible]	12,288	-56.3		27	31.5
175	28	13,126	-61.2		27	32.3
150	28	14,075	-64.6		27	28.8
125	[illegible]	15,181	-67.5		27	23.8
100	28	16,510	-71.7		27	15.0
80	28	17,819	-73.7		27	6.5
70	28	18,602	-70.9		[illegible]	1.1
60	28	19,527	-65.8		[illegible]	[illegible]
50	[illegible]	20,646	-61.7		[illegible]	5.2
40	[illegible]	22,043	-57.7		08	7.4
30	27	23,880	-52.3		09	8.1
25	27	25,068	-49.5		09	8.9
20	[illegible]	26,539	-47.3		08	8.8
15	[illegible]	28,451	-44.2		09	[illegible]
10	18	31,201	-38.2		09	8.6
7	14	33,649	-34.4		12	6.3

BUFFALO, N. Y.
986 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	218	[illegible]	6.5	22	2.3
1000						
950	31	527	9.0	4.8	23	4.2
900	31	974	7.3	[illegible]	24	4.8
850	31	1,443	4.4	-.2	25	[illegible]
800	31	1,935	1.8	-2.0	25	6.6
750	31	2,453	-1.3	-5.8	26	7.1
700	31	3,000	-4.3	-9.6	25	7.6
650	31	3,582	-7.2	-13.3	26	8.1
600	31	4,202	-10.7	-17.9	25	8.3
550	31	4,866	-14.7	-24.9	25	9.4
500	31	5,581	-19.5	-30.9	25	11.0
450	31	[illegible]	-24.8	-36.2	[illegible]	11.8
400	31	7,201	-31.3	-42.5	25	12.5
350	31	8,137	-37.9	-44.6	25	15.6
300	31	9,181	-44.8		26	19.6
250	31	10,385	-50.3		26	21.2
200	30	11,822	-52.4		26	20.2
175	[illegible]	12,687	-52.1		26	[illegible]
150	30	13,686	-52.2		26	14.6
125	[illegible]	14,867	-53.5		27	12.5
100	29	16,297	-55.2		27	8.7
80	[illegible]	17,718	-56.3		26	5.2
70	[illegible]	18,566	-56.3		26	3.6
60	[illegible]	19,545	-56.2		26	2.4
50	29	[illegible]	-55.9		25	1.0
40	28	22,126	-55.0		03	.3
30	27	23,977	-52.0		10	1.1
25	26	25,156	-51.0		09	1.1
20	25	26,615	-49.2		[illegible]	1.7
15	21	28,517	-45.6		[illegible]	[illegible]
10	13	31,242	[illegible]			
7						

CAPE HATTERAS, N. C.
1015 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	17.3	14.9	25	1.1
1000	31	130	18.9	13.4	25	2.2
950	31	569	16.5	10.2	[illegible]	[illegible]
900	31	1,028	13.6	[illegible]	25	[illegible]
850	31	1,507	10.7	2.6	25	[illegible]
800	31	2,010	7.9	-1.5	[illegible]	[illegible]
750	31	2,541	[illegible]	-5.2	[illegible]	[illegible]
700	31	3,101	2.5	-10.4	[illegible]	[illegible]
650	31	3,697	-.8	-13.2	26	[illegible]
600	31	4,332	-4.3	-16.6	[illegible]	[illegible]
550	31	5,013	-8.5	-20.1	[illegible]	[illegible]
500	31	5,746	-13.2	-25.1	[illegible]	[illegible]
450	31	6,540	-18.2	-30.7	[illegible]	19.4
400	31	7,410	-24.3	-37.6	26	[illegible]
350	31	8,372	-31.4	-43.7	[illegible]	[illegible]
300	31	9,442	-39.8	-49.0	26	23.4
250	31	10,663	-49.3		26	[illegible]
200	[illegible]	12,095	-58.3		[illegible]	[illegible]
175	[illegible]	12,929	-60.5		[illegible]	25.0
150	30	13,891	-59.1		[illegible]	[illegible]
125	[illegible]	15,033	-60.1		[illegible]	[illegible]
100	[illegible]	16,422	-61.2		[illegible]	[illegible]
80	[illegible]	17,808	-61.0		[illegible]	[illegible]
70	[illegible]	[illegible]	-60.5		[illegible]	[illegible]
60	[illegible]	19,597	-59.2		[illegible]	[illegible]
50	[illegible]	20,742	-58.2		[illegible]	[illegible]
40	[illegible]	22,152	-55.5		[illegible]	[illegible]
30	[illegible]	24,008	-51.1		[illegible]	[illegible]
25	[illegible]	25,201	-48.8		[illegible]	[illegible]
20	[illegible]	26,672	-46.2		[illegible]	[illegible]
15	[illegible]	28,597	-43.4		31	[illegible]
10	[illegible]	31,326	-40.1			
7						

***See reference note at end of table**

RAWINSONDE DATA

Average monthly values

• CARIBOU, MAINE 993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	191	7.1	5.7	13	.9
1000						
950	30	425	5.4	3.1	20	1.7
900	30	[illegible]	4.1	1.0	22	3.8
850	30	1,430	2.4	-1.5	[illegible]	3.6
800	30	[illegible]	.1	-4.8	23	3.3
750	30	2,434	[illegible]	-10.1	24	4.3
700	30	2,980	[illegible]	-13.3	24	5.7
650	30	[illegible]	-8.1	-16.6	24	5.8
600	30	[illegible]	[illegible]	-22.9	24	6.9
550	30	[illegible]	[illegible]	[illegible]	24	7.9
500	30	[illegible]	[illegible]	-32.5	23	8.8
450	30	[illegible]	[illegible]	-38.1	24	10.6
400	30	[illegible]	-31.7	[illegible]	24	13.4
350	30	8,105	-38.3	-45.6	24	16.6
300	30	9,147	-45.2		24	19.3
250	30	[illegible]	-50.4		24	20.6
200	29	11,796	[illegible]		25	17.7
175	28	12,663	-52.3		25	15.5
150	28	13,661	-52.3		24	12.2
125	27	[illegible]	-52.8		24	9.9
100	27	[illegible]	-53.4		25	7.1
80	27	[illegible]	-55.1		24	4.2
70	27	18,557	[illegible]		25	3.3
60	27	[illegible]	[illegible]		24	1.7
50	[illegible]	20,702	-55.5		21	.4
40	[illegible]	22,130	-53.9		05	1.1
30	[illegible]	23,997	[illegible]		09	2.5
25	24	25,183	-50.1		10	[illegible]
20	[illegible]	26,684	[illegible]		09	3.0
15	[illegible]	28,595	-45.0		08	[illegible]
10	[illegible]	[illegible]	-38.8		10	3.6
7	11	33,781	-34.2			

CHARLESTON, S.C. 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	17.7	15.4	24	[illegible]
1000	31	128	19.0	13.9	24	2.1
950	31	569	17.8	[illegible]	25	4.8
900	31	1,030	15.2	6.6	26	6.4
850	31	[illegible]	12.3	3.8	25	7.7
800	31	2,013	9.8	-2.7	25	9.2
750	31	2,552	7.5	-8.4	26	9.6
700	31	[illegible]	[illegible]	[illegible]	26	[illegible]
650	31	3,716	[illegible]	-12.7	25	11.5
600	31	[illegible]	-3.7	[illegible]	26	[illegible]
550	31	5,037	-7.6	[illegible]	27	13.9
500	31	5,772	-12.4	-26.3	27	14.7
450	31	6,559	[illegible]	[illegible]	27	15.5
400	31	7,440	-23.8	[illegible]	27	17.3
350	31	8,404	[illegible]	[illegible]	27	17.6
300	31	9,477	-39.1	[illegible]	27	19.9
250	31	[illegible]	-48.7		27	23.4
200	31	12,135	-58.2		27	26.5
175	31	12,969	-61.2		28	27.0
150	31	13,925	-61.1		28	22.2
125	31	15,054	-62.2		27	19.2
100	31	16,427	-64.0		27	14.2
80	31	17,794	-63.9		28	[illegible]
70	31	18,615	-62.8		28	4.7
60	31	19,569	-60.9		29	2.0
50	31	20,709	-59.1		06	2.1
40	30	22,118	-56.2		08	3.0
30	[illegible]	23,964	-51.9		09	3.2
25	27	25,152	-49.3		09	3.3
20	[illegible]	26,626	-46.3		09	.9
15	[illegible]	28,545	-43.6		31	1.1
10	11	31,280	-39.7			
7						

CHATHAM, MASS. 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	10.1	7.7	23	.6
1000	24	120	10.2	6.7	25	.7
950	31	540	9.5	4.5	25	3.6
900	31	988	7.8	[illegible]	26	5.3
850	31	1,458	6.0	-2.2	26	6.5
800	31	1,952	3.6	-5.5	26	9.2
750	31	[illegible]	.9	[illegible]	26	10.2
700	31	3,025	-2.3	-11.8	25	11.9
650	31	3,611	-5.2	-14.7	25	13.1
600	31	4,236	[illegible]	-19.0	25	[illegible]
550	31	4,906	[illegible]	-23.8	25	15.3
500	31	5,626	-17.3	-28.6	25	17.5
450	31	6,418	-22.5	[illegible]	25	19.5
400	31	7,263	-28.5	-40.9	25	22.2
350	31	8,210	[illegible]	-46.2	25	[illegible]
300	31	9,267	-43.1	-49.3	25	26.7
250	30	10,475	-50.8		25	[illegible]
200	30	11,908	-55.8		26	26.1
175	30	12,759	-55.8		26	22.2
150	30	13,743	-54.9		26	16.6
125	30	[illegible]	-55.7		26	13.1
100	30	16,323	-57.2		26	8.6
80	30	17,733	-57.5		26	5.6
70	30	18,577	-57.5		26	3.2
60	30	19,551	-57.4		25	1.8
50	30	20,705	-56.8		26	.2
40	29	22,125	-55.2		09	1.3
30	28	23,977	-51.9		09	2.0
25	28	25,163	[illegible]		10	1.2
20	26	26,633	-48.3		08	.5
15	25	28,537	-45.4		35	.8
10	23	31,272	-40.0		19	.4
7	11	33,774	-34.5			

CHIHUAHUA, MEXICO 857 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,478	14.9	1.7	25	.5
1000						
950						
900						
850	31	1,499	16.7	1.4	27	.7
800	31	2,016	15.6	-.4	28	1.8
750	31	2,560	12.3	-3.6	26	2.5
700	31	3,134	8.5	-7.2	26	4.6
650	31	3,742	4.3	[illegible]	25	[illegible]
600	31	4,389	.0	[illegible]	25	7.4
550	31	5,079	-5.3	-19.5	25	8.5
500	31	[illegible]	-10.3	-25.4	25	11.3
450	31	6,623	-15.9	[illegible]	[illegible]	13.2
400	31	7,499	-22.5	[illegible]	26	15.4
350	31	8,468	-29.8	[illegible]	26	[illegible]
300	31	9,546	-38.1	-49.2	26	[illegible]
250	31	10,775	-47.4		26	[illegible]
200	31	12,220	-56.5		26	[illegible]
175	31	13,061	-59.8		26	29.4
150	31	14,018	-62.6		26	27.1
125	31	15,137	-64.6		27	20.9
100	31	[illegible]	-68.5		27	[illegible]
80	31	17,818	-69.6		29	[illegible]
70	30	18,615	-68.5		30	[illegible]
60	31	19,550	-63.8		04	2.6
50	31	20,680	-59.9		09	3.3
40	29	22,082	-56.9		08	4.1
30	28	[illegible]	-52.5		08	4.2
25	27	25,111	-49.7		08	5.6
20	26	26,577	-47.1		08	4.0
15	24	28,490	-44.6		08	3.2
10	17	31,213	-39.3			
7						

• COLD BAY, ALASKA 999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	30	[illegible]	-.6	28	1.4
1000	16	68	.4	[illegible]	31	.6
950	30	431	[illegible]	-2.8	32	2.0
900	30	860	-4.3	-5.2	33	2.4
850	30	1,309	-6.2	-9.5	32	1.8
800	30	1,782	-8.3	[illegible]	32	1.0
750	30	2,281	[illegible]	-16.1	32	1.2
700	30	2,809	[illegible]	[illegible]	31	[illegible]
650	30	3,369	[illegible]	[illegible]	29	[illegible]
600	30	3,966	[illegible]	-28.3	27	1.6
550	30	4,604	[illegible]	-32.6	26	2.2
500	30	5,292	[illegible]	[illegible]	27	2.8
450	30	6,037	-34.3	[illegible]	29	3.5
400	30	6,851	[illegible]	-46.9	28	4.7
350	[illegible]	7,750	-45.4		28	[illegible]
300	[illegible]	8,766	-48.7		28	[illegible]
250	26	9,973	-45.9		28	[illegible]
200	26	11,465	-44.4		28	9.2
175	26	12,358	-45.4		28	8.3
150	26	13,384	-46.3		27	7.6
125	25	14,592	-47.8		27	[illegible]
100	25	16,064	-49.1		27	5.1
80	24	17,525	-49.9		25	2.9
70	23	18,396	-50.3		24	2.5
60	[illegible]	19,402	-50.5		21	1.8
50	22	20,591	-50.7		16	1.4
40	22	22,044	-50.8		14	1.7
30	19	23,916	-51.1		13	[illegible]
25	19	25,102	-51.0		11	1.5
20	17	26,540	[illegible]		09	[illegible]
15	12	28,458	-46.8		08	[illegible]
10						
7						

DAYTON, OHIO 977 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	299	10.4	7.8	24	1.3
1000						
950	31	533	11.4	5.3	25	4.1
900	31	984	9.0	2.2	26	6.2
850	31	1,455	6.1	-2.1	26	7.1
800	31	1,950	3.7	-5.8	27	7.9
750	31	2,472	1.0	-9.4	27	[illegible]
700	31	3,023	-2.2	-12.8	27	10.0
650	31	3,609	-5.2	-16.5	27	11.2
600	31	4,234	-8.6	[illegible]	27	12.4
550	31	4,904	-12.7	[illegible]	27	13.8
500	31	5,624	-17.4	-30.6	27	15.6
450	31	6,405	-22.9	-34.6	27	17.5
400	31	7,239	-28.8	[illegible]	27	19.3
350	31	8,204	-35.6	-45.4	27	21.0
300	31	9,257	-43.3	-49.8	26	22.2
250	31	10,464	-50.5		26	25.1
200	31	11,903	-54.2		27	24.4
175	29	12,756	-54.4		27	21.6
150	29	13,764	-54.5		27	17.0
125	29	14,908	-55.8		27	12.9
100	29	16,324	-57.2		27	10.4
80	29	17,731	-58.4		27	6.7
70	29	18,571	-58.5		27	4.7
60	28	19,544	-57.5		27	3.2
50	27	20,701	-56.9		29	.9
40	27	22,120	-55.3		01	.3
30	23	23,970	-51.8		01	.9
25	23	25,156	-49.9		03	.7
20	22	26,622	-47.6		26	.6
15	17	28,519	-44.9		30	1.9
10	11	31,270	-39.7			
7						

DEL RIO, TEXAS 976 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	314	19.4	12.7	09	2.3
1000						
950	31	548	20.4	12.0	13	3.5
900	31	1,015	19.4	9.1	17	3.4
850	31	1,506	17.9	4.4	21	2.9
800	31	2,022	15.3	.2	24	3.0
750	31	2,566	11.9	-2.5	26	4.0
700	31	3,139	7.9	-6.9	27	5.5
650	31	3,746	3.7	-11.0	27	7.0
600	31	4,391	-.7	-15.7	27	8.7
550	31	5,079	-5.9	-19.1	27	10.3
500	31	5,818	-10.8	-24.8	27	12.6
450	31	6,621	-16.1	-31.3	27	15.0
400	31	7,490	-22.5	[illegible]	27	17.2
350	31	8,465	-29.8	[illegible]	27	20.3
300	31	9,543	-38.1	-49.9	27	23.5
250	31	10,773	-47.4		27	[illegible]
200	30	12,216	-56.8		27	[illegible]
175	30	13,055	-60.1		27	33.2
150	30	[illegible]	-62.0		27	29.8
125	30	15,135	-64.1		27	23.9
100	30	16,488	-67.5		27	16.7
80	30	17,825	-69.4		28	7.1
70	30	18,624	-68.4		30	3.4
60	30	19,559	-63.8		02	2.3
50	30	20,686	-59.5		11	1.7
40	27	22,095	-56.5		09	4.2
30	26	23,940	-52.0		09	5.2
25	26	25,129	-49.1		09	5.0
20	25	26,606	-46.0		09	4.1
15	23	28,529	-43.7		08	3.7
10	21	31,286	-33.6		06	3.6
7	6	33,755	-36.4			

DENVER, COLO. 838 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,611	7.8	[illegible]	27	.7
1000						
950						
900						
850						
800	31	1,991	8.2	-2.9	31	[illegible]
750	31	2,521	5.2	-5.6	33	3.1
700	31	3,091	1.6	-9.2	31	5.0
650	31	3,674	-2.4	-11.5	31	7.3
600	31	4,305	-6.6	-15.3	31	9.6
550	31	4,979	-11.2	-21.0	31	10.6
500	31	5,704	-15.7	-26.9	30	11.4
450	31	6,491	-21.3	-33.4	30	11.3
400	31	7,368	-27.8	-39.7	29	11.7
350	31	8,296	-35.1	-45.7	30	[illegible]
300	31	9,349	-43.6		29	13.7
250	30	10,550	-51.5		29	[illegible]
200	30	11,979	-56.9		29	[illegible]
175	30	12,824	-57.5		29	[illegible]
150	29	13,800	-57.0		28	[illegible]
125	29	14,952	-57.7		29	13.9
100	28	16,350	-59.6		28	9.6
80	28	17,743	-60.4		29	5.4
70	28	18,576	-60.2		29	3.5
60	28	19,538	-59.5		32	1.6
50	27	20,684	-57.9		02	.8
40	26	22,097	-56.2		04	1.1
30	23	23,938	-53.0		05	2.1
25	22	25,120	-50.9		05	1.8
20	18	26,581	-48.7		04	1.9
15	15	28,483	-45.1		01	.7
10	9	31,173	-42.2			
7						

DODGE CITY, KANS. 912 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	791	9.3	5.0	27	1.6
1000						
950						
900	31	991	13.5	3.5	29	2.8
850	31	1,472	12.5	-.7	29	4.8
800	31	1,978	9.8	-3.0	30	5.9
750	31	2,511	6.5	-5.7	31	7.8
700	31	3,074	2.6	-8.9	30	8.7
650	31	3,669	-1.6	-12.0	30	9.4
600	31	4,302	-5.7	-16.5	30	11.0
550	31	4,978	-10.3	-21.5	30	11.8
500	31	5,705	-15.3	-27.6	29	12.8
450	31	6,493	-20.7	-33.9	29	13.7
400	31	7,353	-27.2	-40.3	29	15.5
350	31	8,303	-34.4	-46.6	29	17.7
300	31	9,360	-42.7	-53.5	28	20.2
250	31	10,569	-50.8		28	22.9
200	31	12,001	-56.3		28	23.3
175	31	12,847	-57.4		28	22.0
150	31	13,821	-57.7		28	19.9
125	31	14,971	-58.3		28	16.7
100	31	16,368	-60.3		28	11.5
80	31	17,756	-61.4		28	6.8
70	31	18,584	-61.3		29	4.3
60	31	19,543	-60.3		31	1.6
50	30	20,689	-59.0		02	.9
40	30	22,103	-55.9		05	2.5
30	30	23,950	-52.1		08	1.9
25	29	25,133	-50.6		06	1.3
20	24	26,601	-48.0		02	.7
15	20	28,516	-45.1		31	1.4
10	12	31,275	-40.1		26	5.8
7						

EL PASO, TEXAS 881 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,193	14.8	.4	27	1.2
1000						
950						
900						
850	31	1,498	17.4	-1.5	30	1.8
800	31	2,013	14.1	-3.1	28	3.9
750	31	2,553	10.2	-5.2	28	6.1
700	31	3,122	5.7	-8.0	28	6.3
650	31	3,724	1.7	-10.7	27	7.6
600	31	4,364	-3.0	-14.5	26	10.0
550	31	5,047	-7.4	-21.8	26	11.5
500	31	5,783	-12.1	-27.2	26	11.8
450	31	6,580	-17.7	-33.4	26	12.8
400	31	7,450	-24.3	-39.1	26	14.7
350	31	8,412	-31.6	-46.0	27	16.2
300	31	9,481	-39.7	-51.5	26	18.8
250	31	10,702	-49.4		26	20.7
200	31	12,135	-58.0		26	25.3
175	30	12,967	-60.3		26	27.7
150	30	13,927	-60.9		26	25.1
125	30	15,055	-62.9		27	21.1
100	29	16,421	-65.8		28	14.9
80	26	17,771	-67.6		27	8.5
70	26	18,578	-65.8		28	4.9
60	26	19,518	-63.5		34	1.9
50	26	20,648	-60.0		08	1.8
40	26	22,050	-57.3		07	2.2
30	25	23,887	-52.8		07	2.5
25	24	25,075	-50.4		08	2.9
20	24	26,540	-47.7		09	2.6
15	22	28,452	-44.9		07	.8
10	15	31,170	-40.1			
7						

ELY, NEV. 809 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,908	3.7	-4.2	19	2.6
1000						
950						
900						
850						
800	30	2,006	8.0	-1.2	20	2.1
750	31	2,535	[illegible]	-3.6	30	1.1
700	31	3,100	3.9	-6.2	29	2.8
650	31	3,698	[illegible]	-9.3	28	4.4
600	31	4,332	[illegible]	-13.3	27	[illegible]
550	31	5,010	[illegible]	-18.7	27	6.5
500	31	[illegible]	[illegible]	-25.2	27	7.1
450	31	6,527	[illegible]	-31.5	28	8.7
400	31	7,388	-26.9	-37.9	[illegible]	9.7
350	31	8,340	-34.1	-44.1	28	[illegible]
300	31	9,398	-42.7	-49.8	[illegible]	[illegible]
250	31	10,604	[illegible]		29	[illegible]
200	[illegible]	12,027	-59.4		[illegible]	12.2
175	[illegible]	12,861	-59.8		28	[illegible]
150	[illegible]	13,827	-58.8		28	[illegible]
125	[illegible]	14,969	-59.8		28	[illegible]
100	[illegible]	16,357	[illegible]		28	[illegible]
80	28	17,735	[illegible]		28	[illegible]
70	28	18,561	-62.1		29	.7
60	28	19,517	-60.7		29	[illegible]
50	28	20,658	[illegible]		05	.5
40	[illegible]	22,068	-56.8		[illegible]	.2
30	27	23,907	-53.2		06	[illegible]
25	27	25,088	-51.2		[illegible]	[illegible]
20	27	26,547	-48.6		[illegible]	[illegible]
15	[illegible]	28,453	-45.4		[illegible]	.2
10	21	[illegible]	-40.6		07	.9
7	12	33,634	-36.3			

EMPALME, MEXICO 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	19.0	11.6	33	.2
1000	31	100	22.3	10.9	01	.6
950	31	547	22.4	6.6	05	.9
900	31	1,016	21.0	1.8	13	.1
850	31	1,507	18.2	-2.0	20	1.6
800	31	2,023	15.6	-4.9	21	2.7
750	31	2,567	12.5	-7.2	22	4.1
700	31	3,142	8.8	-10.5	23	5.3
650	31	3,750	4.8	-14.3	25	6.3
600	31	4,397	.3	-19.0	24	7.4
550	31	5,088	-4.6	-23.3	25	9.3
500	31	5,831	[illegible]	-27.9	25	[illegible]
450	30	6,635	-15.8	-32.3	26	[illegible]
400	30	[illegible]	-22.5	-37.6	26	[illegible]
350	30	8,480	-29.7	-43.1	26	[illegible]
300	[illegible]	9,557	-38.1	-49.9	26	21.9
250	[illegible]	10,788	-47.1		26	26.1
200	[illegible]	12,234	-56.4		26	[illegible]
175	[illegible]	[illegible]	[illegible]		25	[illegible]
150	[illegible]	14,029	[illegible]		[illegible]	27.9
125	[illegible]	15,168	[illegible]		26	[illegible]
100	[illegible]	16,497	[illegible]		25	[illegible]
80	[illegible]	17,826	[illegible]		27	[illegible]
70	[illegible]	18,622	[illegible]		28	[illegible]
60	[illegible]	19,549	[illegible]		[illegible]	[illegible]
50	[illegible]	20,673	-60.6		[illegible]	[illegible]
40	[illegible]	22,069	-57.5		09	[illegible]
30	[illegible]	23,903	-53.0		09	[illegible]
25	[illegible]	25,093	[illegible]		[illegible]	[illegible]
20	[illegible]	26,562	[illegible]		[illegible]	[illegible]
15	[illegible]	28,478	-44.3		09	[illegible]
10	[illegible]	31,213	[illegible]			
7						

• FAIRBANKS, ALASKA 990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	135	7.0	-.6	35	1.0
1000	7	153	6.5	-.5		
950	31	475	7.5	-2.4	10	.7
900	31	918	4.5	-5.0	15	1.5
850	31	1,380	.9	-7.2	16	2.7
800	31	1,864	-3.0	-9.0	16	2.9
750	31	2,372	-7.0	-11.6	15	3.5
700	31	2,906	-11.0	-15.3	15	4.3
650	31	3,471	-15.0	-19.4	15	4.9
600	31	4,071	-19.3	-23.7	14	5.2
550	31	4,713	-23.8	-30.6	14	5.3
500	31	5,402	-28.9	-35.7	14	6.5
450	31	6,147	-34.4	-40.5	14	7.1
400	31	6,961	[illegible]	-43.1	16	7.1
350	[illegible]	7,862	[illegible]		16	7.9
300	[illegible]	8,866	[illegible]		16	8.7
250	[illegible]	[illegible]	[illegible]		16	6.3
200	[illegible]	[illegible]	-48.0		16	6.8
175	[illegible]	[illegible]	[illegible]		16	6.3
150	[illegible]	[illegible]	[illegible]		[illegible]	5.7
125	[illegible]	[illegible]	[illegible]		16	[illegible]
100	[illegible]	[illegible]	-48.5		[illegible]	[illegible]
80	[illegible]	[illegible]	-49.8		16	[illegible]
70	[illegible]	[illegible]	-49.8		16	[illegible]
60	[illegible]	[illegible]	[illegible]		16	2.7
50	[illegible]	[illegible]	[illegible]		[illegible]	2.2
40	[illegible]	[illegible]	-50.8		[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]		[illegible]	2.1
25	[illegible]	[illegible]	-49.9		07	[illegible]
20	[illegible]	[illegible]	[illegible]		07	[illegible]
15	17	[illegible]	[illegible]		06	[illegible]
10	17	[illegible]	[illegible]		06	[illegible]
7						

FLINT, MICH. 982 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	236	8.1	5.4	24	1.0
1000						
950	31	513	8.7	2.5	25	2.2
900	31	960	6.6	-.4	23	3.9
850	31	1,427	4.1	-2.8	26	5.1
800	31	1,918	1.4	-5.4	27	5.9
750	31	2,435	-1.4	-8.9	27	6.5
700	31	2,982	-4.2	-12.5	28	7.1
650	31	3,564	-7.1	-17.1	28	7.5
600	31	4,184	-10.6	-21.2	28	8.9
550	31	4,848	-14.9	-24.7	27	9.5
500	31	5,563	-19.6	-30.4	27	10.3
450	31	6,337	-25.1	-36.7	28	11.2
400	31	7,182	-31.1	-42.5	28	12.2
350	31	8,118	-38.0	-46.8	28	13.6
300	31	9,162	-44.5		27	15.9
250	31	10,366	-50.6		27	20.4
200	31	11,814	-52.3		27	[illegible]
175	31	12,678	-52.0		27	[illegible]
150	31	13,674	-52.5		27	[illegible]
125	31	14,850	-53.6		27	[illegible]
100	31	[illegible]	-55.3		27	8.6
80	31	17,598	-56.6		28	5.7
70	30	18,545	-56.8		27	4.2
60	[illegible]	19,523	-56.4		27	2.7
50	29	20,680	-56.3		31	.7
40	27	22,100	-55.0		32	[illegible]
30	26	23,947	-52.9		05	1.2
25	[illegible]	25,127	-51.3		07	1.2
20	24	26,589	-49.2		07	1.0
15	19	28,505	-46.1		[illegible]	1.0
10	[illegible]	31,244	-42.4			
7						

FORT WORTH, TEXAS 991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	180	17.3	12.4	24	.9
1000	6	208	13.1	4.4		
950	31	545	18.8	8.5	22	2.6
900	31	1,008	17.2	5.2	24	3.8
850	31	1,494	15.0	2.2	26	4.6
800	31	2,006	12.3	-2.4	28	6.0
750	31	2,544	9.0	-6.1	28	7.5
700	31	3,111	5.3	-9.7	28	9.5
650	31	3,712	1.3	-11.6	29	10.6
600	31	4,351	-3.1	-15.5	28	11.4
550	31	5,034	-7.7	-20.5	28	12.7
500	31	5,769	[illegible]	-26.5	28	14.0
450	31	6,565	-17.8	-33.4	28	15.5
400	31	7,435	-24.2	-38.7	28	17.2
350	30	8,398	-31.5	-45.1	27	19.7
300	30	9,468	-39.7	-50.6	27	22.9
250	30	10,689	-49.7		27	27.5
200	30	12,124	-57.4		27	29.6
175	30	12,964	-59.4		27	29.2
150	30	13,927	-60.3		28	[illegible]
125	30	15,062	-61.9		28	21.3
100	30	16,436	-64.2		28	[illegible]
80	30	17,793	-66.4		29	[illegible]
70	30	18,606	-64.6		29	5.9
60	29	19,552	-62.5		31	1.7
50	29	20,686	-58.8		05	1.0
40	27	22,095	-56.6		07	2.2
30	25	23,940	-52.2		08	3.2
25	23	25,122	-49.6		08	2.2
20	21	26,596	-47.1		07	1.0
15	15	28,519	[illegible]		33	.3
10	8	31,224	-39.1			
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MAY 1973

Standard pressure surface (mb)	GLASGOW, MONT. 933 MB						GRAND JUNCTION, COLO. 852 MB						• GREAT FALLS, MONT. 888 MB						GREEN BAY, WIS. 985 MB						GREENSBORO, N. C. 983 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	696	7.1	.8	09	.8	31	1,472	9.8	1.0	12	2.3	31	1,118	7.4	-4.4	22	3.5	31	[illegible]	[illegible]	5.3	02	1.0	31	275	12.8	10.3	21	.8
1000																														
950																			31	504	[illegible]	2.4	03	1.3	31	560	14.7	6.7	26	3.5
900	31	995	10.0	-.1	27	1.7													31	949	6.5	-.6	34	1.2	31	1,017	[illegible]	4.3	27	6.3
850	31	1,458	7.9	-2.8	30	3.8	[illegible]	1,510	11.3	-.6	12	2.4	31	1,476	[illegible]	-4.6	25	6.0	31	1,417	[illegible]	-2.8	31	2.4	31	1,495	[illegible]	1.2	26	7.2
800	31	1,966	[illegible]	-5.1	31	4.1	31	1,996	10.7	-2.5	14	2.1	31	1,976	[illegible]	-6.6	27	5.6	31	1,908	[illegible]	-4.3	31	2.8	31	1,996	[illegible]	-1.7	26	9.1
750	31	2,469	.8	-8.2	31	5.1	31	2,530	7.3	-5.1	26	1.4	31	2,499	[illegible]	-9.0	28	5.2	31	2,425	-1.5	-7.4	29	3.6	31	2,525	[illegible]	-5.6	26	11.2
700	31	3,038	-3.0	-11.3	31	5.9	31	3,094	3.1	-7.7	28	4.1	31	3,050	-2.7	-11.9	28	6.2	31	2,972	-4.5	-10.1	29	5.1	31	3,084	[illegible]	-12.3	26	12.8
650	31	3,621	-6.8	-15.5	31	4.7	31	3,690	-1.3	-10.5	29	5.8	31	3,634	[illegible]	-16.6	28	7.4	31	3,552	[illegible]	-16.2	29	6.0	31	3,678	[illegible]	-13.4	26	14.2
600	31	4,241	-10.5	-19.9	30	7.5	31	4,323	-5.9	-14.3	29	7.6	31	4,256	[illegible]	-20.9	28	7.9	31	4,172	[illegible]	-19.9	29	6.3	31	4,310	-5.6	-16.3	26	15.5
550	31	4,905	-14.9	-25.3	30	7.6	31	4,998	-11.0	-20.0	29	9.2	31	4,921	-14.8	-25.9	28	9.1	31	4,837	[illegible]	-24.6	29	6.5	31	4,988	-9.8	-20.3	27	17.4
500	31	5,619	-20.1	-30.2	30	8.2	31	5,724	-15.8	-27.3	29	10.0	31	5,636	-19.3	-31.2	28	10.4	31	5,552	-19.5	-30.8	30	7.8	31	5,717	-14.2	-27.0	27	19.2
450	31	6,392	-25.3	-35.9	30	9.4	31	6,511	-20.9	-34.1	29	11.1	31	6,411	-24.8	-35.4	29	11.9	31	6,327	[illegible]	-35.9	31	8.2	31	6,509	[illegible]	-32.2	27	20.3
400	31	7,237	-31.4	-41.4	30	11.9	31	7,371	-27.0	-39.9	30	13.0	31	7,257	-31.2	-40.6	29	13.3	31	7,173	[illegible]	-41.2	31	9.2	31	7,375	-25.5	-37.3	27	21.9
350	31	8,172	-38.2	-45.7	30	13.4	31	8,322	-34.3	-46.1	30	14.8	31	8,192	-37.9	-44.0	29	16.1	31	8,109	[illegible]	-46.2	30	11.3	31	8,332	[illegible]	-43.4	27	23.6
300	31	9,214	-45.5		30	15.3	31	9,379	-42.6		30	16.2	31	9,236	-45.1		29	19.0	31	9,150	-45.7		[illegible]	13.9	31	9,377	[illegible]	-48.1	27	25.2
250	31	10,409	-52.7		30	15.9	31	10,587	-51.4		30	17.7	31	10,435	-51.8		29	18.3	31	10,346	[illegible]		29	16.2	30	10,614	[illegible]		27	[illegible]
200	31	11,840	-54.7		30	14.4	31	12,013	-57.8		29	19.2	31	11,866	-55.6		29	16.4	31	11,787	-52.2		28	16.9	29	12,050	[illegible]		28	[illegible]
175	31	12,697	-53.7		30	11.6	31	12,855	-57.6		29	17.7	31	12,717	-55.0		29	14.5	31	12,652	-52.0		29	14.5	29	12,889	-59.3		28	24.5
150	31	13,690	-53.0		31	10.6	31	13,829	-57.4		28	15.3	31	13,706	-54.2		29	11.2	31	13,652	-51.6		28	11.5	29	13,855	-59.4		27	21.5
125	31	14,864	-53.9		31	8.5	31	14,978	-59.0		28	12.8	31	14,874	-54.7		29	8.9	31	14,831	-53.1		28	9.9	29	14,994	-60.2		28	17.7
100	31	16,291	-55.4		31	6.5	31	16,371	-60.8		29	10.3	30	16,297	-56.0		29	7.1	31	16,263	-55.0		28	8.3	29	16,383	-61.2		28	12.5
80	31	17,710	-56.4		32	4.7	31	17,759	-61.0		29	5.3	30	17,711	-57.4		30	4.7	31	17,685	-56.5		28	5.4	29	17,769	[illegible]		28	6.7
70	31	18,558	-56.4		31	3.4	31	18,589	-60.8		28	3.2	30	18,556	-57.3		31	3.0	31	18,533	-56.1		29	4.0	29	18,602	-60.3		28	4.4
60	31	19,538	-56.0		32	2.4	31	19,551	-59.7		29	1.3	30	19,532	-56.6		32	2.0	31	19,513	-56.1		28	2.4	29	19,565	-59.3		30	[illegible]
50	31	20,699	-55.4		35	1.9	30	20,696	-57.7		03	1.7	30	20,690	-56.0		33	1.4	31	20,674	-55.5		30	1.0	29	20,709	-58.5		04	[illegible]
40	30	22,124	-54.6		03	1.9	29	22,115	-55.8		07	2.1	30	22,113	-54.9		01	1.2	28	22,099	-54.6		01	1.1	29	22,120	[illegible]		08	1.5
30	30	23,974	-52.2		05	1.5	29	23,960	-52.5		06	2.2	29	23,960	-52.7		06	2.1	27	23,947	-52.5		05	2.0	28	23,968	[illegible]		09	2.3
25	29	25,158	-51.0		06	1.6	28	25,143	-50.4		05	2.0	27	25,141	-51.1		07	2.1	26	25,126	-51.3		07	2.4	27	25,158	[illegible]		08	1.5
20	29	26,618	-48.8		04	1.9	29	26,608	-47.9		05	2.2	27	26,599	-49.4		04	1.1	24	26,583	-48.8		07	2.1	25	26,623	-47.1		28	.9
15	29	28,527	-46.0		06	2.8	26	28,520	-44.8		01	1.3	24	28,509	-45.9		04	2.3	22	28,492	-45.9		05	1.8	23	28,536	-44.3		30	3.1
10	25	31,252	-40.8		05	1.9	21	31,271	-40.8		25	.2	20	31,256	-40.1		06	3.2	16	31,266	-39.6		01	1.9	[illegible]	31,240	[illegible]			
7	8	33,756	-36.8				5	33,719	-37.0				9	33,744	-34.7															

Standard pressure surface (mb)	GUADALUPE IS., MEXICO 1013 MB						• GUAM, MARIANA IS. 1000 MB						HILO, HAWAII 1017 MB						HUNTINGTON W. VA. 984 MB						• INTERNATIONAL FALLS, MINN. 969 MB					
SURFACE	31	23	14.6	11.8	34	6.6	31	111	25.3	22.7	09	3.1	31	10	19.7	18.2	24	1.3	31	246	11.5	8.5	21	1.3	31	359	[illegible]	.4	05	1.9
1000	31	133	13.4	10.7	32	6.6	17	115	25.1	22.7	09	3.2	31	160	20.6	17.1	28	.7												
950	31	564	11.7	6.1	31	5.2	31	560	23.1	20.5	09	7.9	31	602	17.2	15.6	07	2.0	31	537	13.2	7.4	25	5.2	31	521	[illegible]	.6	07	2.8
900	31	1,018	14.5	-2.8	32	3.2	31	1,031	20.4	16.5	09	7.1	31	1,062	14.0	12.7	08	3.5	31	990	10.5	4.3	26	7.2	31	966	6.4	-1.6	07	3.0
850	31	1,501	14.9	-5.8	30	3.0	31	1,524	17.8	12.4	09	5.6	31	1,542	10.9	9.2	07	3.3	31	1,464	7.4	1.2	27	8.1	31	1,433	3.5	-3.5	05	2.4
800	31	2,012	12.9	-8.6	28	2.2	31	2,041	15.2	8.4	09	4.5	31	2,046	8.3	4.7	07	3.4	31	1,961	4.4	-2.5	26	8.9	31	1,923	.8	-7.9	02	2.6
750	31	2,551	10.1	-11.3	28	2.4	31	2,587	13.0	2.2	10	4.0	31	2,579	7.3	-6.7	08	3.4	31	2,485	1.7	-7.6	26	10.5	31	2,439	-2.0	-12.2	36	3.9
700	31	3,121	7.0	-13.8	26	3.2	31	3,164	10.1	-2.4	09	3.2	31	3,146	6.3	-11.9	12	1.8	31	3,038	-.9	-12.6	26	12.6	31	2,984	-5.0	-14.9	35	4.5
650	31	3,726	3.3	-17.2	26	4.0	31	3,776	6.8	-7.8	09	3.1	31	3,751	4.1	-15.0	19	2.0	31	3,627	-3.8	-15.5	27	14.6	31	3,564	-8.0	-17.6	35	5.0
600	31	4,369	-1.2	-21.1	25	4.3	31	4,430	3.2	-14.8	07	3.4	31	4,398	.7	-18.5	23	3.4	31	4,255	-7.1	-18.6	27	16.7	31	4,182	[illegible]	-21.9	35	4.6
550	31	5,057	-6.0	-25.2	25	5.8	31	5,130	-.6	-19.4	08	2.7	31	5,091	-3.6	-23.8	24	4.9	31	4,929	-11.0	-22.9	27	18.1	31	4,844	-15.5	-26.6	35	5.4
500	31	5,795	-11.6	-30.0	25	7.1	31	5,885	-5.0	-24.0	08	2.7	31	5,836	-8.9	-27.5	25	6.7	31	5,655	-15.6	-27.5	27	19.9	31	5,557	-20.4	-30.9	34	5.6
450	31	6,593	-17.4	-34.7	25	8.2	31	6,705	-10.2	-27.5	09	2.5	31	6,644	-14.4	-31.3	26	9.3	31	6,442	[illegible]	-33.3	26	21.8	31	6,328	-25.8	-34.9	33	5.0
400	31	7,464	-24.1	-39.8	25	9.7	31	7,602	-16.1	-33.2	06	2.3	31	7,525	-20.7	-37.2	27	11.7	31	7,303	-26.9	-38.2	26	23.0	31	7,171	-31.9	-41.6	32	4.7
350	31	8,428	-31.3	-45.3	24	10.8	31	8,597	-23.1	-39.1	02	1.6	31	8,502	-27.6	-43.1	27	15.4	31	8,254	-34.2	-44.1	27	25.3	31	8,104	-39.1	-46.7	31	5.2
300	31	9,497	-39.9	-51.6	24	12.7	31	9,764	-31.9	-45.0	30	3.1	31	9,590	-35.4	-49.5	27	19.8	31	9,313	[illegible]	-47.0	25	27.8	31	9,140	-46.8		30	5.9
250	31	10,720	-48.4		25	14.8	31	10,966	-42.0		28	5.5	31	10,834	-45.0		27	24.9	31	10,525	-50.5		27	30.4	31	10,330	[illegible]		30	[illegible]
200	31	12,159	-57.1		25	15.0	31	12,436	-54.3		27	7.5	31	12,289	-56.1		27	31.0	31	11,961	-55.1		27	31.8	30	11,768	-53.4		30	10.0
175	31	12,998	-60.0		25	13.8	30	13,279	-60.9		27	7.2	31	13,127	-61.8		27	32.9	31	12,813	-55.3		27	25.6	30	12,631	-51.7		30	9.3
150	31	13,958	-60.9		24	14.7	30	14,221	-68.0		27	7.1	31	14,069	-67.3		27	30.7	31	13,795	-56.1		27	20.6	29	13,631	-51.4		30	8.2
125	31	15,085	-63.5		25	13.6	30	15,300	-74.1		31	3.7	31	15,156	-71.2		27	24.5	29	14,946	-56.7		27	16.5	29	14,813	-52.6		31	6.7
100	31	16,444	-66.6		25	11.6	29	16,586	-78.5		03	4.9	31	16,476	-71.3		27	14.9	29	16,357	-57.8		27	11.1	29	16,250	-53.9		31	6.0
80	30	17,789	-68.0		26	6.4	29	17,859	-77.6		07	5.8	31	17,794	-71.3		28	5.7	29	17,760	-58.7		27	6.6	29	17,680	-54.8		31	4.3
70	30	18,594	-67.1		27	3.8	27	18,631	-73.2		08	5.6	30	18,589	-69.4		21	.6	29	18,600	-58.4		27	4.8	29	18,533	-55.3		32	3.7
60	30	19,530	-64.4		31	.9	27	19,545	-68.7		09	6.5	30	19,516	-66.6		10	4.3	29	19,571	-57.9		28	2.2	29	19,517	-55.2		33	2.5
50	30	20,655	-61.0		05	3.0	27	20,648	-64.3		08	7.6	30	20,630	-62.7		09	7.5	28	20,724	-57.2		07	.6	29	20,684	-54.5		35	1.8
40	29	22,053	-57.7		06	3.6	27	22,029	-59.2		09	7.4	30	22,016	-59.4		10	8.9	28	22,142	-55.1		07	1.7	28	22,111	-53.9		03	1.6
30	28	23,886	-52.9		06	3.9	26	23,866	-52.1		08	6.9	30	23,842	-53.8		09	9.8	27	23,995	-51.5		07	1.3	27	23,971	[illegible]		05	2.1
25	27	25,075	-50.4		08	4.8	26	25,053	-49.9		08	7.2	30	25,022	-50.8		09	10.6	25	25,185	-49.9		08	1.5	27	25,159	-50.1		07	2.7
20	26	26,539	-47.7		09	4.4	24	26,521	-47.1		08	8.4	29	26,484	-48.1		09	12.8	23	26,658	-47.1		05	.9	27	26,621	-48.8		08	2.7
15	21	28,457	-44.5		09	5.2	21	28,431	-44.3		07	10.5	26	28,395	-44.6		09	13.6	21	28,573	-44.5		33	.9	24	28,536	-45.9		05	2.3
10	12	31,209	-38.6				14	31,156	-41.6				20	31,123	-40.6		09	12.6	12	31,326	-39.2		04	.9	22	31,250	-40.9		06	2.0
7																									18	33,735	-34.9		08	2.0
5																									8	36,097	-30.4			

Standard pressure surface (mb)	JACKSON, MISS. 1002 MB						JOHN F. KENNEDY INT. AP NY 1012 MB						JOHNSTON IS., PACIFIC AREA 1015 MB						KEY WEST, FLA. 1015 MB						+ KOROR, CAROLINE IS. 1007 MB					
SURFACE	31	100	16.5	12.2	17	1.3	31	5	11.9	7.5	24	.4	31	3	24.8	20.7	08	8.1	31	3	24.9	21.0	12	1.8	31	30	[illegible]	24.8	09	3.3
1000	20	150	16.9	10.2	13	.6	30	111	11.7	7.0	24	.9	31	135	23.3	19.8	08	8.6	31	132	24.2	20.2	12	2.2	31	94	[illegible]	24.7	[illegible]	4.1
950	31	559	18.0	10.1	24	3.4	31	537	10.8	5.7	26	2.8	31	582	19.8	17.6	08	10.0	31	580	21.0	17.7	14	3.1	31	548	23.6	22.3	[illegible]	6.7
900	31	1,021	15.7	6.3	24	5.7	31	987	8.8	3.2	25	4.5	31	1,047	16.8	13.6	08	9.6	31	1,047	18.5	11.6	15	3.6	31	1,021	20.6	18.3	09	6.9
850	31	1,504	13.1	3.2	26	7.2	31	1,459	6.4	.2	25	5.4	31	1,532	13.6	10.8	08	8.5	31	1,536	15.7	7.8	17	3.3	31	1,514	17.6	14.7	09	4.6
800	31	2,012	10.9	-2.0	26	8.9	31	1,954	3.8	-2.4	25	7.0	31	2,041	11.2	5.5	08	7.5	31	2,049	13.3	2.8	20	3.0	31	2,033	15.8	10.1	09	4.1
750	31	2,548	8.4	-4.7	26	10.3	31	2,476	.7	-5.0	26	9.1	31	2,579	9.7	-2.7	08	5.0	31	2,589	10.2	-1.3	22	3.0	31	2,580	13.7	6.7	10	4.1
700	31	3,115	4.3	-7.6	27	11.6	31	3,027	-2.2	-9.2	26	11.1	31	3,151	8.7	-12.3	07	2.4	31	3,160	7.0	-6.1	24	3.3	31	[illegible]	10.7	2.1	10	5.2
650	31	3,714	.6	-12.0	27	13.2	31	3,613	-4.9	-13.7	25	13.2	31	3,761	5.9	-15.3	06	1.0	31	3,766	[illegible]	-10.3	26	4.0	31	3,771	6.6	-.1	10	6.2
600	31	4,352	-3.3	-15.0	27	13.8	31	4,239	-8.3	-18.6	26	15.6	31	4,411	2.0	-18.0	03	.5	31	4,412	[illegible]	-14.8	28	5.7	31	4,425	3.0	-3.9	09	5.9
550	31	5,035	-7.3	-20.3	27	15.0	31	4,909	-12.2	-22.5	26	17.4	31	5,118	-2.3	-22.0	30	1.3	31	5,104	-4.0	-20.1	28	7.4	31	5,126	[illegible]	-10.6	09	5.6
500	31	5,772	-11.9	-25.5	27	16.1	31	5,632	-16.7	-28.6	26	18.6	31	5,857	-7.1	-26.1	27	3.2	31	5,849	-8.8	-23.8	28	9.3	31	5,882	-4.8	-16.3	08	5.1
450	31	6,572	-17.4	-31.0	27	17.4	31	6,416	-21.8	-34.3	26	20.3	31	6,671	-12.0	-29.9	27	4.4	31	6,658	-14.0	-28.5	28	11.9	31	6,704	-9.6	-21.5	08	3.9
400	30	7,444	-23.7	-35.5	27	20.0	31	7,273	-28.0	-40.4	25	22.3	31	7,562	-18.1	-34.3	28	6.9	31	7,541	-20.3	-32.4	28	14.5	31	[illegible]	-15.0	-28.0	08	2.8
350	30	8,409	-30.8	-42.5	27	21.6	31	8,221	-34.9	-45.8	25	25.1	31	8,548	-25.5	-39.4	28	11.2	31	8,519	-27.2	-40.1	28	16.5	31	8,604	[illegible]	-33.5	11	1.3
300	30	9,481	-39.3	-48.9	27	23.2	31	9,276	-42.9	-47.2	25	26.4	31	9,645	-33.7	-47.0	27	17.0	31	9,608	-35.7	-47.1	28	20.2	31	9,717	-30.1	-42.3	18	.7
250	30	10,704	-48.7		28	26.8	31	10,485	-50.1		26	29.4	31	10,897	-43.5		27	22.7	31	10,851	-45.4		28	22.9	31	10,987	-40.6	-50.6	24	1.3
200	30	12,139	-57.9		28	30.6	31	11,923	-55.3		26	28.7	30	12,359	-55.4		26	28.6	31	12,304	-56.0		29	28.4	31	12,467	-53.0		25	4.7
175	30	12,977	-60.3		28	31.5	31	12,776	-54.7		26	24.2	30	13,175	-62.1		26	29.5	31	13,143	-61.1		29	30.1	31	13,315	-59.9		26	5.6
150	30	13,936	-61.0		28	30.4	31	13,762	-54.8		26	19.6	30	14,135	-68.8		26	29.1	30	14,092	-65.0		29	25.6	31	14,260	-67.4		28	5.4
125	29	15,066	-62.1		28	23.8	30	14,925	-55.5		26	15.1	30	15,209	-74.9		26	24.5	30	15,194	-68.5		29	21.4	31	15,340	-74.6		31	3.5
100	28	16,441	-64.3		28	17.1	30	16,344	-56.9		26	10.5	30	16,500	-75.5		27	14.5	29	16,521	-71.6		29	12.6	31	16,618	-79.8		06	5.3
80	28	17,799	-65.4		28	8.2	30	17,756	-57.4		26	6.2	29	17,800	-73.5		28	5.1	27	17,835	-71.8		31	5.2	31	17,887	-77.2		07	5.9
70	28	18,614	-64.8		29	4.0	30	18,600	-57.4		26	[illegible]	29	18,586	-70.8		35	.6	27	18,626	[illegible]		02	2.3	31	18,662	-72.6		08	4.8
60	27	19,558	-62.4		28	.9	30	19,574	-57.3		26	1.4	28	19,506	-68.3		09	4.1	25	19,554	-65.8		07	3.2	31	19,578	-68.2		09	3.9
50	27	20,593	-59.5		07	1.7	30	20,723	-56.6		28	.7	28	20,611	-64.0		09	6.5	26	20,674	-61.4		08	5.8	31	20,685	[illegible]		06	.9
40	27	22,098	-56.8		08	3.3	30	22,149	-54.9		09	2.2	28	21,990	-60.2		08	8.5	26	22,071	-57.4		08	9.0	31	22,071	-58.6		32	1.4
30	27	23,940	-52.3		09	3.4	27	23,995	-51.7		10	2.1	28	23,814	-53.4		09	8.9	25	23,913	[illegible]		10	10.3	31	23,901	-53.3		27	2.0
25	23	25,131	-49.9		08	3.1	25	25,181	-50.5		10	2.0	27	24,997	-50.5		08	9.7	26	25,102	-49.4		09	9.4	30	25,083	-50.6		24	1.6
20	23	26,599	-47.3		09	3.5	24	26,643	-48.3		08	1.2	27	26,463	-47.3		08	12.1	24	26,574	-46.4		09	8.5	30	26,547	-47.4		[illegible]	2.1
15	19	28,523	-44.3		06	1.9	22	28,547	-44.5		03	1.1	26	28,377	[illegible]		09	13.9	21	28,496	-43.2		08	9.1	27	28,467	-43.7		[illegible]	7.2
10	9	31,253	-39.5				[illegible]	31,254	-40.0				20	31,120	-39.9		09	13.6	16	31,261	-39.5		08	10.4	22	31,209	[illegible]		09	7.0
7																									9	33,679	[illegible]			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MAY 1973

[illegible]

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1000	3	101	[illegible]	[illegible]	[illegible]	[illegible]
950	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
900	3	[illegible]	[illegible]	[illegible]	[illegible]	9.1
850	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.3
800	[illegible]	[illegible]	15.8	[illegible]	[illegible]	7.5
750	3	[illegible]	13.0	[illegible]	[illegible]	6.9
700	[illegible]	[illegible]	9.6	.0	09	[illegible]
650	[illegible]	3,771	[illegible]	[illegible]	[illegible]	[illegible]
600	[illegible]	[illegible]	[illegible]	-.9	09	[illegible]
550	[illegible]	[illegible]	[illegible]	[illegible]	10	[illegible]
500	[illegible]	[illegible]	-5.8	[illegible]	[illegible]	[illegible]
450	[illegible]	[illegible]	-10.6	[illegible]	[illegible]	[illegible]
400	3	7,593	-16.1	[illegible]	[illegible]	[illegible]
350	[illegible]	8,586	-23.0	[illegible]	[illegible]	[illegible]
300	3	9,697	-31.4	[illegible]	[illegible]	[illegible]
250	3	10,960	-42.1	[illegible]	[illegible]	7.6
200	[illegible]	[illegible]	-54.7		[illegible]	10.9
175	3	13,270	-61.7		[illegible]	[illegible]
150	[illegible]	[illegible]	[illegible]		[illegible]	15.1
125	[illegible]	15,282	-76.1		[illegible]	[illegible]
100	[illegible]	16,562	[illegible]		[illegible]	9.2
80	[illegible]	17,840	-76.0		[illegible]	1.4
70	[illegible]	18,617	[illegible]		[illegible]	2.2
60	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	-64.1		[illegible]	[illegible]
40	[illegible]	[illegible]	-58.9		[illegible]	[illegible]
30	[illegible]	23,855	-52.9		[illegible]	[illegible]
25	[illegible]	[illegible]	-49.6		[illegible]	[illegible]
20	[illegible]	26,517	[illegible]		[illegible]	[illegible]
15	[illegible]	[illegible]	-43.8		[illegible]	6.5
10	[illegible]	31,142	-42.0			
7	[illegible]	33,588	[illegible]			
5						

[illegible]

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	[illegible]	19.1	[illegible]	[illegible]	[illegible]
1000	[illegible]	123	20.7	[illegible]	[illegible]	[illegible]
950	[illegible]	561	18.8	[illegible]	[illegible]	[illegible]
900	[illegible]	1,024	[illegible]	[illegible]	[illegible]	[illegible]
850	[illegible]	1,510	[illegible]	2.1	[illegible]	[illegible]
800	3	2,022	[illegible]	-3.3	[illegible]	5.4
750	[illegible]	2,561	[illegible]	-6.1	[illegible]	6.2
700	3	3,130	[illegible]	[illegible]	[illegible]	[illegible]
650	3	3,733	[illegible]	[illegible]	[illegible]	[illegible]
600	[illegible]	4,374	[illegible]	[illegible]	[illegible]	[illegible]
550	3	5,060	[illegible]	-20.8	[illegible]	[illegible]
500	31	5,798	[illegible]	-27.3	[illegible]	[illegible]
450	3	6,598	[illegible]	[illegible]	[illegible]	[illegible]
400	3	7,473	-22.8	[illegible]	[illegible]	[illegible]
350	[illegible]	[illegible]	-29.8	[illegible]	[illegible]	[illegible]
300	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23.6
250	3	10,747	[illegible]		[illegible]	27.2
200	[illegible]	12,195	[illegible]		[illegible]	[illegible]
175	[illegible]	13,034	[illegible]		[illegible]	[illegible]
150	[illegible]	13,990	[illegible]		[illegible]	[illegible]
125	[illegible]	15,111	[illegible]		[illegible]	[illegible]
100	[illegible]	16,466	[illegible]		[illegible]	17.1
80	[illegible]	17,809	-68.1		[illegible]	7.5
70	[illegible]	[illegible]	-66.7		[illegible]	[illegible]
60	[illegible]	19,554	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
40	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
25	[illegible]	25,117	[illegible]		[illegible]	[illegible]
20	[illegible]	26,592	[illegible]		[illegible]	[illegible]
15	[illegible]	28,506	[illegible]		[illegible]	3.5
10	[illegible]	31,258	-38.5			

[illegible]

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1000						
950						
900						
850						
800	[illegible]	1,995	[illegible]	-5.2	[illegible]	1.5
750	[illegible]	[illegible]	[illegible]	-7.9	[illegible]	2.7
700	[illegible]	3,080	[illegible]	-10.2	[illegible]	4.2
650	[illegible]	[illegible]	-3.8	-13.9	[illegible]	6.1
600	3	[illegible]	[illegible]	-17.8	[illegible]	[illegible]
550	3	4,968	[illegible]	[illegible]	[illegible]	10.5
500	3	5,690	[illegible]	-30.1	[illegible]	12.8
450	[illegible]	6,472	[illegible]	-34.4	[illegible]	[illegible]
400	[illegible]	7,325	[illegible]	-40.1	[illegible]	14.9
350	[illegible]	8,208	[illegible]	[illegible]	[illegible]	15.8
300	[illegible]	9,316	[illegible]		[illegible]	17.0
250	[illegible]	10,514	[illegible]		[illegible]	19.2
200	[illegible]	[illegible]	[illegible]		[illegible]	19.1
175	[illegible]	12,770	[illegible]		[illegible]	18.1
150	[illegible]	13,745	[illegible]		[illegible]	15.2
125	[illegible]	14,899	[illegible]		29	12.9
100	[illegible]	16,302	[illegible]		[illegible]	[illegible]
80	[illegible]	17,693	[illegible]		30	6.2
70	[illegible]	[illegible]	[illegible]		[illegible]	3.5
60	[illegible]	[illegible]	[illegible]		30	1.5
50	[illegible]	[illegible]	[illegible]		34	.6
40	[illegible]	[illegible]	[illegible]		06	2.0
30	[illegible]	[illegible]	[illegible]		06	[illegible]
25	[illegible]	[illegible]	[illegible]		[illegible]	2.6
20	[illegible]	[illegible]	[illegible]		[illegible]	2.1
15	[illegible]	[illegible]	[illegible]		[illegible]	1.7
10	[illegible]	[illegible]	[illegible]			

* LIHUE KAUAI, HAWAII
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	36	22.1	16.8	06	[illegible]
1000	[illegible]	172	21.3	16.9	06	6.4
950	[illegible]	615	[illegible]	[illegible]	[illegible]	[illegible]
900	[illegible]	1,076	[illegible]	[illegible]	07	7.8
850	[illegible]	1,557	[illegible]	[illegible]	[illegible]	6.8
800	[illegible]	2,062	[illegible]	[illegible]	[illegible]	6.2
750	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.6
700	[illegible]	3,163	[illegible]	[illegible]	07	4.1
650	[illegible]	3,767	[illegible]	[illegible]	[illegible]	[illegible]
600	[illegible]	4,412	[illegible]	[illegible]	[illegible]	[illegible]
550	[illegible]	5,103	-4.4	[illegible]	[illegible]	[illegible]
500	[illegible]	[illegible]	-9.4	[illegible]	34	[illegible]
450	[illegible]	6,652	-15.0	[illegible]	[illegible]	3.7
400	[illegible]	7,533	-21.1	[illegible]	[illegible]	5.9
350	[illegible]	[illegible]	-28.3	[illegible]	[illegible]	7.8
300	[illegible]	9,591	-36.7	[illegible]	[illegible]	[illegible]
250	[illegible]	10,829	-46.1		[illegible]	[illegible]
200	[illegible]	12,281	-56.2		27	[illegible]
175	[illegible]	13,118	-61.8		27	[illegible]
150	29	14,060	-66.5		[illegible]	[illegible]
125	[illegible]	15,155	[illegible]		[illegible]	[illegible]
100	28	16,481	[illegible]		[illegible]	[illegible]
80	[illegible]	17,807	[illegible]		28	3.5
70	23	18,608	[illegible]		04	.4
60	[illegible]	19,541	-65.4		09	3.3
50	23	20,660	[illegible]		09	6.1
40	23	22,049	-58.9		09	8.5
30	[illegible]	23,880	[illegible]		09	10.1
25	[illegible]	25,063	-50.0		09	11.2
20	[illegible]	26,532	[illegible]		09	11.6
15	19	28,447	-44.5		09	12.7
10	[illegible]	31,188	[illegible]		09	14.1
7	12	33,645	-34.6		09	11.7
5	[illegible]	35,975	-34.0			

LITTLE ROCK, ARK.
1003 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	15.2	11.9	26	1.0
1000	[illegible]	139	[illegible]	7.3	34	1.1
950	[illegible]	545	17.1	6.1	26	2.3
900	[illegible]	1,005	[illegible]	3.7	26	4.5
850	[illegible]	1,486	12.1	-.4	27	6.7
800	[illegible]	[illegible]	9.5	-3.3	27	8.8
750	3	[illegible]	6.2	-7.3	27	10.3
700	3	3,086	2.9	-11.8	27	[illegible]
650	[illegible]	3,683	-.4	[illegible]	27	13.4
600	[illegible]	4,319	-4.3	-18.1	28	14.4
550	31	4,999	-8.7	-21.9	28	15.1
500	[illegible]	5,731	-13.4	[illegible]	28	16.7
450	[illegible]	[illegible]	-18.8	-32.8	28	17.2
400	[illegible]	7,391	-25.1	[illegible]	28	18.3
350	[illegible]	[illegible]	-32.4	-45.3	28	20.4
300	[illegible]	9,418	-40.7	-50.0	28	22.3
250	[illegible]	[illegible]	-49.9		28	25.3
200	[illegible]	12,066	-57.7		28	27.3
175	29	12,905	-59.3		28	27.8
150	29	13,870	-58.9		28	25.6
125	29	15,011	-60.2		28	21.6
100	29	16,395	-62.8		28	15.5
80	29	17,768	-62.8		29	9.0
70	29	18,592	-62.3		29	4.7
60	28	19,549	-60.4		31	2.0
50	26	20,692	-58.5		29	.4
40	26	22,104	-55.7		07	2.2
30	25	23,951	-51.7		09	3.2
25	24	25,142	-49.3		09	1.5
20	23	26,614	-46.7		02	.6
15	21	28,540	-43.6		29	1.5
10	13	31,304	-38.9			

MCGRATH, ALASKA
992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	103	[illegible]	[illegible]	[illegible]	[illegible]
1000	[illegible]	131	5.9	[illegible]		
950	31	460	5.2	[illegible]	18	.9
900	31	900	2.8	[illegible]	16	2.0
850	31	[illegible]	-.6	[illegible]	16	2.4
800	31	1,842	[illegible]	[illegible]	15	3.1
750	31	2,348	[illegible]	[illegible]	15	3.7
700	31	2,880	[illegible]	[illegible]	14	4.4
650	31	3,443	[illegible]	[illegible]	13	5.3
600	31	4,042	[illegible]	[illegible]	13	5.5
550	31	4,682	[illegible]	[illegible]	13	6.1
500	31	5,370	-29.3	-35.8	13	7.2
450	31	6,114	-34.9	-38.7	12	8.0
400	31	6,925	[illegible]	[illegible]	12	9.0
350	[illegible]	7,812	[illegible]		11	10.3
300	29	8,817	[illegible]		11	9.4
250	[illegible]	9,999	[illegible]		12	6.7
200	27	11,473	[illegible]		13	4.9
175	[illegible]	12,360	-45.6		14	4.8
150	[illegible]	13,388	-45.7		14	[illegible]
125	[illegible]	14,601	-46.6		15	4.4
100	[illegible]	16,074	[illegible]		15	[illegible]
80	[illegible]	17,540	[illegible]		15	[illegible]
70	23	18,417	[illegible]		15	[illegible]
60	23	19,429	[illegible]		14	3.7
50	23	20,625	-49.5		14	3.3
40	23	22,085	-49.9		[illegible]	[illegible]
30	[illegible]	23,963	-49.7		11	2.5
25	[illegible]	25,158	-49.3		10	[illegible]
20	[illegible]	26,625	-48.5		08	3.6
15	19	28,528	[illegible]		06	4.3
10	[illegible]	31,296	[illegible]			

MAJURO, MARSHALL IS.
+ 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	27.9	[illegible]	08	4.3
1000	31	101	[illegible]	[illegible]	08	5.5
950	31	554	[illegible]	[illegible]	09	8.2
900	31	1,025	20.5	[illegible]	[illegible]	8.5
850	31	1,519	17.8	14.9	[illegible]	[illegible]
800	31	[illegible]	15.6	[illegible]	10	8.4
750	31	2,584	[illegible]	6.4	10	7.4
700	31	3,162	[illegible]	3.4	09	6.9
650	31	3,775	[illegible]	.3	09	5.3
600	31	4,429	[illegible]	[illegible]	10	4.7
550	[illegible]	5,131	-.6	[illegible]	[illegible]	[illegible]
500	[illegible]	[illegible]	[illegible]	-14.1	11	.8
450	[illegible]	6,708	[illegible]	-21.2	19	1.2
400	[illegible]	[illegible]	[illegible]	[illegible]	19	2.3
350	[illegible]	8,609	[illegible]	[illegible]	22	3.2
300	[illegible]	9,723	[illegible]	[illegible]	23	4.0
250	[illegible]	10,994	-40.5	[illegible]	25	5.1
200	[illegible]	12,473	-53.1		26	8.5
175	[illegible]	13,321	[illegible]		27	10.3
150	[illegible]	14,266	[illegible]		27	12.3
125	[illegible]	15,343	[illegible]		27	13.3
100	[illegible]	16,620	[illegible]		26	9.0
80	[illegible]	17,899	[illegible]		32	[illegible]
70	[illegible]	18,679	[illegible]		09	1.9
60	[illegible]	19,596	[illegible]		13	1.5
50	[illegible]	20,708	[illegible]		26	[illegible]
40	[illegible]	22,110	[illegible]		27	3.4
30	[illegible]	23,950	[illegible]		25	3.9
25	[illegible]	25,135	[illegible]		27	3.5
20	19	26,599	-46.8		22	2.0
15	[illegible]	28,514	-43.8		14	2.1
10	[illegible]	31,227	-38.9			

* MEDFORD, OREG.
971 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	[illegible]	[illegible]	4.5	34	.2
1000						
950	[illegible]	[illegible]	[illegible]	5.5	30	1.1
900	31	1,032	[illegible]	[illegible]	29	1.2
850	[illegible]	1,506	8.5	[illegible]	21	.7
800	31	[illegible]	6.5	[illegible]	23	1.9
750	31	2,534	[illegible]	[illegible]	24	4.2
700	[illegible]	[illegible]	.9	[illegible]	23	6.4
650	31	3,684	[illegible]	[illegible]	26	7.9
600	31	4,314	[illegible]	[illegible]	26	9.1
550	[illegible]	4,989	[illegible]	[illegible]	26	10.1
500	31	5,714	[illegible]	[illegible]	27	11.2
450	31	6,500	[illegible]	-34.4	27	13.6
400	[illegible]	[illegible]	[illegible]	[illegible]	27	15.3
350	31	8,310	[illegible]	[illegible]	27	17.5
300	[illegible]	9,368	-42.4	[illegible]	27	17.9
250	[illegible]	[illegible]	-51.5		27	20.1
200	31	11,997	[illegible]		27	19.8
175	[illegible]	12,833	[illegible]		[illegible]	[illegible]
150	[illegible]	[illegible]	[illegible]		[illegible]	15.2
125	[illegible]	14,949	-58.9		[illegible]	12.8
100	[illegible]	16,346	[illegible]		[illegible]	8.0
80	[illegible]	17,736	[illegible]		[illegible]	5.3
70	31	18,569	[illegible]		[illegible]	[illegible]
60	31	19,534	[illegible]		28	1.1
50	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
40	[illegible]	22,094	[illegible]		[illegible]	1.0
30	31	23,934	-53.5		06	1.9
25	31	25,112	-51.9		[illegible]	1.7
20	31	26,565	-49.7		[illegible]	1.3
15	29	28,460	-46.2		03	2.0
10	27	31,182	-41.2		07	1.3
7	22	33,657	-35.5		10	1.8

MERIDA, MEXICO
1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	11	23.3	22.0	11	1.6
1000	31	109	24.0	22.7	11	3.3
950	[illegible]	559	22.3	20.2	13	8.5
900	[illegible]	1,030	21.3	14.7	14	6.9
850	31	1,524	19.2	9.5	13	3.8
800	31	[illegible]	16.8	4.6	15	2.0
750	31	[illegible]	13.5	-.6	[illegible]	[illegible]
700	[illegible]	3,169	10.6	-6.0	13	[illegible]
650	[illegible]	3,783	7.1	-8.8	[illegible]	[illegible]
600	[illegible]	4,436	2.9	-12.9	[illegible]	[illegible]
550	[illegible]	5,134	-1.7	-17.0	[illegible]	[illegible]
500	31	5,886	-6.5	-20.9	[illegible]	3.5
450	[illegible]	[illegible]	-11.5	-26.6	[illegible]	5.2
400	[illegible]	7,595	-17.5	-32.7	[illegible]	7.3
350	[illegible]	8,584	-24.3	-37.2	[illegible]	9.3
300	[illegible]	9,686	-32.4	-45.0	[illegible]	11.9
250	31	10,945	-42.4		[illegible]	15.4
200	31	12,416	-53.9		[illegible]	18.3
175	31	13,263	-59.3		[illegible]	19.6
150	31	14,216	-65.0		[illegible]	18.1
125	[illegible]	15,313	-70.2		28	[illegible]
100	31	16,627	-73.7		29	8.5
80	[illegible]	17,928	-74.1		31	5.1
70	[illegible]	18,712	-71.2		35	2.9
60	[illegible]	19,633	-67.4		06	2.4
50	[illegible]	20,747	-61.6		09	[illegible]
40	[illegible]	22,143	-57.4		09	[illegible]
30	25	23,983	-51.8		08	[illegible]
25	[illegible]	25,176	-48.6		08	[illegible]
20	19	26,656	-44.7		08	10.9
15	[illegible]	28,574	-42.8		08	10.9

MIAMI, FLA.
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	23.4	20.1	09	.4
1000	31	141	23.1	19.6	11	1.1
950	31	588	20.5	16.8	14	2.0
900	31	1,054	17.8	13.6	17	2.7
850	31	1,542	14.9	8.6	19	2.8
800	31	2,054	12.8	2.9	22	2.5
750	31	2,594	9.7	-1.3	25	2.9
700	31	3,163	[illegible]	-6.8	25	3.1
650	31	3,768	[illegible]	[illegible]	27	4.3
600	[illegible]	4,413	[illegible]	-14.9	27	6.0
550	[illegible]	5,103	[illegible]	-19.3	28	6.9
500	[illegible]	[illegible]	[illegible]	-23.9	28	9.7
450	[illegible]	6,653	[illegible]	-28.1	29	12.1
400	[illegible]	7,534	[illegible]	-32.6	28	14.4
350	[illegible]	8,510	[illegible]	-38.4	28	16.4
300	[illegible]	9,597	[illegible]	-46.6	28	19.4
250	[illegible]	10,837	[illegible]		28	23.4
200	[illegible]	12,290	[illegible]		29	26.6
175	[illegible]	13,132	[illegible]		29	28.5
150	[illegible]	14,079	[illegible]		29	26.0
125	27	15,181	[illegible]		29	[illegible]
100	[illegible]	16,516	-70.2		29	15.0
80	27	17,841	-70.4		29	7.8
70	[illegible]	18,638	-68.3		30	3.1
60	[illegible]	19,570	-65.0		06	1.8
50	[illegible]	[illegible]	-60.8		07	4.9
40	25	[illegible]	-57.1		08	8.0
30	25	23,936	[illegible]		09	8.9
25	[illegible]	25,131	[illegible]		10	9.0
20	23	26,605	[illegible]		09	8.3
15	[illegible]	28,537	-43.1		09	8.6
10	[illegible]	31,284	-38.4		09	11.0

MIDLAND, TEXAS
914 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	874	[illegible]	4.6	[illegible]	.9
1000						
950						
900	[illegible]	1,005	16.6	[illegible]	[illegible]	2.1
850	[illegible]	1,494	17.3	[illegible]	22	3.3
800	[illegible]	2,009	14.7	-3.3	[illegible]	5.3
750	31	2,551	11.3	-6.1	[illegible]	6.8
700	[illegible]	3,122	6.9	[illegible]	[illegible]	7.6
650	[illegible]	3,726	2.4	[illegible]	[illegible]	8.7
600	[illegible]	4,368	-2.4	-14.8	[illegible]	9.0
550	[illegible]	5,052	-7.1	-19.8	[illegible]	11.2
500	[illegible]	5,788	-12.2	-26.2	[illegible]	13.2
450	[illegible]	6,587	-17.6	[illegible]	[illegible]	13.4
400	[illegible]	7,458	-23.9	[illegible]	[illegible]	15.2
350	[illegible]	8,421	-31.2	[illegible]	[illegible]	17.3
300	[illegible]	9,492	-39.6	[illegible]	[illegible]	[illegible]
250	[illegible]	10,714	-49.0		[illegible]	24.3
200	[illegible]	12,150	-58.0		[illegible]	27.7
175	[illegible]	12,987	-59.8		[illegible]	[illegible]
150	[illegible]	[illegible]	-60.9		[illegible]	[illegible]
125	[illegible]	15,077	-63.1		[illegible]	22.3
100	[illegible]	16,441	-65.6		[illegible]	16.9
80	[illegible]	17,792	-66.7		[illegible]	8.1
70	[illegible]	18,600	-66.4		[illegible]	[illegible]
60	[illegible]	19,540	-63.4		[illegible]	[illegible]
50	[illegible]	20,675	-59.4		[illegible]	.9
40	[illegible]	22,080	-56.7		[illegible]	3.3
30	[illegible]	23,924	-51.7		[illegible]	[illegible]
25	[illegible]	[illegible]	-49.1		[illegible]	3.7
20	[illegible]	[illegible]	-47.0		[illegible]	2.5
15	[illegible]	28,504	[illegible]		[illegible]	[illegible]
10	[illegible]	31,248	-39.7		[illegible]	[illegible]
7		33,709	-34.5			

MONTERREY, MEXICO
961 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	423	19.6	15.8	[illegible]	.5
1000						
950	[illegible]	[illegible]	[illegible]	16.6	[illegible]	[illegible]
900	[illegible]	1,020	[illegible]	12.2	[illegible]	[illegible]
850	[illegible]	1,514	[illegible]	6.4	[illegible]	[illegible]
800	[illegible]	2,034	[illegible]	2.8	[illegible]	[illegible]
750	[illegible]	[illegible]	[illegible]	-.3	[illegible]	[illegible]
700	[illegible]	3,161	[illegible]	-3.6	[illegible]	[illegible]
650	[illegible]	3,773	[illegible]	-8.4	[illegible]	[illegible]
600	[illegible]	4,423	[illegible]	-12.1	[illegible]	[illegible]
550	[illegible]	5,117	-3.9	[illegible]	[illegible]	[illegible]
500	[illegible]	5,862	-9.0	[illegible]	[illegible]	[illegible]
450	[illegible]	6,670	-14.3	[illegible]	[illegible]	[illegible]
400	[illegible]	7,552	-20.9	[illegible]	[illegible]	[illegible]
350	[illegible]	8,528	[illegible]	[illegible]	[illegible]	[illegible]
300	[illegible]	9,614	[illegible]	[illegible]	[illegible]	[illegible]
250	[illegible]	10,855	[illegible]		[illegible]	[illegible]
200	[illegible]	12,309	[illegible]		[illegible]	[illegible]
175	[illegible]	13,151	-60.1		[illegible]	[illegible]
150	[illegible]	14,102	-64.5		[illegible]	[illegible]
125	[illegible]	[illegible]	-67.6		[illegible]	[illegible]
100	[illegible]	16,539	-71.1		[illegible]	[illegible]
80	[illegible]	17,854	-72.3		[illegible]	[illegible]
70	[illegible]	18,641	-70.5		[illegible]	[illegible]
60	[illegible]	19,571	[illegible]		[illegible]	[illegible]
50	[illegible]	20,699	[illegible]		[illegible]	[illegible]
40	[illegible]	22,099	[illegible]		[illegible]	[illegible]
30	[illegible]	23,936	[illegible]		[illegible]	[illegible]
25	[illegible]	25,123	[illegible]		[illegible]	[illegible]
20	[illegible]	26,595	[illegible]		[illegible]	[illegible]
15	[illegible]	28,515	[illegible]		[illegible]	[illegible]
10	[illegible]	31,267	[illegible]			

MONETT, MO.
961 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	438	11.5	6.8	20	[illegible]
1000						
950	[illegible]	547	13.9	[illegible]	22	[illegible]
900	[illegible]	[illegible]	[illegible]	4.0	[illegible]	[illegible]
850	[illegible]	1,472	[illegible]	1.0	[illegible]	6.5
800	[illegible]	1,974	[illegible]	-2.6	[illegible]	8.0
750	[illegible]	2,503	[illegible]	[illegible]	[illegible]	9.3
700	[illegible]	3,062	[illegible]	-13.0	[illegible]	10.9
650	[illegible]	3,656	[illegible]	[illegible]	[illegible]	11.8
600	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
550	[illegible]	4,964	-10.3	[illegible]	[illegible]	[illegible]
500	[illegible]	5,691	-15.0	[illegible]	[illegible]	16.1
450	[illegible]	6,460	[illegible]	[illegible]	[illegible]	17.5
400	[illegible]	7,341	[illegible]	[illegible]	[illegible]	[illegible]
350	[illegible]	[illegible]	-33.5	[illegible]	[illegible]	20.9
300	[illegible]	9,356	-41.5	[illegible]	[illegible]	24.0
250	[illegible]	10,570	-50.1		[illegible]	26.2
200	[illegible]	12,003	-57.0		[illegible]	27.2
175	[illegible]	12,845	-57.7		[illegible]	26.1
150	[illegible]	13,819	-57.1		[illegible]	23.5
125	[illegible]	14,970	-58.6		[illegible]	[illegible]
100	[illegible]	16,365	-60.5		[illegible]	12.2
80	[illegible]	17,751	[illegible]		[illegible]	8.5
70	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
60	[illegible]	19,546	[illegible]		[illegible]	[illegible]
50	[illegible]	20,690	[illegible]		[illegible]	[illegible]
40	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
20	[illegible]	26,595	[illegible]		[illegible]	[illegible]
15	[illegible]	28,507	[illegible]		[illegible]	[illegible]
10	[illegible]	31,254	[illegible]		[illegible]	[illegible]

MONTGOMERY, ALA.
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	57	16.6	[illegible]	16	.5
1000	[illegible]	135	15.9	[illegible]	16	.2
950	[illegible]	569	17.7	[illegible]	23	[illegible]
900	[illegible]	1,030	14.9	[illegible]	25	5.5
850	[illegible]	1,511	[illegible]	[illegible]	[illegible]	6.6
800	[illegible]	2,017	[illegible]	[illegible]	[illegible]	[illegible]
750	[illegible]	2,552	[illegible]	[illegible]	[illegible]	[illegible]
700	[illegible]	3,116	[illegible]	[illegible]	[illegible]	11.4
650	[illegible]	3,714	[illegible]	[illegible]	[illegible]	12.4
600	[illegible]	4,351	[illegible]	[illegible]	[illegible]	[illegible]
550	[illegible]	5,032	[illegible]	-19.1	[illegible]	14.7
500	[illegible]	5,766	[illegible]	-25.6	[illegible]	16.7
450	[illegible]	6,563	[illegible]	-30.3	[illegible]	17.7
400	[illegible]	7,432	[illegible]	-36.2	[illegible]	19.5
350	[illegible]	8,395	[illegible]	-42.1	[illegible]	21.8
300	31	9,466	[illegible]	-47.6	[illegible]	24.1
250	[illegible]	10,687	[illegible]		[illegible]	[illegible]
200	[illegible]	12,119	[illegible]		[illegible]	[illegible]
175	[illegible]	12,954	[illegible]		[illegible]	30.1
150	[illegible]	13,914	-60.9		[illegible]	25.7
125	[illegible]	[illegible]	-62.8		[illegible]	[illegible]
100	[illegible]	16,411	-65.0		[illegible]	[illegible]
80	[illegible]	17,769	-65.2		[illegible]	9.9
70	[illegible]	18,584	-64.5		[illegible]	4.9
60	[illegible]	19,532	-61.8		[illegible]	[illegible]
50	[illegible]	20,666	-59.9		[illegible]	[illegible]
40	[illegible]	[illegible]	-56.9		[illegible]	[illegible]
30	[illegible]	23,915	-52.1		[illegible]	[illegible]
25	[illegible]	25,099	-49.6		[illegible]	2.7
20	[illegible]	26,570	-46.7		[illegible]	[illegible]
15	[illegible]	[illegible]	-44.1		[illegible]	[illegible]
10	[illegible]	31,222	-39.6		[illegible]	.7

NASHVILLE, TENN.
993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	160	[illegible]	10.4	19	1.3
1000						
950	31	549	14.2	6.9	22	3.9
900	3	[illegible]	11.8	4.5	25	5.7
850	31	1,481	9.2	-.7	26	7.8
800	[illegible]	1,982	6.2	-2.5	26	9.7
750	31	2,509	3.8	-7.5	26	11.4
700	[illegible]	3,066	.8	-11.6	27	13.2
650	3	3,659	-2.3	-15.3	27	13.8
600	[illegible]	4,290	-6.0	-19.1	27	15.5
550	[illegible]	4,967	-9.8	-22.2	27	17.7
500	31	5,696	-14.4	-27.5	27	19.7
450	3	6,487	-19.6	-32.8	27	21.9
400	[illegible]	7,351	-25.9	-37.8	27	24.7
350	3	8,309	-32.8	-43.4	27	25.5
300	3	9,372	-41.3	-48.4	27	27.0
250	3	10,586	-50.4		27	29.5
200	[illegible]	12,011	-57.3		27	32.3
175	[illegible]	12,852	-58.5		28	30.5
150	[illegible]	13,823	-58.0		28	24.3
125	[illegible]	14,970	-59.1		28	[illegible]
100	[illegible]	16,363	-60.7		27	13.9
80	[illegible]	17,748	-61.1		28	7.2
70	[illegible]	18,578	-60.8		27	4.7
60	[illegible]	19,539	-59.9		27	2.6
50	[illegible]	20,683	-58.2		36	.7
40	[illegible]	22,094	-56.1		07	1.9
30	[illegible]	23,942	-52.2		08	1.3
25	[illegible]	25,123	-49.9		05	.8
20	[illegible]	26,591	-47.2		32	.9
15	23	28,500	-44.5		27	2.3
10	15	31,255	-39.4		25	4.0

See reference note at end of table

RAWINSONDE DATA

Average monthly values

• NOME, ALASKA 1005 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	29	5	.4	-3.2	03	2.0
1000	19	85	1.3	-3.9	06	2.5
950	29	462	1.4	-4.4	05	3.1
900	29	896	-.4	-6.8	11	2.7
850	29	1,351	-2.7	-8.8	14	2.7
800	29	1,829	-5.6	-11.4	13	2.8
750	29	2,333	-8.8	-14.5	13	3.3
700	29	2,863	-12.3	-18.4	13	3.9
650	29	3,425	-15.9	-23.6	12	4.4
600	29	4,025	-19.6	-27.7	12	4.6
550	29	4,666	-23.7	-30.4	11	5.1
500	29	5,356	-28.4	-35.5	10	5.4
450	29	6,104	-33.5	[illegible]	09	6.0
400	29	6,920	-39.7	[illegible]	10	7.0
350	24	7,793	-47.3		10	7.9
300	24	8,795	-53.5		10	6.4
250	24	9,969	-51.2		11	4.1
200	24	11,436	-46.7		12	3.7
175	24	12,322	-46.6		13	3.5
150	24	13,346	-46.5		13	3.4
125	24	14,555	-47.0		14	4.2
100	24	16,031	-47.7		14	3.9
80	24	17,509	-48.2		14	4.2
70	24	18,389	-48.3		14	3.5
60	22	19,403	-48.7		12	3.1
50	22	20,600	-49.2		12	3.3
40	20	22,059	-49.5		12	2.4
30	20	23,945	-49.0		09	3.2
25	19	25,132	-48.9		10	2.5
20	18	26,597	-48.4		08	3.3
15	18	28,499	-46.4		06	4.3
10	16	31,247	-41.6		06	6.7
7	6	33,612	-38.8			

NORTH PLATTE, NEBR. [illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	847	7.0	-.9	33	2.3
1000						
950						
900	29	1,003	10.2	1.3	33	3.6
850	31	1,467	9.6	[illegible]	35	7.0
800	31	1,967	6.7	-4.5	35	7.9
750	31	2,494	3.5	-7.5	34	8.6
700	31	3,056	-.1	-10.4	33	10.4
650	30	3,645	-3.7	-15.3	32	11.4
600	31	4,273	-7.6	-19.8	32	12.4
550	30	4,945	-11.9	-24.6	31	13.1
500	30	5,668	-16.8	-30.2	31	15.0
450	29	6,450	-22.1	-34.8	30	16.4
400	29	7,305	-28.6	-40.9	30	18.0
350	29	8,249	-36.1	-46.6	30	18.9
300	29	9,298	-44.3		30	18.5
250	29	10,498	-52.4		29	20.7
200	29	11,924	-56.8		29	21.7
175	29	12,771	-56.5		29	20.6
150	29	13,751	-55.8		29	16.9
125	29	14,911	-56.4		29	14.5
100	29	16,323	-57.7		29	9.7
80	29	17,725	-59.4		29	6.9
70	28	18,565	-58.9		30	3.9
60	28	19,534	-58.2		31	1.8
50	27	20,664	-57.3		33	1.1
40	26	22,102	-55.9		03	1.9
30	26	23,945	-53.0		06	2.3
25	26	25,126	-50.9		06	2.7
20	22	26,585	-49.1		06	2.0
15	17	28,481	-46.0		08	1.5
10	14	31,218	-40.3			

OAKLAND, CALIF. 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	5	[illegible]	[illegible]	29	.3
1000	31	130	[illegible]	[illegible]	28	[illegible]
950	31	560	[illegible]	[illegible]	28	2.8
900	31	1,018	[illegible]	[illegible]	[illegible]	4.3
850	31	1,502	[illegible]	[illegible]	30	3.7
800	31	2,012	[illegible]	[illegible]	[illegible]	[illegible]
750	31	2,547	3.2	[illegible]	[illegible]	[illegible]
700	31	3,113	[illegible]	[illegible]	28	3.7
650	31	3,712	.5	[illegible]	27	4.1
600	31	4,349	[illegible]	[illegible]	[illegible]	4.9
550	31	5,029	[illegible]	[illegible]	[illegible]	6.3
500	31	5,759	-13.6	[illegible]	28	7.1
450	31	6,552	-19.2	[illegible]	29	7.8
400	31	7,416	-25.8	[illegible]	29	8.4
350	31	8,372	-33.4	-44.5	29	8.4
300	31	9,432	-42.0	[illegible]	[illegible]	8.8
250	30	10,640	-51.8		[illegible]	9.6
200	31	12,059	-59.2		29	10.3
175	29	12,898	-60.2		28	9.7
150	29	13,861	-59.9		27	9.7
125	[illegible]	14,948	-60.8		27	9.1
100	[illegible]	16,380	-62.5		26	6.8
80	[illegible]	17,757	-63.3		27	3.9
70	[illegible]	18,583	-61.9		25	1.7
60	[illegible]	19,538	-60.9		07	.3
50	25	20,676	-59.1		06	1.1
40	22	22,086	-57.1		06	2.1
30	19	23,928	-54.3		07	3.0
25	16	25,108	-51.9		06	2.6
20	15	26,563	-49.4		05	3.1
15	15	28,463	-45.9		07	2.0
10	7	31,212	-39.9			

OMAHA, NEBR. [illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	403	[illegible]	[illegible]	32	2.0
1000						
950	29	528	[illegible]	[illegible]	32	3.7
900	31	[illegible]	[illegible]	[illegible]	33	5.1
850	31	1,444	6.5	[illegible]	33	6.1
800	31	[illegible]	[illegible]	-3.6	32	7.0
750	31	2,469	[illegible]	-6.4	32	7.5
700	31	3,024	-.5	-10.2	31	8.6
650	31	3,613	-4.1	-12.8	31	10.2
600	31	4,241	-8.3	-19.6	31	11.6
550	31	4,911	-12.4	-25.4	30	11.6
500	31	5,633	-17.1	-30.0	30	12.8
450	31	6,415	[illegible]	-35.3	30	13.8
400	31	7,268	-28.8	-40.4	30	15.5
350	31	8,213	-35.9	-44.8	30	17.8
300	30	9,264	-43.6		30	20.1
250	30	10,469	-51.5		29	22.4
200	30	11,902	-55.1		28	22.8
175	30	12,756	-54.1		29	21.1
150	30	13,745	-54.0		29	17.2
125	30	14,914	-55.1		29	13.1
100	30	16,333	-56.9		29	9.1
80	30	17,741	-58.3		29	6.8
70	30	18,582	-58.2		30	5.0
60	30	19,553	-57.6		31	3.1
50	30	20,708	-56.5		32	1.3
40	30	22,130	-55.0		05	1.0
30	28	23,979	-52.3		04	2.0
25	25	25,168	-50.7		06	2.3
20	22	26,636	-48.3		05	2.6
15	19	28,543	-45.5		06	1.3
10	5	31,213	-40.3			

+ PAGO PAGO, AMERICAN SAMOA 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	5	29.3	[illegible]	[illegible]	[illegible]
1000	31	106	27.1	21.6	[illegible]	[illegible]
950	31	559	23.7	[illegible]	[illegible]	[illegible]
900	31	1,031	20.6	15.6	08	2.4
850	31	1,524	18.1	[illegible]	07	2.2
800	31	2,042	15.9	7.8	06	[illegible]
750	31	2,589	13.4	[illegible]	06	1.6
700	31	3,167	10.1	[illegible]	06	1.6
650	31	3,781	6.8	[illegible]	07	1.5
600	31	4,434	[illegible]	-6.7	07	[illegible]
550	31	5,134	[illegible]	[illegible]	06	.7
500	31	5,889	-5.2	-15.8	03	.9
450	31	6,710	-9.6	[illegible]	02	[illegible]
400	31	7,610	-15.4	-28.6	35	[illegible]
350	31	8,608	[illegible]	[illegible]	33	1.2
300	31	9,719	[illegible]	[illegible]	33	[illegible]
250	[illegible]	[illegible]	[illegible]	[illegible]	29	3.4
200	[illegible]	12,464	[illegible]		28	[illegible]
175	[illegible]	[illegible]	[illegible]		26	5.8
150	[illegible]	14,254	-67.5		25	4.6
125	30	15,331	[illegible]		27	4.5
100	30	16,613	[illegible]		26	2.6
80	[illegible]	17,868	[illegible]		13	.1
70	30	18,659	[illegible]		07	1.0
60	30	19,568	-69.4		07	2.4
50	[illegible]	[illegible]	-63.8		08	2.4
40	28	[illegible]	-58.8		09	.6
30	27	23,887	-53.1		32	.9
25	26	25,068	-50.9		28	1.3
20	25	26,529	-47.6		28	1.3
15	22	28,450	-43.3		21	.2
10	14	31,211	-37.2		11	4.4
7	5	33,708	-34.3			

• PEORIA, ILL. 987 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	200	10.4	7.6	23	1.1
1000						
950	31	515	11.8	4.3	27	3.4
900	31	966	9.6	1.3	27	5.0
850	31	1,438	6.8	-1.6	28	5.7
800	31	1,934	3.9	-4.7	28	6.8
750	31	2,456	1.1	-7.4	28	8.0
700	31	3,008	-1.9	-12.0	28	9.4
650	31	3,594	-5.3	-13.9	28	10.2
600	31	4,219	-8.7	-18.0	29	11.5
550	31	4,888	-12.9	-22.5	29	11.8
500	31	5,609	-17.8	-27.0	29	13.3
450	31	6,388	-23.4	-33.3	28	14.7
400	31	7,240	-29.5	-39.1	28	16.9
350	31	8,181	-36.7	-45.2	28	19.1
300	31	9,229	-44.2		28	19.7
250	31	10,433	-50.8		28	23.1
200	31	11,872	-54.7		28	23.6
175	31	12,727	-54.4		28	22.1
150	31	13,716	-54.2		28	17.6
125	29	14,887	-54.8		28	13.1
100	27	16,304	-57.3		28	9.3
80	27	17,710	-58.5		28	5.9
70	26	18,549	-58.3		28	4.1
60	26	19,521	-57.5		29	2.7
50	26	20,676	-56.6		33	.6
40	26	22,094	-55.5		05	1.4
30	25	23,939	-52.4		07	1.7
25	24	25,120	-50.7		07	1.6
20	22	26,576	-49.0		06	1.5
15	20	28,486	-45.5		31	1.2
10	18	31,227	-40.0		03	1.5
7	12	33,704	-34.1			
5						

• PITTSBURGH, PA. 970 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	359	10.3	6.9	21	1.7
1000						
950	31	528	10.8	6.1	23	3.2
900	31	979	9.0	3.8	25	6.8
850	31	1,450	5.9	1.4	26	8.5
800	31	1,944	2.8	-.2	26	9.2
750	31	2,464	-.2	-3.8	26	9.6
700	31	3,014	-3.2	-8.2	26	10.3
650	31	3,598	-6.1	-12.1	26	11.4
600	31	4,221	-9.3	-17.8	26	13.3
550	31	4,889	-13.4	-22.7	27	15.1
500	31	5,608	-17.8	-28.1	27	17.0
450	31	6,389	-22.9	-33.5	26	19.6
400	31	7,242	-29.1	-40.9	26	22.0
350	31	8,187	-35.7	-46.0	26	25.3
300	31	9,238	-43.5	-46.9	26	27.9
250	31	10,446	-50.2		26	29.6
200	31	11,889	-54.3		27	28.2
175	30	12,740	-54.5		27	22.4
150	30	13,728	-54.2		27	18.3
125	30	14,896	-55.2		27	15.3
100	30	16,315	-56.4		27	9.2
80	29	17,731	-57.6		27	5.8
70	29	18,574	-57.9		28	4.4
60	28	19,547	-57.2		27	2.4
50	28	20,701	-57.0		34	.2
40	27	22,117	-55.6		07	1.0
30	26	23,961	-52.6		09	.4
25	24	25,144	-50.9		04	.2
20	20	26,601	-49.1		04	.7
15	14	28,502	-46.4		31	.8
10	11	31,234	-40.8			
7	8	33,676	-36.1			
5						

+ PONAPE, CAROLINE IS. 1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	39	28.6	24.9	07	3.6
1000	31	87	26.8	23.0	07	4.0
950	31	540	23.3	20.6	08	7.5
900	31	1,011	20.4	17.4	09	8.9
850	31	1,504	17.6	14.1	09	8.5
800	31	2,022	15.7	9.9	09	8.0
750	31	2,568	12.9	6.3	09	7.1
700	31	3,146	9.5	2.8	10	6.6
650	31	3,758	6.2	-.7	10	6.9
600	31	4,410	2.7	-4.7	09	5.7
550	31	5,110	-.9	-9.4	10	4.0
500	31	5,866	-5.0	-14.3	09	3.8
450	31	6,687	-9.7	-19.9	09	3.2
400	30	7,588	-15.3	-26.9	14	.3
350	30	8,586	-22.1	-34.4	24	2.5
300	30	9,699	-30.4	-42.8	26	4.2
250	30	10,968	-40.6	-52.0	26	6.7
200	30	12,448	-53.1		27	8.8
175	30	13,295	-60.0		27	10.0
150	28	14,240	-67.6		27	11.7
125	28	15,318	-74.9		27	10.9
100	28	16,595	-79.3		27	6.4
80	29	17,870	-76.3		29	.8
70	28	18,648	-72.8		09	1.2
60	28	19,563	-68.4		08	.7
50	28	20,671	-62.9		25	1.2
40	24	22,052	-59.0		27	2.5
30	22	23,881	-53.5		28	3.3
25	22	25,063	-50.6		28	2.7
20	19	26,527	-47.2		23	.9
15	15	28,424	-45.8		10	3.0
10	8	31,166	-41.7			

PORTLAND, MAINE 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	20	8.8	7.1	01	.7
1000	29	119	8.5	6.1	33	.6
950	31	535	8.1	4.6	24	.8
900	31	981	6.2	1.9	23	2.3
850	31	1,448	4.3	-.3	25	3.6
800	31	1,940	1.8	-4.2	25	5.1
750	31	2,457	-1.2	-7.3	25	6.7
700	31	3,005	-4.0	-10.2	25	8.1
650	31	3,587	-6.9	-15.1	25	9.5
600	31	4,208	-10.1	-20.2	25	10.5
550	31	4,874	-14.0	-23.5	26	12.4
500	31	5,591	-19.1	[illegible]	26	[illegible]
450	31	6,367	-24.5	-37.6	25	15.5
400	31	7,214	-30.7	-44.0	25	18.6
350	31	8,153	-37.0	-48.2	25	[illegible]
300	31	9,201	-44.1		26	24.4
250	31	10,406	-50.6		26	25.3
200	31	11,847	-53.7		26	23.8
175	31	12,706	-53.4		26	18.1
150	30	13,697	-53.3		26	15.2
125	30	14,871	-53.9		25	[illegible]
100	30	16,297	-55.5		25	8.2
80	30	17,716	-56.5		27	4.2
70	29	18,563	-56.9		[illegible]	[illegible]
60	29	19,541	-56.5		25	[illegible]
50	28	20,700	-56.2		22	.2
40	28	22,123	-54.8		[illegible]	[illegible]
30	25	23,983	-51.8		[illegible]	2.4
25	24	25,168	-50.4		[illegible]	2.3
20	22	26,643	-48.5		[illegible]	2.4
15	16	28,551	-45.0		[illegible]	1.6
10	5	31,307	-39.0			

• QUILLAYUTE, WASH. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	58	7.3	5.8	06	.4
1000	29	156	8.4	6.0	36	.5
950	31	573	7.8	3.1	25	2.0
900	31	1,017	6.0	-.7	24	3.4
850	31	1,484	3.8	[illegible]	23	4.7
800	31	1,975	1.3	-8.7	22	5.7
750	31	2,492	-1.3	-12.8	23	6.8
700	31	3,039	-3.9	-16.2	23	7.7
650	31	3,621	-7.1	-18.5	24	8.7
600	31	4,241	-10.8	-21.9	24	9.9
550	31	4,904	-15.2	-27.1	25	11.1
500	31	5,619	-20.0	-31.2	25	12.7
450	31	6,391	-25.1	-34.8	25	14.8
400	31	7,237	[illegible]	-40.2	25	17.5
350	31	8,176	-37.1	-43.0	26	18.3
300	31	9,223	-43.9		26	20.2
250	31	10,429	-50.7		26	21.8
200	31	11,864	-56.1		26	21.5
175	31	12,714	-55.4		26	18.7
150	31	13,701	-53.9		26	16.0
125	31	[illegible]	[illegible]		25	13.0
100	31	16,294	-55.6		25	9.1
80	[illegible]	[illegible]	[illegible]		25	5.9
70	[illegible]	[illegible]	-56.9		25	4.2
60	[illegible]	[illegible]	-56.6		25	2.2
50	[illegible]	[illegible]	-56.1		22	.5
40	[illegible]	22,115	-55.2		15	.2
30	[illegible]	23,970	-53.2		06	1.7
25	29	25,148	-51.9		08	2.0
20	[illegible]	[illegible]	-50.1		07	1.6
15	[illegible]	28,492	-46.9		09	2.1
10	[illegible]	[illegible]	-40.3		09	1.6
7	[illegible]	[illegible]	-34.4		08	2.0
5	[illegible]	[illegible]	-31.8			

RAPID CITY, S. DAK. 904 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	966	6.7	.7	32	3.9
1000						
950						
900	22	1,030	8.0	-1.4	31	3.6
850	31	1,476	9.3	-3.5	32	7.0
800	31	1,975	5.9	-4.9	33	7.0
750	31	2,501	2.2	-7.5	33	7.7
700	31	3,054	-1.5	-10.7	32	8.6
650	31	3,640	-5.2	-14.9	32	9.5
600	31	4,264	-9.3	-19.6	31	10.8
550	31	4,932	-13.3	-24.3	31	11.4
500	31	5,651	-17.9	-29.9	30	11.9
450	31	6,431	-23.2	-34.0	30	13.5
400	31	7,283	-29.6	-39.3	30	[illegible]
350	31	8,224	-36.9	[illegible]	30	[illegible]
300	31	9,269	-45.1		30	[illegible]
250	31	10,464	-53.3		30	[illegible]
200	31	11,888	-56.3		30	[illegible]
175	31	12,736	-56.1		[illegible]	[illegible]
150	29	13,726	-54.4		[illegible]	13.7
125	29	14,893	-55.4		[illegible]	11.1
100	29	16,310	-57.3		[illegible]	[illegible]
80	29	17,717	-58.4		[illegible]	4.7
70	29	18,558	-57.8		[illegible]	[illegible]
60	29	19,531	-57.5		[illegible]	[illegible]
50	29	20,685	-56.7		[illegible]	[illegible]
40	29	22,105	-55.5		[illegible]	[illegible]
30	27	23,949	-52.9		[illegible]	[illegible]
25	26	25,125	[illegible]		[illegible]	[illegible]
20	25	26,583	[illegible]		[illegible]	[illegible]
15	23	28,477	[illegible]		[illegible]	[illegible]
10	17	31,200	[illegible]		[illegible]	[illegible]
7	8	33,662	[illegible]			
5	[illegible]	[illegible]	[illegible]			
4	5	37,676	[illegible]			

ST CLOUD, MINN. 974 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	316	6.5	3.9	02	1.2
1000						
950	31	521	9.0	1.6	01	2.1
900	31	969	8.0	-.5	01	2.7
850	31	1,439	5.4	-3.1	36	3.9
800	31	1,933	2.8	-5.2	35	5.7
750	31	2,452	-.5	-7.8	34	6.6
700	31	3,000	-4.1	-11.4	33	6.5
650	31	3,582	-7.2	-16.2	33	[illegible]
600	31	4,202	-10.6	-20.7	33	7.3
550	31	4,866	-14.7	-25.6	32	[illegible]
500	31	5,582	-19.3	-30.6	32	9.1
450	31	6,357	-24.7	-34.0	31	10.0
400	31	7,203	-31.3	-39.7	31	[illegible]
350	31	8,139	-38.1	-45.2	30	[illegible]
300	31	[illegible]	-45.8		29	[illegible]
250	31	[illegible]	-52.6		29	[illegible]
200	[illegible]	[illegible]	-54.7		29	[illegible]
175	[illegible]	[illegible]	-52.8		29	11.3
150	[illegible]	[illegible]	-52.8		29	[illegible]
125	31	[illegible]	-53.5		29	9.1
100	31	16,265	-55.3		29	7.6
80	31	17,685	-56.4		30	4.9
70	[illegible]	18,536	-56.8		31	3.5
60	29	19,516	-56.5		30	2.6
50	[illegible]	20,675	-55.8		32	1.4
40	28	22,100	-55.0		35	1.7
30	[illegible]	23,947	-52.8		04	[illegible]
25	[illegible]	25,124	-51.3		04	1.8
20	[illegible]	26,574	-49.5		05	1.9
15	[illegible]	[illegible]	-46.9		06	1.7
10	[illegible]	[illegible]	[illegible]			

• ST PAUL IS., ALASKA 1005 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	10	-1.4	-2.9	36	3.2
1000	22	78	-2.3	-3.8	35	[illegible]
950	31	452	-3.9	-4.8	01	2.3
900	31	878	-5.7	-7.1	01	1.3
850	31	1,325	-6.9	-12.6	02	2.0
800	31	1,797	-8.7	-15.7	03	2.0
750	31	2,295	-11.1	-18.4	04	2.2
700	31	2,822	-14.0	-22.3	04	2.5
650	31	3,382	-17.0	-25.5	[illegible]	1.9
600	31	[illegible]	-20.3	-29.1	03	1.5
550	31	[illegible]	-24.2	-33.2	01	1.6
500	31	5,306	-28.7	-37.9	35	2.3
450	31	6,053	-33.7	-41.6	34	2.8
400	31	6,870	-39.1	-44.8	33	4.2
350	31	7,776	-44.8	-46.6	32	5.9
300	31	8,795	-48.8		32	7.8
250	31	9,991	-48.3		30	6.1
200	31	11,470	-46.0		29	6.6
175	31	12,358	-46.1		29	6.0
150	31	13,381	-47.0		29	5.8
125	31	14,586	-48.2		29	4.8
100	31	16,052	-49.4		28	3.4
80	31	17,512	-50.3		27	2.3
70	31	18,383	-50.5		26	1.2
60	31	19,369	-50.5		19	.9
50	[illegible]	20,574	-50.5		11	.3
40	[illegible]	22,030	-50.6		12	1.7
30	[illegible]	23,905	-50.2		09	2.3
25	28	25,093	-49.9		08	2.8
20	[illegible]	26,552	-49.4		09	2.6
15	23	28,452	-47.2		06	3.1
10	14	31,154	[illegible]		04	5.1

SALEM, ILL. 991 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	174	[illegible]	[illegible]	21	[illegible]
1000						
950	31	524	[illegible]	[illegible]	25	4.7
900	31	978	[illegible]	[illegible]	26	6.3
850	31	1,453	[illegible]	-.9	27	7.5
800	31	1,951	5.1	-4.4	28	8.7
750	31	2,475	2.2	-8.3	28	9.6
700	31	3,029	-1.0	[illegible]	28	10.5
650	31	3,617	-4.1	-15.5	27	12.1
600	31	4,245	[illegible]	[illegible]	28	14.2
550	31	4,918	-11.5	[illegible]	28	16.2
500	31	5,642	-16.3	-29.5	28	[illegible]
450	31	6,427	-21.7	-34.6	28	19.2
400	31	7,283	-28.0	[illegible]	28	21.2
350	31	8,232	-34.8	-45.3	28	23.6
300	31	9,287	-42.8	-47.8	28	23.7
250	30	10,498	-50.5		28	26.9
200	[illegible]	11,935	-55.3		28	27.1
175	30	12,785	-56.0		27	24.5
150	29	13,766	-55.6		27	20.9
125	29	14,925	[illegible]		29	15.8
100	29	16,332	-58.7		27	9.6
80	29	17,729	-59.8		28	6.0
70	28	18,561	-59.4		28	4.2
60	28	19,528	[illegible]		29	1.9
50	[illegible]	20,677	[illegible]		35	1.4
40	[illegible]	22,068	-55.8		05	1.3
30	25	23,935	-52.8		07	1.2
25	25	25,116	-51.2		[illegible]	.7
20	[illegible]	26,577	-48.3		[illegible]	.9
15	[illegible]	[illegible]	[illegible]		[illegible]	.5
10	[illegible]	31,245	[illegible]		09	2.7
7	[illegible]	33,673	[illegible]			

SALEM, OREG. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	61	7.8	3.2	19	1.0
1000	30	152	10.3	5.6	21	.5
950	31	576	9.7	3.8	23	.5
900	31	1,024	8.1	1.3	22	1.7
850	31	1,495	6.2	-4.1	23	3.8
800	31	1,990	4.0	-7.7	24	5.4
750	31	2,512	1.7	-12.3	24	6.1
700	31	3,065	[illegible]	-15.1	25	[illegible]
650	31	3,653	-4.7	[illegible]	25	9.0
600	31	4,278	-8.4	-21.6	26	10.9
550	31	4,948	-12.6	-25.2	26	12.0
500	31	5,669	-17.3	-28.8	26	13.8
450	31	6,450	-22.7	-33.8	26	16.5
400	31	7,303	-29.0	[illegible]	26	17.8
350	31	8,248	-35.7	-44.7	26	17.6
300	31	9,300	-43.2		27	18.0
250	31	10,506	-51.4		27	17.7
200	31	11,933	-57.6		27	17.6
175	30	12,778	-57.7		27	17.9
150	28	13,760	-56.2		26	13.8
125	28	14,917	-57.4		27	11.8
100	27	16,324	-58.7		26	7.6
80	26	17,724	-59.2		25	3.9
70	25	18,560	-59.4		27	2.2
60	26	19,529	-58.2		33	.9
50	25	20,680	-57.1		07	.7
40	25	22,099	-55.8		05	1.2
30	24	23,945	-53.2		06	2.1
25	23	25,129	-51.7		07	2.8
20	23	26,584	-49.5		08	2.1
15	[illegible]	28,487	-46.2		04	1.9
10	[illegible]	[illegible]	-39.6			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MAY 1973

SALT LAKE CITY, UTAH 871 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,288	10.7	1.7	16	2.2
1000						
950						
900						
850	31	1,494	13.0	-2.3	15	2.3
800	31	2,001	10.7	-5.7	22	1.3
750	31	2,535	6.7	-7.7	28	2.5
700	31	3,097	2.2	-10.2	29	4.4
650	31	3,69[illegible]	-2.3	[illegible]	29	6.4
600	31	4,321	-6.8	-15.7	29	8.1
550	31	4,995	-11.4	-21.0	28	8.3
500	31	5,719	-16.2	-27.5	29	9.7
450	31	6,505	-21.4	-33.2	29	11.8
400	31	7,363	-27.4	-40.3	29	13.3
350	31	8,313	-34.8	-46.7	29	14.2
300	31	9,366	-43.4		28	13.7
250	31	10,569	-52.4		29	14.9
200	31	11,988	-58.6		29	16.2
175	31	12,827	-58.4		28	14.9
150	31	13,798	-58.2		28	13.6
125	31	14,946	-58.8		28	12.0
100	31	16,343	-60.0		28	8.7
80	29	17,731	-60.8		29	5.8
70	29	18,562	-60.3		28	3.2
60	28	19,525	-59.6		30	1.4
50	27	20,671	-57.9		08	.3
40	27	22,085	-56.1		06	1.2
30	26	23,931	-52.8		07	1.7
25	25	25,111	-51.2		03	2.2
20	22	26,573	-48.4		06	3.1
15	17	28,481	-45.8		05	2.3
10	11	31,208	-40.2		02	1.0
7						
5						
4						

SAN DIEGO, CALIF. 999 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	124	13.5	11.5	26	.8
1000	12	140	13.0	11.4	29	.8
950	30	551	12.9	8.6	32	.4
900	31	1,007	15.7	-.2	34	1.5
850	30	1,493	15.9	-4.8	32	2.4
800	30	2,005	13.4	-6.9	32	2.0
750	30	2,544	10.3	-10.7	30	1.2
700	30	3,114	6.8	-13.7	25	1.9
650	30	3,718	2.4	-17.1	25	2.2
600	30	4,359	-2.3	-20.4	26	2.8
550	30	5,043	-7.2	-26.1	26	4.0
500	30	5,778	-12.7	-30.8	27	5.0
450	30	6,573	-18.5	-35.4	27	5.7
400	30	7,440	-25.3	-41.2	26	7.2
350	30	8,397	-33.0	-47.0	26	7.8
300	30	9,459	-41.6	-52.2	27	8.7
250	30	10,673	-49.9		27	11.2
200	29	12,109	-57.6		27	12.8
175	28	12,951	-59.4		26	13.5
150	27	13,909	-59.6		26	13.9
125	25	15,045	-61.8		26	11.9
100	24	16,417	-65.2		26	8.4
80	22	17,776	-66.0		27	4.5
70	22	18,589	-64.7		28	2.2
60	22	19,534	-63.0		01	1.0
50	22	20,664	-60.2		08	2.3
40	22	22,065	-57.8		09	2.9
30	21	23,903	-52.8		07	3.2
25	21	25,087	-50.3		07	2.9
20	19	26,553	-47.8		07	2.5
15	9	28,518	-44.7			
10	8	31,258	-38.6			
7						
5						
4						

SAN JUAN, P. R. 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	6	25.9	21.1	13	1.6
1000	31	148	24.5	21.0	10	3.4
950	31	597	21.5	18.6	11	6.3
900	31	1,065	18.6	15.0	11	5.8
850	31	1,554	16.0	9.7	11	5.4
800	31	2,068	13.5	5.4	11	4.4
750	31	2,610	11.1	-.2	12	3.6
700	31	3,183	7.9	-6.5	15	2.1
650	31	3,791	4.6	-10.0	16	2.0
600	31	4,439	1.2	-15.7	18	1.4
550	31	5,134	-3.0	-20.4	23	2.1
500	31	5,882	-7.7	-25.2	25	2.9
450	31	6,693	-13.0	-30.0	26	4.6
400	31	7,580	-19.0	-34.6	27	6.8
350	31	8,564	-25.9	-40.6	27	8.5
300	31	9,659	-34.3	-48.1	27	10.3
250	31	10,908	-44.3		27	13.4
200	31	12,367	-55.4		27	17.7
175	30	13,208	-60.9		27	19.6
150	30	14,153	-66.5		28	18.9
125	30	15,244	-70.7		28	14.4
100	30	16,554	-74.1		29	8.0
80	30	17,858	-73.1		35	1.8
70	30	18,646	-70.3		07	3.5
60	30	19,570	-66.2		08	5.7
50	30	20,688	-61.9		08	8.3
40	27	22,081	-58.1		09	9.5
30	25	23,918	-53.0		10	10.1
25	23	25,105	-49.1		10	9.1
20	23	26,582	-45.3		09	8.4
15	17	28,512	-42.2		09	10.9
10	10	31,273	-39.1			
7						
5						
4						

• SAULT STE MARIE, MICH. 984 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	221	5.4	3.2	05	.7
1000						
950	31	505	6.3	.5	08	1.4
900	31	948	4.9	-1.2	10	1.1
850	31	1,412	2.5	-4.2	06	.8
800	31	1,900	.1	-6.4	35	.7
750	31	2,416	-2.4	-10.0	28	1.3
700	31	2,961	-5.1	-14.1	27	2.2
650	31	3,541	-7.7	-17.6	28	2.8
600	31	4,159	-11.4	-21.3	28	3.7
550	31	4,822	-15.3	-25.5	28	4.8
500	31	5,536	-20.0	-31.0	28	5.5
450	31	6,309	-25.5	-35.7	29	5.7
400	31	7,152	-32.1	-42.9	29	6.7
350	31	8,084	-39.0	-47.9	29	8.4
300	31	9,121	-46.6		29	10.1
250	31	10,315	-51.7		28	12.4
200	31	11,760	-51.3		28	12.3
175	31	12,630	-50.7		27	9.9
150	31	13,634	-50.9		28	9.8
125	31	14,818	-52.1		28	8.3
100	31	16,256	-53.9		28	7.0
80	31	17,686	-54.8		27	4.9
70	31	18,540	-54.7		27	3.3
60	30	19,531	-54.8		26	2.5
50	30	20,698	-54.6		27	.9
40	29	22,131	-54.0		06	.3
30	28	23,984	-51.9		07	1.7
25	28	25,169	-50.6		08	2.4
20	27	26,635	-48.7		08	3.2
15	27	28,539	-45.7		08	2.1
10	24	31,267	-40.5		07	1.9
7	21	33,731	-35.5		09	3.5
5	13	36,110	-30.7			
4	5	37,666	-29.5			

• SHREVEPORT, LA. 1004 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	16.8	13.5	18	.8
1000	25	132	18.1	12.9	18	.5
950	31	553	18.3	8.9	23	3.0
900	31	1,015	16.4	5.7	26	5.2
850	31	1,500	14.1	2.2	27	7.1
800	31	2,010	11.4	-2.1	27	8.2
750	31	2,546	8.4	-5.1	27	9.2
700	31	3,113	4.7	-8.1	27	10.3
650	30	3,713	.9	-11.9	27	11.4
600	30	4,351	-3.3	-15.3	27	12.5
550	30	5,034	-7.4	-20.3	27	13.4
500	30	5,770	-12.3	-26.5	27	14.4
450	29	6,565	-17.6	-31.7	27	16.4
400	29	7,436	-23.8	-37.1	27	18.8
350	29	8,400	-31.2	-44.6	27	20.5
300	29	9,471	-39.3	-50.9	27	24.3
250	29	10,695	-48.8		27	27.9
200	29	12,132	-57.6		27	32.9
175	29	12,969	-60.2		27	33.5
150	29	13,930	-60.5		27	28.6
125	29	15,061	-62.2		28	23.7
100	28	16,435	-64.3		28	15.7
80	28	17,792	-66.1		28	9.9
70	28	18,604	-64.6		28	4.9
60	28	19,551	-62.3		28	1.2
50	27	20,686	-59.5		04	1.0
40	27	22,093	-56.5		08	3.2
30	26	23,938	-51.4		09	2.0
25	25	25,126	-49.5		07	2.2
20	23	26,598	-46.6		07	1.8
15	21	28,523	-43.6		28	.8
10	15	31,270	-40.1		30	1.5
7	8	33,706	-35.2			
5						
4						

SPOKANE, WASH. 932 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	720	8.2	1.0	19	2.1
1000						
950						
900	31	1,008	10.2	-2.0	21	3.1
850	31	1,482	8.3	-5.5	23	4.5
800	31	1,979	4.6	-7.8	24	5.1
750	31	2,501	.8	-9.9	25	5.4
700	31	3,052	-2.8	-14.6	25	5.9
650	31	3,635	-6.2	-19.1	26	7.2
600	31	4,257	-9.9	-23.4	26	8.5
550	31	4,923	-14.3	-27.0	26	10.0
500	31	5,639	-19.1	-30.3	26	11.3
450	31	6,415	-24.3	-35.4	26	13.1
400	31	7,264	-30.1	-40.5	26	15.1
350	31	8,205	-36.6	-43.9	27	17.0
300	31	9,253	-44.2		27	18.5
250	31	10,455	-51.8		28	20.4
200	31	11,886	-56.1		28	17.6
175	31	12,736	-55.4		28	15.6
150	31	13,722	-54.3		27	13.2
125	31	14,889	-55.4		27	10.9
100	31	16,308	-56.5		27	7.0
80	31	17,720	-57.2		27	4.7
70	30	18,569	-57.2		29	2.9
60	30	19,544	-57.0		30	1.1
50	29	20,702	-56.2		34	.8
40	29	22,125	-54.8		05	1.7
30	29	23,976	-52.3		06	1.3
25	28	25,136	-51.0		07	1.8
20	28	26,615	-49.3		06	2.1
15	26	28,506	-46.1		05	1.7
10	17	31,231	-40.9		03	2.2
7	5	33,620	-37.9			

• SWAN ISLAND, W. I. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	26.7	23.4	11	4.9
1000	31	106	26.2	22.7	11	5.6
950	31	558	22.7	20.4	12	7.5
900	31	1,028	19.8	16.2	12	7.0
850	31	1,520	17.1	10.9	13	6.7
800	31	2,036	14.7	6.7	13	5.8
750	31	2,579	12.0	.7	13	4.6
700	31	3,155	9.2	-3.9	12	4.0
650	31	3,766	6.2	-8.7	13	3.1
600	31	4,418	2.5	-12.8	13	2.3
550	31	5,116	-1.4	-17.6	11	1.2
500	31	5,870	-5.9	-22.2	10	1.0
450	31	6,687	-11.1	-26.5	33	1.0
400	31	7,581	-17.2	-30.8	31	2.8
350	31	8,572	-24.2	-37.3	30	5.3
300	31	9,674	-32.6	-44.7	30	7.8
250	31	10,933	-42.5		30	11.1
200	30	12,403	-54.0		29	13.0
175	30	13,249	-60.1		29	13.8
150	30	14,196	-66.6		28	13.2
125	30	15,284	-72.0		29	10.3
100	30	16,585	-75.5		32	5.9
80	30	17,874	-75.1		04	3.7
70	30	18,655	-71.8		07	4.6
60	30	19,575	-67.1		08	5.8
50	28	20,691	-62.5		08	7.5
40	27	22,087	-57.8		08	8.9
30	27	23,923	-52.4		09	9.7
25	26	25,111	-49.5		09	9.8
20	26	26,584	-46.3		09	9.7
15	24	28,507	-43.3		09	10.7
10	21	31,273	-39.0		09	11.4
7	14	33,744	-34.4			

TAMPA, FLA. 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	20.8	18.4	16	.8
1000	31	140	21.9	17.8	18	1.6
950	31	586	19.9	13.9	21	3.3
900	31	1,050	17.1	9.2	22	3.9
850	31	1,536	14.6	4.3	22	4.6
800	31	2,047	12.5	-2.0	24	4.3
750	31	2,586	9.5	-7.3	25	5.0
700	31	3,154	6.0	-9.8	25	5.9
650	31	3,758	2.7	-12.8	26	6.6
600	31	4,401	-1.3	-16.5	27	8.1
550	31	5,089	-5.5	-21.3	27	9.3
500	31	5,829	-10.4	-25.1	28	11.3
450	31	6,632	-16.0	-30.1	28	13.1
400	31	7,509	-22.1	-34.4	28	14.6
350	31	8,481	-28.9	-41.5	28	17.6
300	31	9,563	-37.1	-49.1	28	19.8
250	31	10,798	-46.4		28	25.2
200	31	12,247	-56.5		28	31.1
175	31	13,086	-61.0		28	33.1
150	31	14,036	-63.7		28	25.9
125	31	15,150	-65.6		29	22.0
100	31	16,498	-67.9		29	13.7
80	31	17,836	-68.6		29	6.4
70	31	18,640	-66.6		30	2.5
60	31	19,579	-63.5		03	.6
50	31	20,709	-59.7		07	4.3
40	30	22,116	-56.7		08	7.1
30	29	23,960	-51.3		09	7.5
25	29	25,152	-48.6		09	7.8
20	29	26,630	-45.4		09	6.9
15	25	28,555	-42.8		09	6.8
10	19	31,315	-38.3		08	7.4
7						

TOPEKA, KANS. 980 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	268	11.2	8.3	25	1.5
1000						
950	31	526	13.9	5.0	27	3.5
900	31	982	12.5	2.3	27	4.9
850	31	1,459	9.8	-.2	28	6.2
800	31	1,960	6.9	-3.9	29	7.8
750	31	2,488	4.0	-8.4	30	9.1
700	31	3,045	.3	-11.2	30	10.3
650	31	3,636	-3.2	-14.6	30	11.2
600	30	4,264	-7.2	-19.4	30	11.7
550	30	4,936	-11.6	-24.3	30	12.9
500	30	5,660	-16.5	-29.9	29	14.7
450	30	6,444	-21.9	-34.1	29	16.4
400	30	7,301	-27.9	-40.2	29	18.0
350	30	8,249	-34.9	-45.5	29	19.5
300	29	9,305	-42.8		29	20.9
250	29	10,513	-50.8		29	23.4
200	29	11,946	-56.4		28	23.7
175	29	12,792	-56.4		28	22.6
150	29	13,775	-55.3		28	20.1
125	29	14,935	-56.6		29	16.3
100	29	16,343	-58.6		29	10.8
80	29	17,741	-59.6		29	7.1
70	29	18,575	-59.8		30	4.3
60	29	19,541	-58.8		33	2.4
50	28	20,689	-57.2		02	1.2
40	28	22,105	-55.6		07	1.6
30	28	23,952	-52.4		07	2.1
25	26	25,135	-50.3		03	1.3
20	25	26,599	-48.3		01	.9
15	20	28,513	-45.4		03	.7
10	14	31,240	-39.8		31	1.1
7						

TRUK, CAROLINE IS. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	2	28.5	24.9	06	3.5
1000	31	103	27.3	24.6	07	4.1
950	31	557	23.6	22.1	09	7.2
900	31	1,029	20.9	18.3	09	7.6
850	31	1,522	17.8	15.2	09	7.4
800	31	2,041	15.4	12.1	09	7.4
750	31	2,587	13.1	7.6	09	7.0
700	31	3,166	10.1	4.3	09	6.5
650	31	3,779	6.6	1.0	09	6.0
600	31	4,433	3.0	-3.1	09	5.2
550	31	5,134	-.7	-8.2	09	3.7
500	31	5,890	-5.0	-13.6	09	3.3
450	31	6,712	-9.5	-19.8	09	2.1
400	31	7,613	-14.9	-26.1	02	.6
350	31	8,614	-21.7	-33.3	26	2.3
300	31	9,727	-30.1	-41.0	26	5.1
250	30	10,998	-40.4	-49.8	26	7.4
200	30	12,478	-53.0		25	9.9
175	30	13,325	-60.2		26	10.8
150	30	14,269	-67.8		26	11.7
125	29	15,346	-75.1		27	10.0
100	29	16,625	-78.4		28	3.9
80	29	17,900	-76.3		04	.8
70	29	18,678	-72.1		08	2.3
60	29	19,595	-67.7		09	2.5
50	29	20,703	-63.2		21	.8
40	29	22,092	-58.6		28	2.0
30	29	23,922	-53.1		28	2.2
25	29	25,107	-50.1		26	1.9
20	26	26,578	-46.7		18	.7
15	21	28,494	-44.0		11	3.1
10	12	31,258	-39.7		10	9.7
7						

• TUCSON, ARIZ. 923 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	789	15.9	1.6	14	2.9
1000						
950						
900	31	1,005	20.5	1.1	15	3.1
850	31	1,497	18.1	-1.1	16	1.5
800	31	2,012	14.3	-3.5	24	.9
750	31	2,552	10.0	-5.9	24	1.8
700	31	3,121	6.0	-9.4	23	2.5
650	31	3,724	1.7	-12.5	23	3.0
600	31	4,363	-2.9	-16.7	24	4.2
550	31	5,047	-7.1	-22.4	25	5.8
500	31	5,783	-12.3	-29.0	26	7.3
450	29	6,576	-18.5	-33.9	25	8.1
400	28	7,451	-25.0	-39.7	25	9.6
350	28	8,410	-32.5	-45.1	25	11.1
300	28	9,475	-40.7	-51.2	25	14.1
250	29	10,692	-49.8		25	19.0
200	27	12,124	-57.6		25	23.1
175	27	12,963	-59.4		26	22.2
150	27	13,927	-59.7		26	20.5
125	27	15,060	-62.6		26	17.0
100	25	16,430	-65.3		26	12.7
80	25	17,782	-66.7		26	6.8
70	25	18,592	-65.4		27	3.5
60	24	19,538	-63.5		01	.8
50	23	20,667	-59.9		07	2.2
40	22	22,071	-56.8		08	2.7
30	20	23,909	-52.3		07	4.0
25	19	25,099	-50.3		08	3.6
20	19	26,565	-47.7		08	2.1
15	18	28,479	-43.9		07	.7
10	17	31,226	-39.5		01	.9
7	14	33,692	-35.2			
5						
4						

• VANDENBERG AFB, CALIF. 1004 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	100	10.8	9.5	33	1.4
1000	26	157	10.2	9.1	34	2.0
950	30	560	12.3	6.6	36	3.7
900	30	1,017	15.8	-.9	01	4.2
850	30	1,501	15.1	-4.0	36	3.7
800	30	2,012	12.4	-6.5	35	3.8
750	30	2,550	9.4	-9.3	34	3.6
700	30	3,117	5.6	-11.6	32	3.3
650	30	3,719	1.6	-15.1	31	3.4
600	30	4,358	-2.8	-18.2	31	4.0
550	30	5,041	-7.8	-22.8	30	4.5
500	30	5,775	-13.2	-28.4	30	5.0
450	30	6,569	-18.8	-34.2	30	6.1
400	30	7,435	-25.6	-40.2	29	6.6
350	30	8,391	-33.1	-46.3	29	6.5
300	30	9,453	-41.7		30	6.7
250	30	10,664	-51.0		29	8.4
200	30	12,089	-58.5		28	10.9
175	30	12,926	-59.8		28	10.6
150	30	13,889	-59.7		27	11.4
125	30	15,024	-61.5		26	9.8
100	30	16,399	-64.1		26	8.2
80	30	17,761	-65.0		27	4.2
70	30	18,577	-64.2		26	2.6
60	30	19,525	-62.2		30	.6
50	29	20,656	[illegible]		11	.6
40	29	22,056	-58.0		08	2.6
30	29	23,906	-53.9		07	2.6
25	29	25,064	-51.6		07	3.0
20	29	26,522	-48.7		06	1.8
15	27	28,421	-45.8		29	1.5
10	26	31,148	-41.6		28	3.4
7	21	33,569	-37.8		30	4.5
5	5	35,498	-33.7			
4						

VICTORIA, TEXAS 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	33	19.0	16.9	06	.3
1000	29	115	20.8	16.2	11	.7
950	31	552	19.4	13.6	17	3.5
900	31	1,016	18.0	6.9	19	4.2
850	31	1,565	16.7	2.7	20	3.7
800	31	2,020	14.9	-1.9	25	3.5
750	31	2,563	11.7	-4.8	27	4.1
700	31	3,135	7.7	-8.9	28	5.4
650	31	3,742	3.7	-12.0	28	6.5
600	31	4,386	-.8	-15.6	28	8.9
550	31	5,075	-5.6	-21.0	28	10.3
500	30	5,816	-10.6	-27.4	27	12.6
450	30	6,619	-16.0	-32.3	27	15.1
400	30	7,495	-22.3	-36.3	27	18.0
350	30	8,465	-29.4	-42.4	27	21.0
300	30	9,543	-38.0	-48.5	27	24.5
250	30	10,773	-47.5		27	29.7
200	30	12,216	-57.0		27	35.1
175	30	13,055	-60.5		27	35.5
150	30	14,010	-62.6		27	30.6
125	29	15,130	-65.1		28	24.7
100	29	16,475	-69.1		28	16.8
80	29	17,804	-70.2		28	9.0
70	29	18,602	-68.3		30	3.3
60	29	19,536	-64.1		04	1.3
50	27	20,660	-60.6		10	2.5
40	26	22,059	-57.5		08	5.1
30	26	23,897	-52.4		09	5.6
25	25	25,084	-49.4		09	5.8
20	25	26,554	-46.8		09	5.6
15	20	28,475	-43.6		08	4.5
10	14	31,227	-38.6		05	2.7
7						
5						
4						

• WAKE IS., PACIFIC AREA 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	26.2	22.6	09	5.7
1000	31	147	25.0	21.2	09	6.9
950	31	597	21.2	19.3	09	8.4
900	31	1,064	18.0	15.2	10	8.0
850	31	1,552	15.1	9.6	10	7.6
800	31	2,065	12.6	4.5	10	6.5
750	31	2,605	10.2	-.8	09	5.8
700	31	3,176	7.6	-8.4	09	4.6
650	31	3,784	5.1	-11.9	08	4.3
600	31	4,433	1.6	-15.9	07	3.1
550	31	5,129	-2.4	-19.0	06	2.8
500	31	5,879	-7.2	-23.4	03	2.8
450	31	6,692	-12.4	-28.5	01	3.0
400	31	7,581	-18.8	-34.7	36	4.2
350	31	8,565	-25.7	-41.6	35	5.7
300	31	9,661	-34.0	-48.7	32	6.7
250	28	10,907	-44.0		30	9.0
200	28	12,367	-55.6		29	11.1
175	28	13,207	-61.1		29	12.4
150	28	14,151	-66.9		29	12.6
125	28	15,238	-72.0		30	9.2
100	27	16,543	-75.0		33	4.2
80	27	17,842	-73.0		02	1.8
70	26	18,631	-69.4		06	2.9
60	26	19,560	-66.0		08	5.3
50	26	20,675	-62.6		08	7.8
40	26	22,062	-59.6		09	9.5
30	26	23,887	-53.1		09	10.4
25	26	25,072	-49.6		08	11.8
20	25	26,540	-46.5		09	13.0
15	24	28,461	-44.2		09	12.9
10	20	31,216	-39.1		09	13.8
7	17	33,681	-35.8		09	14.8
5	9	36,049	-32.2			
4	[illegible]	37,623	-31.0			

• WALLOPS IS., VA. NASA 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	14.2	11.7	19	1.2
1000	31	114	15.0	9.6	23	2.0
950	31	549	13.7	6.8	25	5.4
900	31	1,003	11.3	4.0	26	6.7
850	31	1,478	8.2	1.8	26	7.6
800	31	1,977	5.1	-.9	26	9.0
750	31	2,501	2.4	-5.8	26	11.0
700	31	3,056	-.6	-10.1	26	13.6
650	31	3,645	-4.0	-13.3	26	15.1
600	31	4,273	-7.1	-18.0	26	17.0
550	31	4,947	-11.1	-22.1	26	18.5
500	31	5,672	-15.6	-27.4	26	19.7
450	31	6,460	-20.8	-33.2	25	21.1
400	31	7,320	-26.9	-39.3	25	22.1
350	31	8,273	-33.8	-45.1	26	24.1
300	31	9,332	-42.1	-47.1	25	26.0
250	31	10,562	-50.9		26	27.5
200	31	11,969	-57.9		27	27.2
175	30	12,813	-59.1		26	23.4
150	30	13,781	-58.4		26	19.7
125	30	14,928	-58.9		26	16.7
100	30	16,323	-60.0		27	11.2
80	30	17,713	-60.4		26	6.6
70	30	18,547	-59.7		26	4.6
60	29	19,510	-59.2		27	2.2
50	29	20,654	-58.6		30	.7
40	29	22,064	-56.3		09	1.2
30	29	23,907	-52.4		09	1.4
25	28	25,089	-50.6		10	.2
20	27	26,550	-48.0		29	.8
15	26	28,463	-45.0		28	2.8
10	23	31,204	-39.7		27	3.7
7	15	33,653	-35.6			
5	5	36,038	-30.6			
4						

† See reference note at end of table

RAWINSONDE DATA

Average monthly values

WASHINGTON DULLES INT. AP
1003 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	85	11.1	8.6	19	.7
1000	21	135	11.2	6.5	23	1.2
950	31	542	12.7	6.1	24	4.0
900	31	995	10.4	4.3	26	5.6
850	31	1,469	7.8	2.2	27	7.5
800	31	1,967	4.7	-.9	27	8.4
750	31	2,491	1.7	-4.9	26	9.9
700	31	3,044	-1.3	-9.5	26	12.2
650	31	3,632	-4.5	-12.3	26	13.7
600	31	4,259	-7.7	-17.2	26	15.8
550	31	4,931	-11.6	-23.5	26	17.3
500	31	5,655	-16.2	-28.0	26	19.0
450	31	6,441	-21.3	-32.7	26	20.3
400	31	7,300	-27.3	-38.7	26	21.8
350	31	8,250	-34.5	-44.4	26	24.0
300	31	9,307	-42.3	-47.1	26	25.4
250	31	10,519	-50.1		26	28.6
200	29	11,960	-55.8		27	27.1
175	29	12,808	-56.5		27	23.5
150	29	13,788	-56.2		26	18.6
125	29	14,945	-57.2		26	15.6
100	29	16,353	-55.3		27	10.4
80	29	17,754	-59.0		27	5.6
70	29	18,593	-55.6		27	3.7
60	28	19,563	-58.2		28	2.1
50	28	20,713	-57.6		06	.4
40	28	22,128	-55.6		09	1.1
30	27	23,977	-52.0		07	1.6
25	27	25,163	-50.3		07	1.0
20	26	26,630	-47.5		04	.4
15	22	28,548	-44.3		27	1.1
10	11	31,301	-38.8			

WAYCROSS, GA.
10.0 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	44	16.9	15.2	22	.8
1000	31	129	18.3	14.1	24	1.2
950	31	571	18.6	11.3	26	3.9
900	31	1,034	16.2	7.5	25	6.0
850	31	1,518	13.4	2.0	25	7.4
800	31	2,026	11.0	-1.8	26	8.2
750	31	2,562	8.2	-7.6	26	9.1
700	31	3,129	5.0	-11.3	26	9.8
650	31	3,729	1.3	-14.1	26	10.6
600	31	4,369	-2.6	-17.3	26	11.4
550	31	5,054	-6.8	-21.2	27	11.9
500	31	5,791	-11.5	-25.3	27	13.7
450	30	6,589	-17.0	-30.2	27	14.6
400	30	7,462	-23.1	-35.9	27	16.6
350	30	8,430	-29.9	-42.5	27	17.6
300	30	9,506	-38.5	-48.9	27	20.0
250	30	10,734	-48.0		27	24.5
200	30	12,173	-57.7		28	28.1
175	29	13,008	-60.5		28	30.0
150	28	13,964	-62.1		28	25.1
125	28	15,090	-62.6		28	20.9
100	27	16,461	-65.1		28	15.7
80	27	17,818	-65.5		28	8.0
70	27	18,632	-64.5		28	4.9
60	26	19,582	-62.0		34	.7
50	26	20,717	-59.2		06	2.8
40	23	22,125	-55.9		09	4.4
30	17	23,976	-51.5		09	4.5
25	17	25,167	-48.8		08	4.5
20	17	26,643	-46.0		11	3.0
15	16	28,574	-43.0		08	1.8
10	13	31,339	-38.1			

WINNEMUCCA, NEV.
870 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,312	7.7	.1	15	.3
1000						
950						
900						
850	31	1,510	12.6	-1.0	02	.6
800	31	2,017	10.3	-3.2	29	1.2
750	31	2,551	6.6	-5.8	27	2.9
700	31	3,112	2.3	-8.3	26	4.4
650	31	3,707	-2.0	[illegible]	26	6.1
600	30	4,338	-6.4	-13.7	26	7.6
550	30	5,012	-11.2	-19.7	26	8.4
500	31	5,738	-15.7	-25.8	27	9.5
450	30	6,525	-21.0	-31.8	27	10.2
400	29	7,383	-27.7	-37.8	28	10.4
350	29	8,332	-34.8	-44.0	28	11.3
300	29	9,386	-43.3		28	8.8
250	29	10,589	-52.4		28	10.5
200	29	12,007	-59.6		28	10.6
175	28	12,844	-60.2		28	11.3
150	28	13,809	-58.8		28	10.0
125	27	14,959	-59.1		27	8.0
100	26	16,349	-61.3		28	7.1
80	24	17,729	-61.3		28	3.1
70	24	18,559	-60.8		29	1.5
60	24	19,519	-60.1		30	.6
50	24	20,661	-58.4		04	1.2
40	23	22,073	-56.5		08	1.5
30	22	23,910	-54.3		07	1.7
25	21	25,083	-52.3		08	2.5
20	21	26,537	-49.1		04	2.1
15	19	28,443	-46.1		04	2.9
10						

WINSLOW, ARIZ.
851 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,487	9.1	1.0	21	1.2
1000						
950						
900						
850	21	1,520	11.1	-.5	22	.9
800	31	2,010	13.2	-2.4	28	1.9
750	31	2,550	9.9	-5.1	28	3.6
700	31	3,118	5.3	-7.2	26	4.1
650	31	3,719	1.0	-9.6	26	4.5
600	31	4,357	-3.4	-14.3	27	5.6
550	31	5,039	-8.5	-19.7	27	6.8
500	31	5,771	-13.8	-27.0	28	7.3
450	31	6,563	-19.5	-32.2	28	8.4
400	31	7,427	-25.9	-38.9	28	9.3
350	31	8,383	-32.9	-45.2	28	10.9
300	31	9,446	-41.3	-51.5	28	12.1
250	31	10,659	-50.6		27	14.5
200	31	12,087	-58.0		27	17.0
175	31	12,926	-58.9		27	17.1
150	31	13,895	-58.8		27	16.4
125	29	15,033	-61.0		27	15.3
100	29	16,408	-64.1		27	11.2
80	26	17,766	-64.3		27	6.8
70	25	18,584	-63.5		28	4.2
60	24	19,533	-62.5		29	1.6
50	23	20,664	-59.8		03	1.1
40	20	22,074	-57.2		08	3.0
30	15	23,899	-53.5		06	2.1
25	14	25,076	-51.1		07	2.2
20	13	26,539	-48.6		18	.8
15	9	28,462	-44.7			
10						

YAKUTAT, ALASKA
1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	25	12	4.7	3.3	[illegible]	2.1
1000	22	123	5.3	3.4	[illegible]	[illegible]
950	25	520	3.1	1.0	[illegible]	5.9
900	25	956	.0	-1.4	14	[illegible]
850	25	[illegible]	-3.1	-5.3	14	7.6
800	25	1,869	-6.0	-8.5	19	[illegible]
750	25	2,392	-8.9	-13.0	18	[illegible]
700	25	2,923	-12.2	-17.0	[illegible]	[illegible]
650	25	3,487	-15.6	-20.7	[illegible]	[illegible]
600	25	[illegible]	-19.2	-25.1	16	[illegible]
550	25	4,728	-23.4	-29.6	[illegible]	[illegible]
500	25	5,419	-27.7	-35.0	[illegible]	[illegible]
450	25	6,170	-32.7	-39.6	17	[illegible]
400	25	6,989	-38.8	-42.5	17	[illegible]
350	25	7,895	[illegible]		17	[illegible]
300	25	[illegible]	-49.5		18	[illegible]
250	25	[illegible]	[illegible]		19	[illegible]
200	25	11,574	-46.9		18	[illegible]
175	25	12,460	-46.8		19	[illegible]
150	25	[illegible]	-47.7		19	[illegible]
125	25	[illegible]	-48.5		19	[illegible]
100	25	[illegible]	-49.1		18	5.5
80	18	17,584	-49.6		17	[illegible]
70	18	18,458	-50.2		17	[illegible]
60	18	19,463	-50.7		17	3.4
50	17	[illegible]	-51.2		18	[illegible]
40	15	22,108	-51.1		13	2.3
30	15	23,980	-51.0		[illegible]	1.7
25	15	25,169	-50.1		09	1.7
20	15	26,631	-48.9		11	1.8
15	14	28,551	-45.8		09	2.9
10	9	31,368	-40.5			

YAP, CAROLINE IS. °
1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	14	28.8	23.5	09	4.0
1000	31	96	27.1	24.2	08	4.9
950	31	549	23.7	21.5	08	7.0
900	31	1,021	20.8	17.7	09	7.5
850	31	1,515	17.8	14.2	09	6.6
800	31	2,033	15.6	10.3	09	5.8
750	31	2,579	12.9	5.3	09	5.5
700	31	3,157	9.9	.9	09	5.1
650	31	3,770	6.8	-4.5	10	4.9
600	31	4,423	3.2	-8.1	10	4.6
550	31	5,124	-.6	-13.8	09	4.5
500	31	5,880	-4.9	-19.2	07	3.3
450	31	6,701	-9.7	-22.7	08	2.3
400	31	7,601	-15.5	-30.3	07	1.4
350	31	8,598	-22.3	-35.2	29	.7
300	31	9,710	-30.5	-43.2	25	3.1
250	31	10,979	-40.7	-51.7	24	5.1
200	31	12,457	-53.3		25	7.1
175	31	13,304	-60.0		26	8.0
150	31	14,249	-67.6		28	7.4
125	30	15,328	-74.2		32	4.6
100	30	16,611	-78.6		04	5.8
80	30	17,884	-76.8		07	5.3
70	30	18,660	-72.3		07	4.5
60	29	19,575	-68.2		08	5.7
50	29	20,683	-63.6		08	5.0
40	29	22,066	-59.1		07	3.3
30	27	23,901	-53.5		10	2.1
25	26	25,083	-50.5		11	2.5
20	26	26,551	-47.1		11	4.9
15	20	28,465	-44.1		10	8.2
10	13	31,201	-40.2			

YUCCA FLAT, NEV.
880 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,198	9.7	2.7	34	.8
1000						
950						
900						
850	31	1,490	16.8	-.9	33	1.4
800	31	2,004	13.9	-4.1	24	1.1
750	31	2,544	9.7	-6.5	24	1.9
700	31	3,111	5.1	-9.2	23	1.7
650	31	3,711	.4	-11.1	23	1.4
600	31	4,348	-3.8	-15.7	27	1.7
550	31	5,029	-8.6	-21.1	28	3.2
500	31	5,761	-13.8	-27.1	28	4.9
450	31	6,552	-19.6	-32.2	28	6.0
400	31	7,416	-26.1	-39.0	27	6.8
350	31	8,371	-33.5	-45.3	27	7.4
300	31	9,431	-42.0	-50.3	28	8.1
250	31	10,640	-51.3		28	8.3
200	30	12,068	-59.0		28	10.3
175	30	12,903	-59.4		27	11.0
150	29	13,869	-59.2		27	12.4
125	29	15,008	-60.8		27	10.4
100	29	16,388	-62.9		27	8.3
80	29	17,758	-64.0		27	5.0
70	28	18,579	-62.9		28	3.3
60	28	19,532	-61.6		31	1.6
50	28	20,668	-59.5		05	.4
40	28	22,073	-56.9		08	1.9
30	28	23,909	-53.7		06	2.5
25	27	25,084	-51.8		06	2.0
20	27	26,540	-49.2		05	1.6
15	20	28,431	-45.9		30	1.2
10	5	31,164	-42.2			

[illegible] record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dy- [illegible] temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon. The temperature and wind values are based on 15 or more observations at [illegible] and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon [illegible]

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

° Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G.C.T.

† Dew Point temperatures are [illegible] 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun. MAY 1973

ALBUQUERQUE, N. MEX.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.10	3.35	2.51	1.67	*	1.67	2.51	3.35	4.10
May									
1-----	----	----	----	----	----	(1.14)	----	----	----
2-----	0.80	[illegible]	1.04	1.21	1.41	1.20	1.07	0.95	0.83
3-----	.76	.88	1.06	1.20	1.42	1.20	1.01	.86	.78
4-----	.79	.89	1.02	1.18	1.38	----	----	----	---
5-----	----	----	----	----	----	----	----	----	.80
7-----	.77	[illegible]	1.02	1.11	----	1.16	1.00	.85	.71
8-----	.72	.84	.97	1.13	1.31	(1.11)	----	----	----
9-----	----	----	1.03	1.18	(1.37)	(1.14)	.99	(.83)	(.71)
10----	.84	.95	1.06	1.22	1.39	1.15	.98	.83	.68
11----	.78	.88	.98	1.15	1.36	1.12	.77	----	---
12----	.62	.72	----	1.00	1.15	----	----	----	----
15----	.88	.98	1.08	1.21	1.40	1.22	1.09	.97	.86
16----	.82	.93	1.04	1.15	1.36	----	----	----	----
17----	.77	.87	.99	1.15	1.33	----	----	----	----
18----	.69	(.73)	(.85)	1.13	1.35	1.16	.98	.84	.74
19----	.78	.87	1.00	1.15	1.33	----	----	----	----
20----	----	----	.70	.90	(1.15)	----	----	----	----
21----	.56	.72	.86	1.01	1.22	----	----	----	----
22----	.66	.76	.90	1.06	(1.32)	----	1.04	----	----
23----	.84	.89	1.03	1.16	(1.37)	----	----	----	----
24----	.82	.91	1.04	1.18	1.34	1.12	----	----	----
25----	.83	.92	1.05	1.19	----	----	----	----	----
26----	----	----	----	----	----	1.13	1.00	.86	.78
27----	.95	1.02	1.13	1.25	1.40	1.12	.98	.87	.78
28----	.95	1.01	1.12	1.25	1.38	1.35	1.32	1.28	.88
29----	.92	.99	1.09	1.19	----	----	----	----	----
30----	.77	.85	----	1.10	----	----	----	----	----
Averages	0.77	0.88	1.01	1.15	1.35	1.17	1.02	0.92	0.79

TUCSON, ARIZ.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
May									
1-----	0.75	0.87	1.00	1.18	1.38	1.15	0.95	0.80	0.68
2-----	.78	.89	1.02	1.17	1.44	1.20	1.00	.85	.71
3-----	.81	.91	1.04	1.20	1.41	1.20	1.06	.91	.81
4-----	.88	1.00	1.11	1.27	---	----	----	----	----
5-----	----	----	----	----	----	1.20	1.03	.89	.78
6-----	.63	.80	.95	1.17	1.36	1.06	.87	.75	.67
7-----	.72	.82	.95	1.14	1.38	1.13	.96	.83	.72
8-----	----	----	.95	1.09	1.36	1.11	.94	.81	.72
9-----	.78	.89	1.01	1.17	1.40	1.14	.96	.83	.72
10----	.79	.90	1.03	1.19	1.40	1.15	.97	.84	.74
11----	.66	.76	.88	1.06	1.33	1.03	.85	.71	.59
12----	.77	.89	1.03	1.21	----	----	----	----	----
13----	.68	.78	.91	1.09	----	----	.86	.76	.68
14----	----	----	.98	1.17	1.39	----	----	----	----
15----	.73	.81	.95	1.13	1.35	----	----	----	----
16----	.66	.76	.87	1.08	1.36	----	----	----	----
17----	.70	.79	.95	1.10	1.36	----	----	----	----
18----	----	----	----	----	1.32	----	----	----	----
19----	.58	.68	.81	1.00	1.26	----	----	----	----
20----	----	.72	.83	1.06	1.36	1.10	.92	.79	.70
21----	.62	.76	.93	1.11	1.41	1.17	----	----	----
22----	.71	.81	.93	1.09	1.30	----	----	----	----
23----	.72	.83	.96	1.15	1.37	1.19	1.03	.86	.76
24----	.81	.92	1.04	1.20	1.37	1.18	1.00	.89	.78
25----	.83	.94	1.06	1.22	----	----	----	----	----
26----	.88	.97	1.08	1.23	1.42	1.20	1.04	.92	.81
27----	.65	.76	.91	1.14	1.40	1.20	1.04	.89	.78
28----	.84	.95	1.06	1.19	1.44	----	----	----	----
29----	----	----	1.04	1.20	----	----	----	----	.74
30----	----	----	.98	1.10	----	----	.92	.80	.70
Averages	0.74	0.84	0.97	1.15	1.38	1.15	0.96	0.83	0.73

OMAHA, NEBR.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
			NO DATA RECEIVED						

MADISON, WIS.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
May									
4-----	0.83	0.93	1.05	1.21	1.40	1.20	1.01	0.81	0.70
11----	S .65	S .79	S .90	S .99	----	----	----	----	----
15----	S .83	S .92	S 1.06	S 1.19	----	----	----	----	----
17----	S .82	S .92	S 1.03	S 1.25	----	----	----	----	----
20----	H .32	H .40	H .51	H .73	----	----	H .55	H .39	----
Averages	0.56	0.79	0.91	1.07	1.40	1.20	0.78	0.60	0.70

( ) Clouds Present
* Values corresponding to true solar noon
BD Blowing Dust
BN Blowing Sand
D Dust
DI Intense Dust
DM Moderate Dust
DS Slight Dust
F Fog
GF Ground Fog
H Haze

HI Intense Haze
HM Moderate Haze
HS Slight
I Intense Haze-indeterminable
K Smoke
KI Intense Smoke
KM Moderate Smoke
KS Slight Smoke
M Moderate Haze-indeterminable
N Sand
S Slight Haze-indeterminable

Langley is the unit used to denote one gram calorie per square centimeter. An Explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

NET RADIATION

MAY 1973

Net radiation in langleys (8 a.m. to 8 a.m.) at Palmer, Alaska.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	111	176	218	159	160	190	216	181	197	224	208	147	259	222	162	53	208	182	260	223	199	252	246	107	139	207	212	240	190	221	246	194

The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (< 3900 Å) at Ames, Iowa.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .														NO DATA RECEIVED																		

These data are from an U-V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder.

This instrument has not been checked by the NOAA, National Weather Service.

TOTAL OZONE DATA

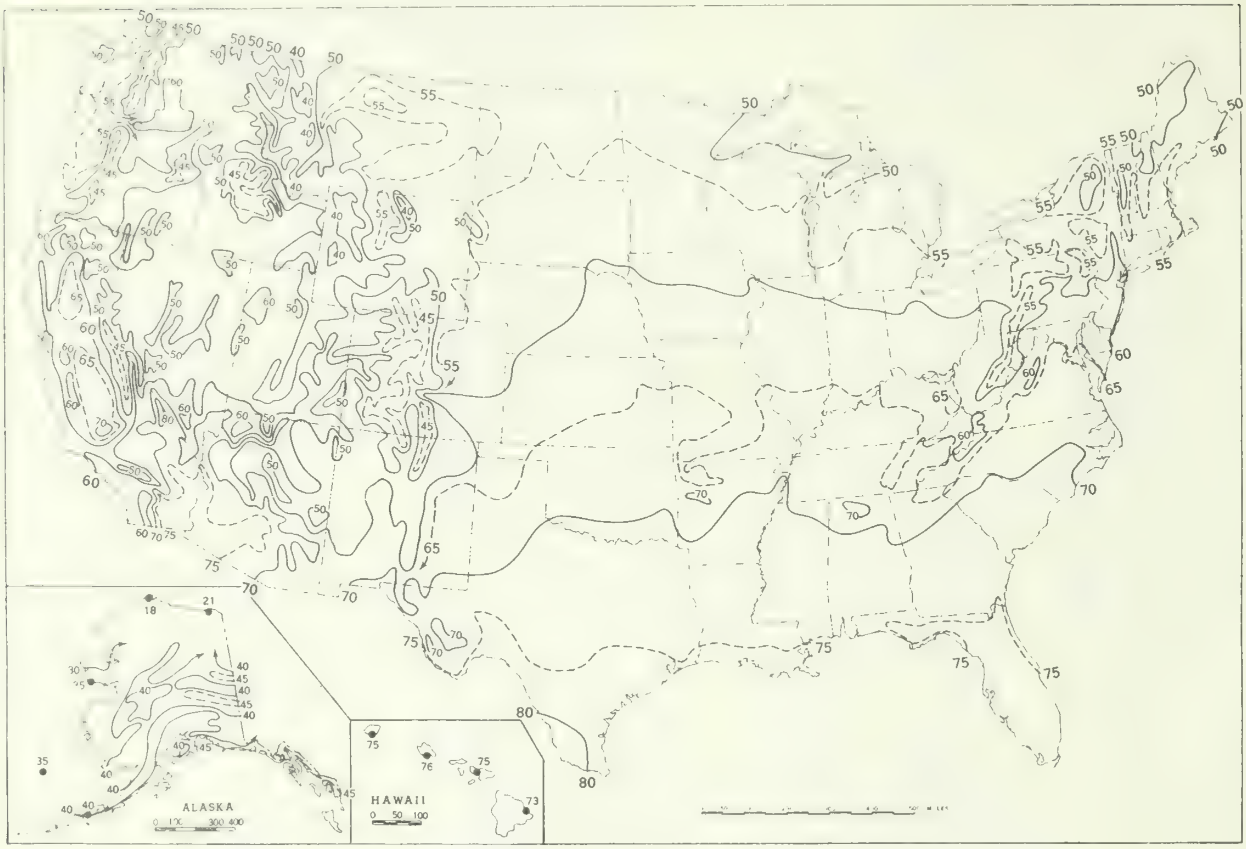
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code XS Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units Milli-atmo-cms.

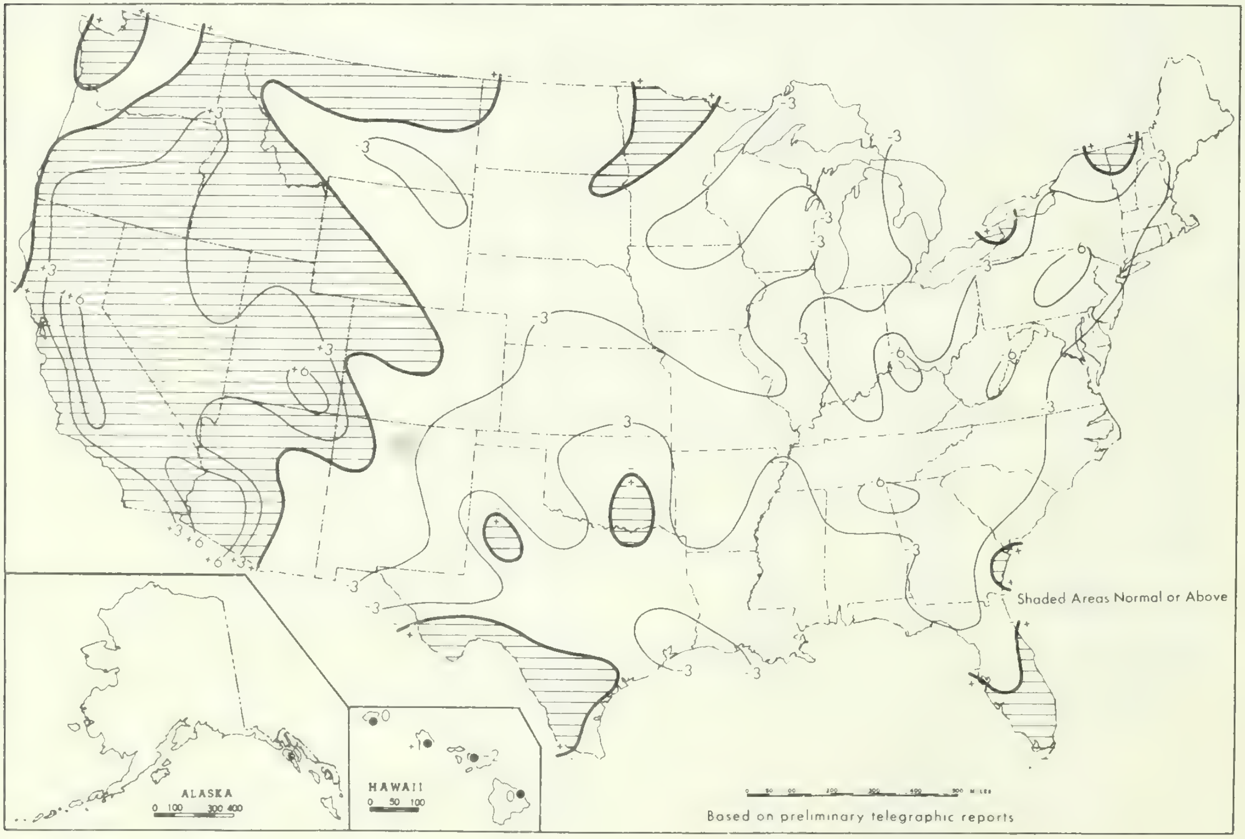
Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O3
														NO DATA RECEIVED																		

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column [illegible] extending [illegible] ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this [illegible] is expressed in terms of the thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code XS designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), May.


50
55
60
65
70
75
80
ALASKA
0 100 300 400
18
21
30
35
40
45
HAWAII
0 50 100
75
76
73

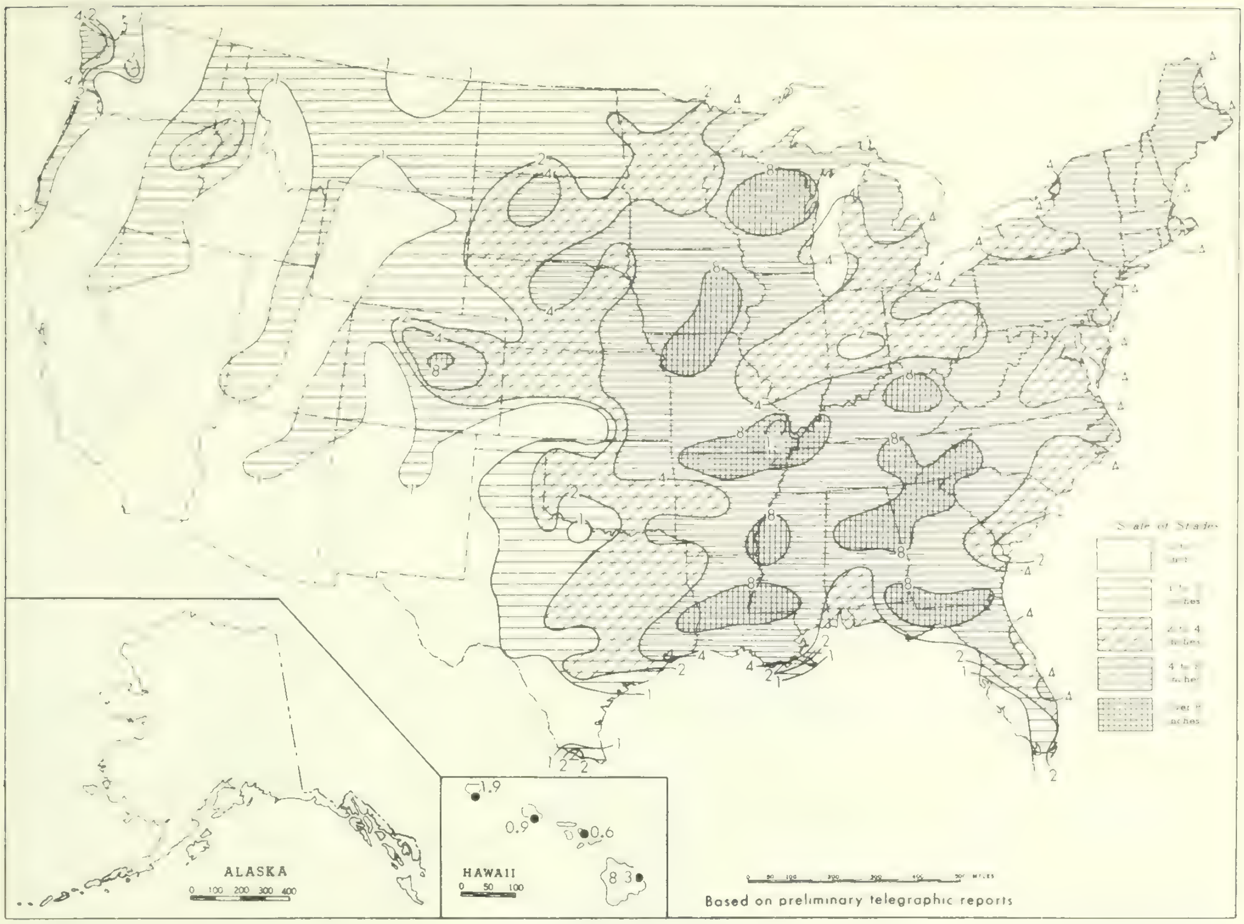
B. Temperature Departure from 30 - Year Mean (°F 1931-60), May 1973


+
-3
-6
+3
+6
ALASKA
0 100 300 400
HAWAII
0 50 100
0
+1
-2

Shaded Areas Normal or Above

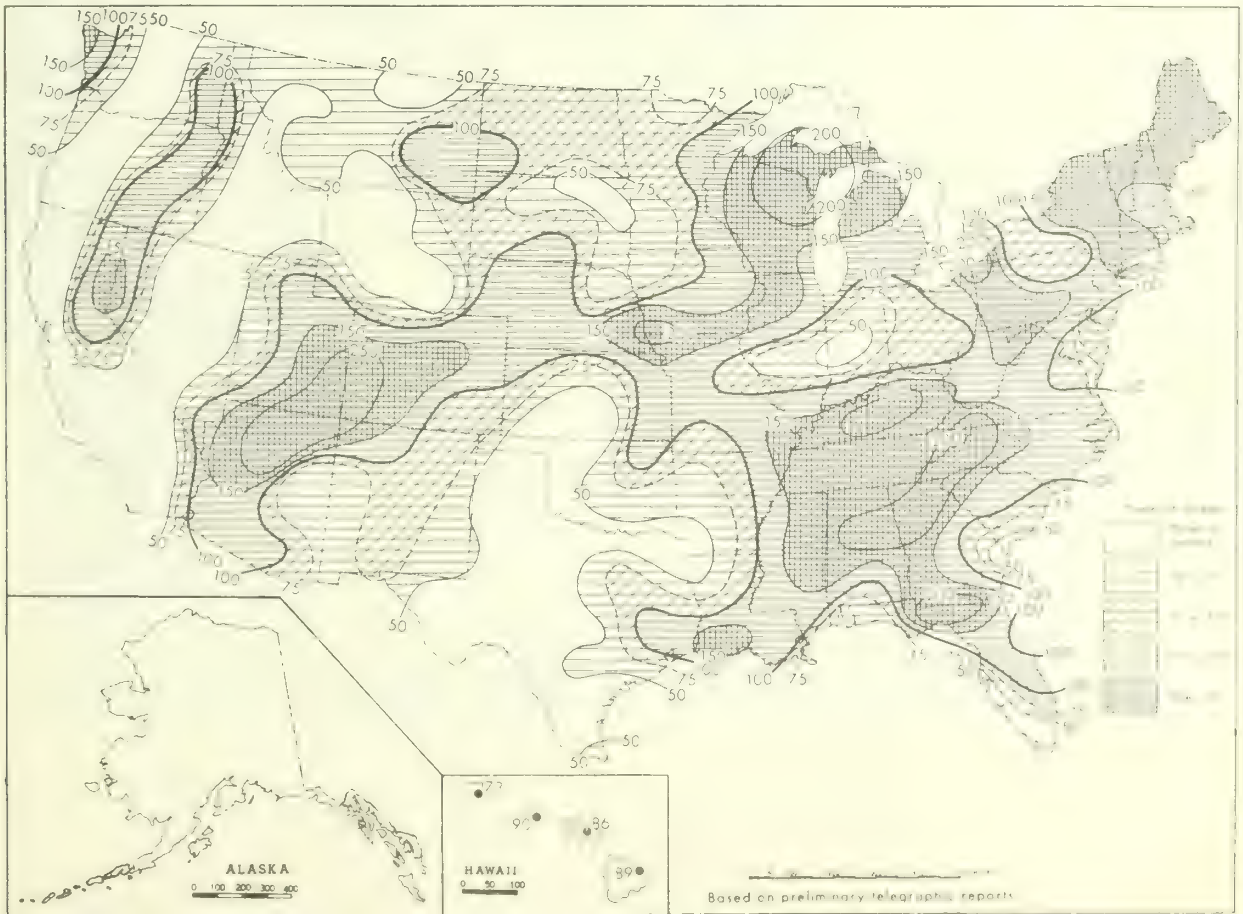
Based on preliminary telegraphic reports

Chart II. A. Total Precipitation (Inches), May 1973


Scale of Shades
Under 1 inch
1 to 2 inches
2 to 4 inches
4 to 8 inches
Over 8 inches
ALASKA
0 100 200 300 400
HAWAII
0 50 100
1.9
0.9
0.6
8.3
0 50 100 200 300 400 500 MILES

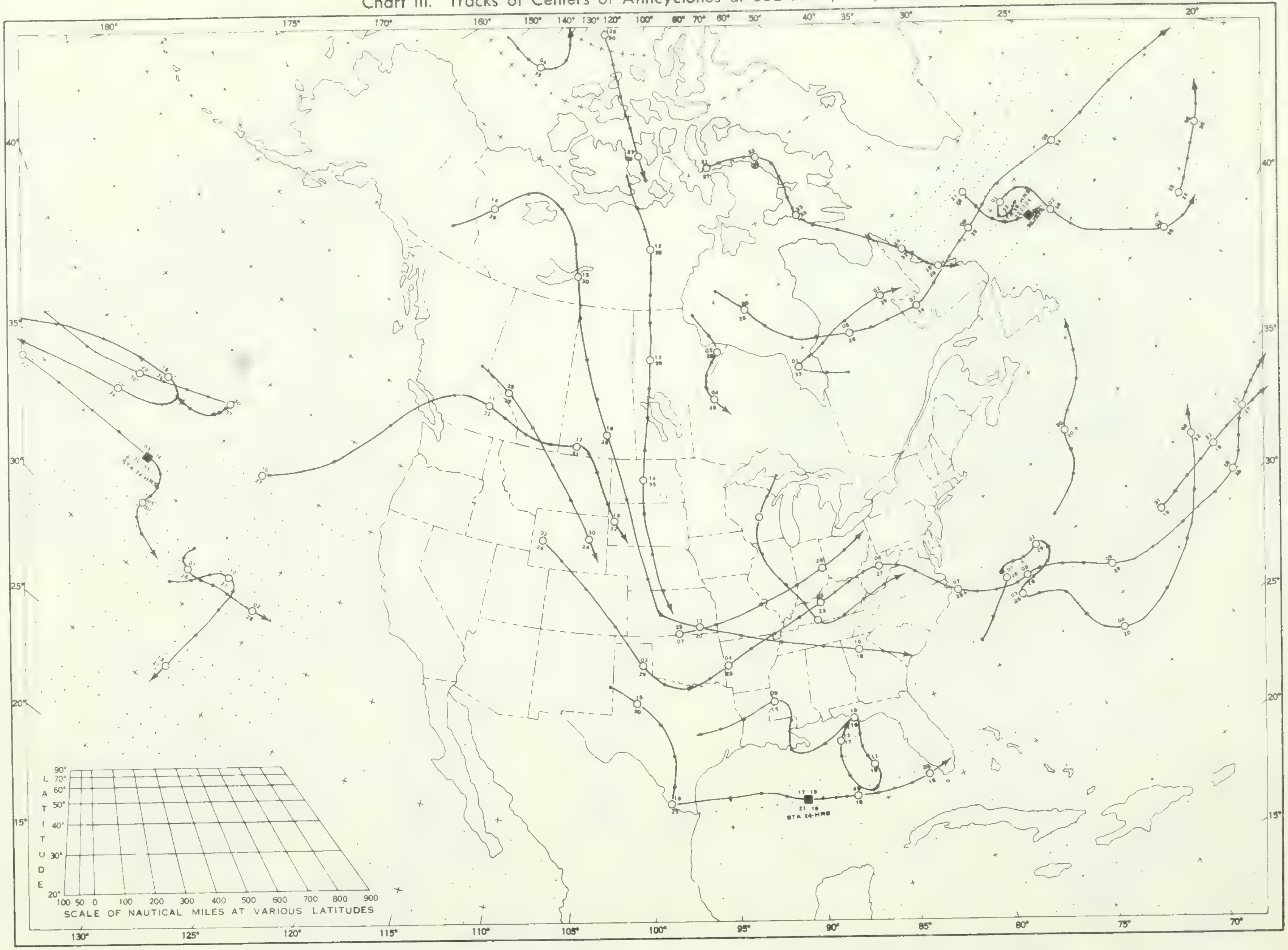
Based on preliminary telegraphic reports

B. Percentage of Normal Precipitation, May 1973


ALASKA
0 100 200 300 400
HAWAII
0 50 100
173
90
86
89

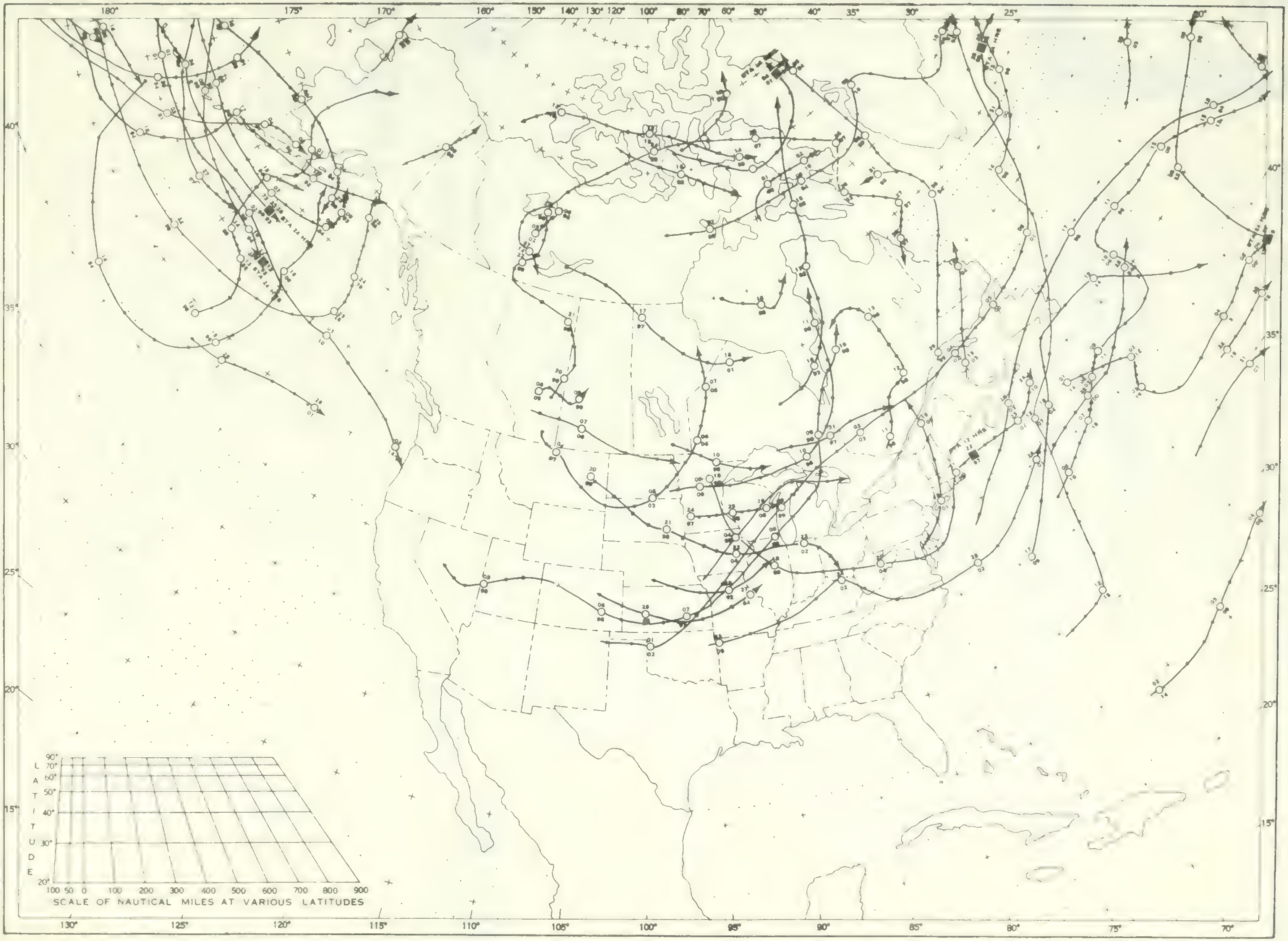
Based on preliminary telegraphic reports

Chart III. Tracks of Centers of Anticyclones at Sea Level, May 1973


STA 24 HRS
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES
180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, May 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES
12 HRS
STA 24 HRS

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

JUNE
1973
Volume 24
No. 6
Asheville, N.C.

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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

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I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina, 28801.

William H. Haggard
Director, National Climatic Center

CLIMATOLOGICAL DATA

NATIONAL SUMMARY
JUNE 1973

GENERAL SUMMARY OF WEATHER CONDITIONS
Dr. Richard E. Felch, Climatologist

HIGHLIGHTS:

1. The northern two-thirds of the Nation had above normal temperatures, with much of the South below normal.
2. Parts of Texas and South Carolina received record precipitation. The West was mostly dry.

TEMPERATURE--Except for an area over the Dakotas and Nebraska, the northern two-thirds of the Nation was above normal. From Arizona westward, temperatures were below normal in the South except for southern portions of Mississippi, Alabama, and Florida. Most of Texas averaged 3° to 5° below normal

Temperatures during the month were highly variable. The month began on the cool side, but quickly turned warm as a large high over the southeast brought unseasonably warm temperatures to much of the Nation. Only Texas and adjoining States remained below normal.

At midmonth temperatures continued above normal east of a line from Louisiana to Montana, while temperatures were below normal over the western States.

A slowly moving cold front during the week ending on the 24th brought cooler temperatures to much of the Nation except for the western States and much of New England. As the month ended this cold airmass continued to keep the eastern half of the Nation cool, but temperatures were above normal from the Rockies westward.

PRECIPITATION--The distribution of precipitation during June was highly variable. West of a line from El Paso, Tex., to Saginaw, Mich., precipitation was below normal except for a portion of northern Wisconsin, northern Montana, the coasts of Oregon and Washington and much of New Mexico, eastern Arizona, western Colorado, southern Utah, and eastern Nevada. Albuquerque, N. Mex., received 1.37 inches, which is 233 percent of normal. To the east, precipitation was above normal except along the Lower Mississippi River Valley and much of Mississippi and Alabama. Much of Florida also received below normal precipitation. The northern Appalachians and adjoining areas were also below normal.

The month started clear and dry. During the first full week the western third of the Nation received virtually no precipitation. Thunderstorm activity brought 2 to 4 inches to parts of the Corn Belt, the Deep South, and eastern Texas. Much of this activity was associated with a slowly moving cold front which took almost a week to move across the eastern half of the Nation.

Rainfall was more general at midmonth with excessive amounts in Texas, Georgia, and South Carolina. Charleston, S. C., received 11.30 inches during the week ending on the 17th, while Houston, Texas, received 9.95.

Heavy rains continued in many areas during the next week, associated mainly with thunderstorm activity. Virtually no rain fell in the West, while south Texas and the Carolinas received 4 inches or more. On the 18th-19th, Quincy, Ill., received 5.26 inches.

The month ended with dry conditions in the West and heavy rains in many portions of the eastern half of the Nation. The Mississippi River was bank-bound along its entire length for the first time since early March.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

JUNE 1973

STATE	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Robertsdale 1 E	98	30	3 Stations	51	29+	West Blocton	13.95	Coden	1.15
Alaska	Mile 41 Steese	84	14	2 Stations	25	4+	Little Port Walter	9.86	Chignik	T
Arizona	Willow Beach	123	27	Fort Valley	24	20	Crown King	2.49	17 Stations	.00
Arkansas	2 Stations	100	25	6 Stations	49	7+	Nathan 4 WNW	12.44	2 Stations	83
California	Death Valley	123	28	White Mountain 2	17	15	Fort Dick	1.06	299 Stations	00
Colorado	Rangely	104	26	Independence Pass 5 SW	12	5	Mesa Lakes Resort	3.72	Manassa	.03
Connecticut	2 Stations	98	11	3 Stations	36	18+	Stevenson Dam	8.49	Groton	2 38
Delaware	Milford 2 WSW	96	11	2 Stations	51	1	Newark University Farm	6.33	Georgetown 5 SW	2.33
Florida	Deland 1 SSE	99	15	2 Stations	59	2	Flamingo Ranger Sta	13.61	Bradenton 5 ESE	1.18
Georgia	Savannah USDA Pl Garden	99	16	Toccoa	47	1	Douglas 2 NNE	15.09	Buena Vista	1 04
Hawaii	Lualualei 804, Oahu	92	24	Mauna Loa Slope Obs, Hawaii	33	2	Mount Waialeale 1047,Kauai	20.23	27 Stations	.00
Idaho	Lewiston WSO AP	107	22	Warren	20	3	Fenn Ranger Station	3 22	Parma Experiment Sta	02
Illinois	Geneseo	99	16	Marshall 1 E	46	1	Pontiac	11.60	Galena 1 N	2.03
Indiana	Plymouth Power Substa	99	16	Indianapolis SE Side	40	1	Rockville	10.23	Goshen College	2 40
Iowa	Le Mars 2 N	99	9	Elkader 5 SSW	42	22	Clinton No 2	11.40	Shenandoah	1.31
Kansas	Kanopolis Dam	109	25	2 Stations	40	20+	Fort Scott	5.26	Attica 6 WNW	T
Kentucky	3 Stations	96	26+	2 Stations	45	1	La Grange	13.90	Princeton 1 SE	1.01
Louisiana	Monroe FAA AP	98	29	4 Stations	55	8+	Hackberry 8 SSW	13.27	Quarantine	47
Maine	Saco	96	12	Middle Dam	29	3	Middle Dam	9 08	Houlton	1.85
Maryland	National Arboretum D C	97	11	Bittinger 2 NW	36	2	Chestertown	8.46	Preston 1 S	1.14
Massachusetts	Chester 2	101	11	Chester 2	26	3	Springfield	8.87	Edgartown	2.19
Michigan	2 Stations	95	12+	Chatham Exp Farm	31	24	Bay City	7.49	Howell Sewage Pl	1.77
Minnesota	2 Stations	100	11+	Thief River Falls 5 N	33	7	Two Harbors	6.55	Canby	32
Mississippi	Corinth 5 WSW	104	24	2 Stations	53	7	Saucier Exp Forest	8.76	Jackson WSO AP	32
Missouri	4 Stations	98	26+	2 Stations	46	23+	Owensville	8.65	Fairfax	.65
Montana	3 Stations	100	24+	2 Stations	21	18+	Zortman	6.92	Rogers Pass 6 NE	T
Nebraska	3 Stations	106	25+	2 Stations	33	22+	West Point	5 26	Staplehurst	20
Nevada	Valley of Fire St Pk	116	28	Reese River R S	19	2	Owyhee	2.10	7 Stations	00
New Hampshire	Concord WSO AP	96	11	Mount Washington	20	2	Mount Washington	16.00	Durham	2.38
New Jersey	Paterson	98	12	Phillipsburg	47	1	Greenwood Lake	10.20	Belleplain St Forest	3.42
New Mexico	2 Stations	109	30+	Wolf Canyon	22	20	Pedernal 4 E	3.13	Hope	T
New York	New York Laurel Hill	98	11	Indian Lake 2 SW	27	3	Grahamsville	12.04	Watertown FAA AP	33
North Carolina	Louisburg	98	18	Celo 2 S	42	2	Moncure 3 SE	12.55	Sparta	2 20
North Dakota	San Haven	100	15	2 Stations	29	7	Mohall	7.34	Colgate	51
Ohio	Toledo Blade	96	12+	Tom Jenkins Lake	41	1	Columbus Sullivant Ave	10.42	2 Stations	1 80
Oklahoma	2 Stations	108	26	2 Stations	41	20+	Muskogee	13.46	Great Salt Plains Dam	21
Oregon	2 Stations	105	28+	2 Stations	16	18	Tillamook 13 ENE	6.86	12 Stations	00
Pennsylvania	Carlisle	98	10	Clermont 4 NW	37	15+	Milanville	12.14	Meyersdale 1 W	1 92
Puerto Rico & V I	8 Stations	94	30	Adjuntas Substation, P.R.	57	2	La Muda - Caguas, P R	14.63	Ensenada, P.R	54
Rhode Island	Providence WSO AP	95	11	Kingston	42	18+	North Scituate 4 W	5.10	Newport	2.85
South Carolina	Mc Coll	98	17	Longcreek 1 N	51	1	Charleston WSO AP	27.24	Greenville	3 32
South Dakota	2 Stations	101	24+	Deerfield 4 NW	25	4	Lodgepole 10 NW	5.66	Hermosa 1 W	22
Tennessee	Selmer	101	25	Mountain City No 2	44	1	Jamestown	9.17	Covington 1 W	47
Texas	2 Stations	112	30	Andrews	41	5	Coldspring 5 SSW	20.11	4 Stations	00
Utah	Saint George	111	28	Park City Summit House	20	18	La Sal	2.92	Wah Wah Ranch	05
Vermont	Vernon	95	12	Mount Mansfield	26	2	Mount Mansfield	13.08	Bellows Falls	4.17
Virginia	John H. Kerr Dam	97	18	Monterey	38	1	Langley Air Force Base	8 97	Brookneal	64
Washington	2 Stations	105	22+	2 Stations	25	17+	Quinault Ranger Sta	8 22	3 Stations	T
West Virginia	3 Stations	95	11	Seneca State Forest	33	1	Thomas	8.25	Clarksburg 1	1 29
Wisconsin	Crivitz High Falls	98	11	Lamp River 5 E	36	13	Lancaster	6.11	Madison WSO AP	81
Wyoming	2 Stations	100	10+	Merna	17	18+	Oshoto 15 NW	4.02	2 Stations	.00

+ Also on an earlier date or dates.

Note: Dates in the above table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

METRIC UNITS

JUNE 1973

State and Station	Elevation ground	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days sunrise to sunset: Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover, tenths, sunrise to sunset	Possible sunshine
ALABAMA	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	Mps		Mps							%
BIRMINGHAM	189	994.2	1016.5	29.8	18.9	24.4	-1.9	31.7	20+	13.9	24	0	0	19.4	76	95	-7	25	15	16	0	0	[illegible]	14	12.1	NW	21	4	[illegible]	16	[illegible]	65
HUNTSVILLE	190	993.6	1016.4	29.8	19.4	24.6	-1.3	32.8	27+	16.7	29+	3	0	19.4	77	57	-29	18	12	11	0	0	1.2	19	14.3	29	27	6	12	12	6.3	
MOBILE	64	1008.1	1016.0	33.1	22.2	27.6	0.7	36.1	28	20.0	23+	24	0	21.6	71	135	-23	81	10	16	0	0	1.5	19	9.8	20	13	1	21	8	6.9	
MONTGOMERY	56	1009.1	1016.4	32.7	20.6	26.3	-1.1	33.9	28+	17.2	2	26	0	20.0	72	136	30	31	13	13	0	0	0.2	25	10.7	W	28	6	16	8	6.0	59
ALASKA																																
ANCHORAGE	35	1006.4	1011.2	14.7	6.9	10.8	-2.4	22.8	21	2.2	7	1	0	6.1	72	27	2	10	10	0	0	0	2.0	19	12.5	18	30	3	5	22	8.1	41
ANNETTE	34	1010.6	1014.5	14.1	7.2	10.7	-1.7	18.9	16+	4.4	20+	0	0	6.1	77	151	7	30	22	1	0	0	2.9	15	13.0	15	5	0	[illegible]	24	8.9	
BARROW	9	1015.2	1015.7	2.6	-1.3	0.7	0.1	8.3	20	-3.9	3	0	28	-0.6	93	20	11	10	7	0	24	76	3.1	6	11.7	9	28	2	5	23	8.4	
BARTER ISLAND	12	1012.5	1014.3	3.1	-0.8	1.2	-0.1	12.8	21	-2.2	11+	0	28	0.6	95	13	0	9	4	0	30	25	2.1	6	12.7	9	3	1	4	25	8.7	
BETHEL	38	1007.4	1012.7	14.9	4.8	9.9	-1.0	24.4	23	1.1	10+	4	3	3.9	69	11	-19	10	6	0	T	T	2.5	32	11.2	32	16	1	9	20	8.0	
BETTLES	196			20.1	8.8	14.4		26.7	14	2.2	9	12	0			16		9	6	1	0	0			10.7	26	19	1	10	[illegible]	6.5	
BIG DELTA	388			18.9	7.7	13.3		25.0	14	1.7	4	9	0			112			15	1	0											
COLD BAY	29	1009.1	1012.8	9.3	3.3	5.8	-1.6	14.4	26	0.0	22+	0	2	3.9	88	20	-39	12	10	0	T	T	1.2	27	21.5	12	10	0	5	25	9.1	
FAIRBANKS	133	991.9	1008.8	21.2	10.2	15.7	1.1	26.7	21+	5.6	24	17	0	6.1	54	25	-11	15	10	1	0	0	0.9	31	9.4	33	24+	1	8	21	7.0	
GULKANA	479			16.7	5.7	11.2		24.4	17	1.1	12+	8	0			61		20	13	0	0				10.7	18	25	1	10	19	8.1	
HOMER	20			12.8	5.7	9.0		17.2	21	-2.8	3	0	1			52	25	29	12	0	0				8.9	12	29	3	8	19	7.9	
JUNEAU	4	1012.2	1013.0	15.6	5.8	10.7	-0.6	22.2	11	0.6	11	1	0	6.1	78	71	-15	26	17		0		1.4	12	11.2	24	21	1	4	25	8.3	[illegible]
KING SALMON	15	1008.8	1010.7	15.8	5.7	10.8	0.0	23.9	24	1.7	5	4	0	5.0	69	38	2	13	11	2	0		1.7	21	11.2	18	20+	1	8	21	8.1	
KODIAK	34	1007.1	1011.5	10.8	5.2	8.0	-1.8	16.1	12	-0.6	4	0	1	4.4	80	43	-61	17	16	0	0		1.5	2	10.3	9	29+	4	[illegible]	22	7.9	
KOTZEBUE	3			8.9	2.3	5.6	-0.9	22.2	27	-3.3	7	1	13			13	1	5	6	1	T	T			13.9	29	15					
MCGRATH	105	997.6	1010.0	19.4	7.5	13.5	-0.1	26.7	15	2.8	8	15	0	3.9	55	41	-2	14	11	4	0	0	1.3	31	8.9	34	24	3	8	19	7.6	
NOME	4	1011.5	1012.4	9.6	2.2	5.9	-1.8	25.0	23	-2.2	4	2	7	2.8	80	23	0	5	16	0	20	0	2.2	26	14.3	28	16	8	7	15	6.5	68
ST. PAUL ISLAND	7	1012.9	1013.9	6.5	1.7	4.1	-0.8	10.6	23	-1.7	4	0	9	2.2	89	27	-2	13	11	0	5	T	0.6	3	16.1	12	20	1	4	25	8.9	
SUMMIT	733			13.9	4.1	9.0		21.1	21+	-1.7	4	2	2			24		8	11		137	25										
TALKEETNA	105			17.9	5.7	11.8	-1.0	22.2	17	0.6	4	8				57	12	11	16	2		0			9.4	17	17+					
YAKUTAT	9	1011.5	1012.7	14.1	5.2	9.2	-1.1	22.2	12	0.6	11+	1	0	6.1	83	99	-29	21	22		0		0.6	13	9.4	11	6+	0	4	26	9.0	
ARIZONA																																
FLAGSTAFF	2135	792.0	1014.5	25.6	6.1	15.8	0.6	33.9	27	0.0	16	3	1	0.6	41	10	-7	6	3	4	0	0	1.2	22	13.4	SW	14	18	7	5	2.4	88
PHOENIX	340	973.2	1007.9	40.0	22.3	31.2	0.5	46.1	28	15.6	16	30	0	5.0	21	T	-2	T	0	1	0	0	0.4	21	17.9	SW	14	25	2	3	1.6	92
TUCSON	788	923.1	1008.4	35.7	19.1	27.4	-0.7	41.7	28+	13.3	16	24	0	4.4	26	13	5	10	4	4		0	1.1	19	13.4	SE	[illegible]	23	3	4	2.1	93
WINSLOW	1492	852.[illegible]	1012.7	30.9	13.3	21.7	-2.8	[illegible]	28	5.0	20	11	0	1.7	32	8	1	6	3	2		0	1.7	23	13.0	27	29+	21	5	4	2.8	
YUMA	59	1009.7	[illegible]	40.[illegible]	22.5	31.3	1.3	45.0	27+	15.6	16	30		8.9	29	0	0	0	0	0	0	0	1.7	18	11.6	[illegible]	13+	22	4	4	[illegible]	92
ARKANSAS																																
FORT SMITH	136	998.0	1014.3	29.6	17.8	23.7	-2.2	32.2	30+	12.8	7	6	0	18.3	75	194	84	73	16	14	0		0.7	18	17.9	W	18	7	10	13	6.4	62
LITTLE ROCK	78	1005.4	1014.8	31.7	20.1	25.9	-0.2	35.6	24	15.0	7	14	0	19.4	70	68	-24	13	10	12	0		1.8	22	17.9	NW	19	3	13	14	6.6	88
CALIFORNIA																																
BAKERSFIELD	145	994.6	1011.7	36.0	20.0	28.0	2.9	43.9	28	12.2	14	23	0	10.0	35	0	-2	0	0	0	0	0	3.3	31	13.4	30	13	22	5	3	2.4	
BISHOP	1252	872.4		33.5	11.3	22.4	1.4	40.0	26	6.1	2	20	0			4	1	4	1		0											
BLUE CANYON	1609	841.[illegible]		22.6	11.9	17.3	2.2	31.7	27	2.2	17	0	0			0	-24	0	0		0		1.3	20	10.3	18	29+	19	5	6	3.1	
EUREKA	13			15.5	10.1	12.8	-0.2	22.2	25	6.1	1	0	0			6	-13	3	5		0				11.6	N	1	7	12	11	6.1	54
FRESNO	100	1000.0	1011.6	35.1	16.6	25.9	2.2	42.2	28+	10.0	14	22	0	10.6	42	T	-2	T	0	0	0		2.1	30	11.6	NW	13	20	5	5	2.6	97
LONG BEACH	8	1011.9	1013.3	27.4	16.4	21.9	2.2	42.2	20	13.9	16	6	0	17.8	63	T	-1	T	0	0	0		1.4	22	8.9	29	10	10	14	6	5.0	
LOS ANGELES	32	1009.1	1012.8	23.2	15.4	19.3	1.1	33.3	20	12.8	15	2	0	14.4	77	T	-1	T	0	0	0		2.7	24	11.2	SW	23+	[illegible]	11	12	6.1	
LOS ANGELES [illegible]	82			28.0	16.4	22.2	2.2	41.1	[illegible]	13.3	15	5	0			0	-2	0	0		0				8.5	SW	15+	13	12	5	[illegible]	67
MT. SHASTA	[illegible]			26.1	8.9	17.5	1.8	34.4	26	0.6	18	4	0			0	-32	0	0		0											
OAKLAND	2	1014.6	1014.7	22.7	13.4	18.1	0.9	34.4	27+	11.1	18	2	0	12.8	76	T	-3	T	0	0	0		3.6	29	[illegible]	29	14	14	10	6	7.3	
RED BLUFF	104	999.3	1011.7	34.3	17.4	25.9	1.3	42.2	26	12.8	18+	19	0	7.2	34	T	-11	T	0	0			[illegible]	34	[illegible]	NW	3	21	6	[illegible]	2.1	95
SACRAMENTO	5	1011.2	1012.0	[illegible]	14.3	23.7	2.3	41.1	26+	9.4	17	15	0	10.0	48	0	-3	0	0	0	0		2.2	21	11.6	SW	16	21	[illegible]		[illegible]	95
SANDBERG	1377	871.0		27.1	14.1	20.6	2.4	34.4	8	3.9	15	6	0			0	-1	0	0				2.4	31	[illegible]	34	17					
SAN DIEGO	4	1012.2	1013.1	[illegible]	16.9	20.0	[illegible]	32.2	20	15.0	9+	1	0	13.9	71	T	-1	T	0	0			[illegible]	26	8.5	NW	5	8	9	14	[illegible]	56
SAN FRANCISCO [illegible]	2	1014.2	1014.9	23.3	11.6	17.5	1.2	36.7	8	10.0	18+	4	0	10.6	71	T	-3	T					[illegible]	28	13.4	[illegible]	13+	14	[illegible]	5	[illegible]	
SAN FRANCISCO [illegible]	16			20.1	11.6	15.9	0.9	33.9	22	9.4	5	2	0			0	-4	0														74
SANTA MARIA	72			24.7	10.9	17.8	2.5	38.9	20	5.0	15	5	0			T	-3	T	1		0							14	11	5	[illegible]	
STOCKTON	7	1011.4	1012.2	33.9	16.2	25.1	2.4	43.3	21	10.0	14	19	0	9.4	42	T	-2	T	0	1	0		3.2	28	10.3	[illegible]	16+	19	6	3	2.5	
COLORADO																																
ALAMOSA	2297	774.1		24.4	5.6	15.0	-0.6	31.7	26	-1.7	5	0	2			18	5	6	6		0	0						16	10	4	3.4	

See footnotes at end of table.

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CLIMATOLOGICAL DATA

METRIC UNITS

JUNE 1973

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min 0 °C or lower	Temperature: Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 25 mm or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Ice pellets: Total	Precipitation: Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile (1.6 kilometers): Direction	Wind: Fastest mile (1.6 kilometers): Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
COLORADO	M	Mb	Mb	C	C	C		C		C				C	%	Mm	Mm	Mm.			Mm.	Mm.	M p.s.		M.p.s.							%
COLORADO SPRINGS	1873	812.1	1011.9	26.4	10.9	18.7	0	32.8	30+	3.9	5	4	0	2.2	38	12	- 28	6	5	9	0	0	0.7	10	13.4	25	18	17	5	8	3.9	
DENVER	1610	836.1	1010.3	28.7	10.8	19.7	0.[illegible]	35.0	25+	3.9	20	9	0	3.9	39	5	- 31	4	5	5	0	0	1.2	21	15.6	NW	18	13	9	8	4.3	78
GRAND JUNCTION	1476	852.0	1011.5	29.7	13.0	21.4	- 0.4	37.2	30	4.4	19	14	0	2.8	35	22	11	10	6	4	0	0	1.2	14	21.0	NW	28	16	6	8	4.0	79
PUEBLO	1428	854.7	1010.2	31.8	11.7	21.8	0.1	37.8	26+	4.4	5	15	0	6.1	41	10	- 21	7	3	6	0	0	0.1	11	16.1	NE	18	19	6	5	3.2	91
CONNECTICUT																																
BRIDGEPORT	2	1015.9	1016.3	25.3	17.3	21.3	[illegible]	33.3	12	10.0	3	2	0	16.1	76	116	30	46	12	4	0	0	1.4	20	15.6	27	9	4	7	19	7.1	
HARTFORD	52	1009.1	1015.6	27.9	16.3	22.1	1.[illegible]	36.7	11	7.2	3	4	0	15.6	71	129	35	46	14	6	0	0	1.9	19	13.4	NW	1	2	12	16	7.7	56
DELAWARE																																
WILMINGTON	23	1013.2	1016.2	28.8	19.8	24.3	2.4	35.0	11	13.3	1	6	0	18.9	74	132	28	56	14	8	0	0	1.4	20	10.3	20	29+	6	11	13	6.6	
DIST.OF COLUMBIA																																
WASHINGTON DULLES	89	1004.4	1015.9	29.3	17.5	23.4		32.2	21+	8.9	1	6	0	18.3	75	49		17	12	5	0	0	1.1	19	11.6	35	4	6	11	13	6.2	
WASHINGTON NATIONAL	3	1013.9	1016.1	30.0	20.1	25.1	1.6	33.9	21+	12.8	1	8	0	18.3	70	54	- 28	37	7	6	0	0	1.4	19	13.4	NW	4	3	12	10	5.9	65
FLORIDA																																
APALACHICOLA	4			31.4	23.3	27.4	0.6	33.9	30	20.0	26	13	0			51	- 84	19	8	8	0	0			9.4	N	1	2	22	6	5.9	91
DAYTONA BEACH	9	1015.6	1017.0	31.1	22.1	26.6	0.8	33.9	17	19.4	3	7	0	20.6	73	110	- 38	24	14	15	0	0	1.5	12	10.3	26	30	3	15	12	6.0	
FORT MYERS	5	1016.3		33.4	22.1	27.8	0.7	35.6	5+	20.6	30+	29	0	22.2	75	101	-126	29	11	13	0	0	0.4	14	10.3	8	1	4	15	11	6.2	
JACKSONVILLE	8	1015.6	1016.6	32.0	21.1	26.6	- 0.6	35.0	16	18.3	3	18	0	21.1	80	104	- 57	28	15	14	0	0	0.9	15	12.1	N	25+	2	19	9	6.3	62
KEY WEST	1	1015.2	1015.9	31.0	25.6	28.3	[illegible]	31.7	30+	23.3	22	0	0	22.8	73	73	- 28	24	13	12	0	0	2.7	12	11.2	E	19	0	20	10	6.5	84
LAKELAND U	65			31.9	22.2	27.1		33.9	30+	19.4	19	17	0			92	- 91	30	13		0	0						2	17	11	6.6	61
MIAMI	2	1015.9	1016.3	30.4	24.4	27.4	0.[illegible]	32.2	16	21.7	8	1	0	22.8	79	227	40	63	19	14	0	0	2.2	11	11.2	30	15+	1	14	15	7.3	
ORLANDO	33	1012.2	1016.7	33.3	23.4	28.4	1.[illegible]	35.6	17+	21.7	7+	27	0	21.7	72	168	- 8	38	14	14	0	0	1.2	15	9.4	17	8	3	15	12	6.9	
PENSACOLA	34	1011.9	1016.2	32.4	23.0	27.7	0.[illegible]	35.6	29	21.1	26+	24	0	22.2	75	88	- 50	26	10	14	0	0	0.4	25	10.3	1	18	2	16	12	6.5	
TALLAHASSEE	17	1013.9	1016.3	32.3	20.8	26.6	- 0.2	35.0	19+	18.9	30+	17	0	21.7	79	180	14	51	15	18	0	0	0.1	11	10.3	15	21	1	20	9	6.3	
TAMPA	6	1016.3	1016.4	32.4	22.8	27.7	0.7	34.4	17+	20.6	4+	21	0	21.1	71	106	- 78	23	12	15	0	0	0.4	21	10.3	15	6+	1	14	15	7.0	68
WEST PALM BEACH	5	1015.6	1016.4	31.6	23.6	27.6	0.4	33.3	14	20.6	19	11	0	21.1	72	191	0	63	13	15	0	0	2.0	12	10.7	10	7	2	16	12	7.1	
GEORGIA																																
ATHENS	244	987.8	1016.3	29.7	19.0	24.3	- 1.0	32.2	18+	15.0	1	2	0	18.9	78	81	- 18	34	11	13	0	0	0.3	6	7.6	29	28+	4	10	16	6.8	
ATLANTA	308	980.0	1016.3	29.2	19.2	24.2	- 0.6	31.7	18	17.2	26+	0	0	18.9	77	85	- 12	36	10	10	0	0	0.3	30	16.1	SW	28	7	10	13	6.4	66
AUGUSTA	41	1010.8	1016.0	30.8	19.6	25.2	- 0.8	34.4	17	15.0	1	7	0	18.9	73	185	108	48	15	15	0	0	0.4	9	8.9	3	16	3	11	16	6.9	
COLUMBUS	117	1002.4		31.3	20.6	25.9	- 0.4	33.9	30	17.2	26	14	0	20.6	77	112	19	43	9	8	0	0	0.4	36	16.5	18	5	6	13	11	6.1	
MACON	108	1003.7	1016.4	32.1	20.6	26.3	- 0.7	35.0	28+	16.7	30	18	0	20.6	78	84	- 1	26	13	10	0	0	0.2	7	12.1	W	6	3	11	16	7.0	68
ROME	194			31.6	19.4	25.5	0.8	34.4	19	16.7	29+	15	0			137	42	63	12		0	0										
SAVANNAH	14	1014.9	1016.8	31.1	21.4	26.3	- 0.2	33.9	17	17.8	3	7	0	21.1	79	233	104	84	12	11	0	0	0.8	19	11.2	E	18	1	13	16	7.6	42
HAWAII																																
HILO	8	1017.3	1018.6	27.9	19.4	23.7	0.2	28.9	28+	18.3	20+	0	0	20.0	83	94	- 79	25	25	0	0	0	0.4	12	7.6	E	28+	0	6	24	8.3	27
HONOLULU	2	1017.6	1017.9	30.2	22.3	26.2	0.7	32.2	28	19.4	27	1	0	18.3	64	2	- 6	1	7	0	0	0	5.7	6	13.0	NE	9	1	17	12	6.8	55
KAHULUI	15	1014.9	1017.3	28.9	19.8	24.4	- 0.7	31.1	28	15.1	21+	0	0	17.2	67	2	- 3	1	6	0	0	0	6.2	5	14.8	E	13	11	7	12	5.6	75
LIHUE	31	1014.2	1019.4	28.1	22.3	25.2	0.4	30.0	28	20.0	22	0	0	19.4	73	13	- 24	3	12	0	0	0	5.4	5	11.2	NE	12	0	17	13	7.2	51
IDAHO																																
BOISE	865	914.7	1012.8	27.7	11.9	19.8	[illegible]	39.4	22	2.2	18	10	0	2.2	35	5	- 18	3	4	2	0	0	1.4	32	21.0	SE	22	13	7	10	4.7	73
LEWISTON	431			27.4	12.2	19.8	1.[illegible]	41.7	22	6.1	3	6	0			6	- 38	3	6		0	0			16.1Y		17	7	7	16	6.8	
POCATELLO	1358	862.9	1013.3	25.9	8.9	17.4	0.3	34.4	27	0.0	3	4	1	2.8	41	22	- 2	18	5	3	0	0	3.7	24	17.0	SW	17	14	7	9	4.6	75
ILLINOIS																																
CAIRO	96			30.5	20.8	25.7	0.2	34.4	25	15.0	1	6	0			100	- 5	50	11		0	0			26.8	SW	2	10	10	10	5.4	73
CHICAGO O HARE	201	988.2	1012.2	27.1	16.3	21.7	1.7	32.8	11	10.0	25	2	0	15.0	67	73	- 28	40	10	6	0	0	2.4	22	12.5	5	16	7	13	10	5.5	
CHICAGO MIDWAY	185	990.5	1012.8	28.0	17.3	22.7	1.3	34.4	10	13.3	25+	2	0	14.4	63	68	- 35	27	9	10	0	0	2.0	21	13.9	NW	16	5	12	12	5.8	71
MOLINE	177	990.9	1012.1	28.3	16.4	22.4	0.5	36.1	16	10.6	29	5	0	15.6	67	167	56	88	8	7	0	0	2.4	23	25.5	SE	18	10	10	10	5.1	73
PEORIA	199	989.5	1013.7	28.1	16.1	22.1	0.1	34.4	16	10.0	29	1	0	15.6	70	164	60	42	11	11	0	0	1.8	21	24.1	NW	16	12	8	10	5.3	58
ROCKFORD	221	985.4	1012.0	27.3	15.5	21.4	0.5	32.2	11+	11.1	29	2	0	15.6	72	131	22	65	10	3	0	0	2.0	23	16.5	36	16	8	10	12	5.8	
SPRINGFIELD	179	991.2	1013.1	28.9	16.8	22.9	- 0.4	33.9	10+	12.8	6	6	0	16.1	69	185	72	75	14	11	0	0	2.3	22	14.8	NE	18	14	6	10	4.8	76
INDIANA																																
EVANSVILLE	116	1000.7	1014.5	30.1	18.6	24.3	0.0	33.3	18+	13.3	1	6	0	19.4	75	133	38	36	16	13	0		1.5	23	19.7	SW	6	7	10	13	6.0	71

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

JUNE 1973

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No of days: Max 32.2 °C or above	No of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Greatest in 24 hours	No of days: .25 mm or more	No of days: With thunderstorms	Snow, Ice pellets: Total	Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile 1.6 kilometers: Speed	Direction	Date	No of days (sunrise to sunset): Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p s		M p s							%
INDIANA																																
FORT WAYNE	241	984.4	1013.8	28.2	17.0	22.6	1.2	32.8	11	12.2	1	3	0	16.1	71	113	7	37	15	9	0		2.5	23	21.0	W	26	8	9	13	6.7	73
INDIANAPOLIS	241	985.8	1014.3	28.7	17.2	22.9	1.2	32.2	16+	10.6	1	3	0	17.8	75	150	33	45	13	12	0		[illegible]	22	18.8	S	4	6	11	13	6.3	62
SOUTH BEND	236	985.1	1012.6	27.5	17.3	22.4	1.8	33.3	11	12.2	14	3	0	15.6	69	123	32	47	12	10	0		2.5	23	[illegible]	29	16	6	11	13	6.1	
IOWA																																
BURLINGTON	211			27.9	16.7	22.3	0.1	33.9	16	12.8	6	1	0	16.1	68	132	5	47	9	9	0	0	2.2	22	15.6	36	18	11	10	9	5.3	
DES MOINES	286	977.3	1011.4	29.1	17.2	23.1	1.4	35.0	8	12.2	29+	6	0	15.0	62	52	- 68	[illegible]	[illegible]	[illegible]	0	0	1.9	22	21.9	SW	14	11	9	10	5.2	65
DUBUQUE	322	973.6		26.2	14.8	20.5	0.6	31.1	10	10.6	29	0	0			54	- 53	15	10		0	0										
SIOUX CITY	334	971.9	1010.7	29.2	15.7	22.4	0.6	36.7	9	10.6	22+	10	0	13.3	57	90	- 20	35	8	8	0	0	1.3	[illegible]	23.2	N	18	11	14	5	4.6	84
WATERLOO	265	980.0	1011.3	28.2	15.4	21.8	0.7	34.4	11+	10.6	29	5	0	13.9	64	78	- 45	19	9	7			1.7	[illegible]	17.0	34	16	11	10	9	5.0	
KANSAS																																
CONCORDIA	448	[illegible]	[illegible]	30.7	16.6	23.7	0.2	39.4	24	10.0	5	12	0	14.4	61	45	- 61	15	7	3			2.2	19	14.3	S	18	14	10	6	4.0	87
DODGE CITY	787	922.5	1010.7	32.6	16.7	24.7	1.1	39.4	26	10.6	5	17	0	10.0	46	27	- 50	18	5	7	0		2.4	19	14.3	NE	[illegible]	14	[illegible]	4	3.6	85
GOODLAND	1114	886.6	1010.9	29.2	12.4	20.8	- 0.1	36.7	24	6.7	5	11	0	8.9	53	52	- 16	20	9	10	0		1.3	[illegible]	13.4	36	12	16	11	3	4.0	
TOPEKA	267	981.0	1012.1	30.3	17.4	23.8	0.1	36.1	24	9.4	6	8	0	16.7	67	75	- 39	61	8	7			2.4	[illegible]	17.0	S	16	13	7	10	5.1	71
WICHITA	403	965.1	1011.7	32.5	17.3	24.9	0.2	39.4	24	9.4	6	15	0	13.9	57	31	- 76	20	6	5			2.4	19	15.2	SW	1	13	13	4	4.4	77
KENTUCKY																																
COVINGTON	265	984.1	1015.1	28.3	16.5	22.4	0.3	32.2	19	8.9	1	1	0	17.8	78	154	60	62	14	12	0	0	2.1	21	13.0	22	4	7	11	12	5.9	
LEXINGTON	294	981.0	1015.9	28.6	17.6	23.1	0.0	32.2	11	12.2	7	1	0	18.3	76	154	34	78	12	11			2.1	20	14.3	24	17	4	15	11	6.4	
LOUISVILLE	145	997.3	1014.5	29.6	18.9	24.2	1.2	33.3	10	12.8	1	3	0	18.3	73	157	56	41	13	12	0	0	2.1	20	16.1	S	4	7	14	9	6.1	67
LOUISIANA																																
ALEXANDRIA	28	1011.5	1015.8	30.8	20.0	25.4	- 1.1	33.3	28+	15.6	7	9	0	[illegible]	81	99	- 10	25	12	11	0	0	0.8	18	10.3	24	20	2	11	17	7.2	
BATON ROUGE	20	1013.2	1015.9	32.6	21.8	27.2	0.1	33.9	30+	[illegible]	6	23	0	20.6	73	76	- 28	24	7	10	0	0	0.6	15	10.3	30	5	0	14	16	7.5	
LAKE CHARLES	3	1014.2	1015.4	30.7	22.4	26.6	- 0.7	32.8	28+	18.3	7	5	0	21.7	79	101	- 19	43	8	10	0	0	1.8	16	10.3	22	11+	3	10	17	[illegible]	
NEW ORLEANS	1	1014.9	1015.7	32.6	22.6	27.6	0.9	35.0	18	20.0	5	20	0	[illegible]	72	154	42	57	14	11	0	0	0.7	18	14.3	[illegible]	26	3	15	12	6.9	
SHREVEPORT	[illegible]	1005.8	1014.9	31.1	20.5	25.8	- 1.2	33.9	29+	16.7	6	13	0	[illegible]	75	148	64	41	10	9	0	0	1.4	19	10.3	35	5	2	11	17	7.3	56
MAINE																																
CARIBOU	190	990.9		22.7	11.7	17.2	2.2	27.8	21	2.2	3	0				54	- 49	20	13		0	0						1	8	21	8.1	
PORTLAND	[illegible]	1013.5	1015.9	22.3	13.0	17.7	0.9	34.3	11	3.9	3	1	0	14.4	82	124	43	25	17	6		0	[illegible]	21	13.9	NW	12	4	9	17	7.4	40
MARYLAND																																
BALTIMORE	45	1010.8	1016.4	28.1	17.9	23.1	0.6	33.3	11	10.6	1	6	0	16.7	71	80	- 3	41	10	7	0		1.0	23	12.5	W	28	3	10	12	5.9	54
MASSACHUSETTS																																
BLUE HILL OBS R	192			24.8	14.9	19.9	1.5	33.3	12+	8.3	3	2	0			147	52	62	13		0				27.3	NW	9					44
BOSTON	5	1014.9	1015.9	25.8	16.3	21.1	1.2	36.1	11	10.0	3	3	0	14.4	70	119	30	33	13	3	0	0	0.8	23	15.2	NW	12	4	8	18	7.3	54
WORCESTER	301	980.0	[illegible]	24.6	14.7	19.7	1.6	32.2	12+	8.3	17+	2	0	13.3	71	177	80	36	13	6	0	0	2.1	25	[illegible]	34	12	3	8	19	7.5	
MICHIGAN																																
ALPENA	21	987.1	1012.1	23.7	11.2	17.5	1.6	33.9	11+	6.1	14+	2	0	12.2	75	59	- 9	11	16	8	0	0	[illegible]	19	[illegible]	SW	7	4	11	15	7.1	50
DETROIT	189			27.3	18.1	22.7	1.8	33.3	11+	13.9	25	2	0	15.0	64					6			2.2	21	9.4	19	8					
DETROIT METRO	193	989.2	1013.0	26.6	15.4	21.1	1.1	31.7	11+	10.6	14	0	0	16.1	74	123	39	31	10	9	0		2.1	23	38.9	SW	26	9	9	12	6.3	60
FLINT	235	[illegible]	1012.5	24.7	14.7	19.7	0.4	30.0	11+	10.0	14	0	0	15.0	77	82	3	25	14	6	0		2.6	22	11.2	29	3	6	9	15	6.9	
GRAND RAPIDS	239	984.1	1012.6	26.9	15.1	21.1	1.3	31.7	11	10.0	14	0	0	15.0	70	91	7	37	11	5	0		2.5	22	13.4	SW	4	3	11	16	6.9	53
HOUGHTON LAKE	350	971.2	1012.5	23.7	12.8	18.3	1.3	30.6	10	6.7	13	0	0	13.3	75	72	- 7	22	13	8	0		1.6	23	8.9	21	8	5	6	19	7.2	
LANSING	256	981.7	1012.7	25.4	14.2	19.8	0.2	30.6	11+	8.9	14	0	0	15.6	77	92	7	27	11	6	0		2.5	22	[illegible]	W	3	6	11	13	6.7	61
MARQUETTE	[illegible]			[illegible]	11.2	15.7	0.1	31.1	15	6.7	2	0	0			87	- 1	17	18		0	0			12.5	SW	10	3	9	18	7.6	42
MUSKEGON	191	989.8	1012.5	24.2	14.1	19.2	- 0.1	28.3	11+	9.4	15+	[illegible]	0	13.9	75	53	- 15	24	9	4	0	0	2.7	22	13.0	20	8	9	6	15	6.7	
SAULT STE MARIE	220	985.1	1011.5	20.2	9.4	14.8	- 0.2	26.7	26+	3.3	1	0	0	12.2	86	67	- 17	12	15	8	0		0.6	16	11.6	NW	10	1	6	23	8.2	45
MINNESOTA																																
DULUTH	435	959.4	1010.1	21.4	8.7	15.1	0.2	26.7	24	5.0	13	0	0	10.0	76	62	- 47	15	13	9	0	0	0.6	20	15.2	E	16+	5	13	12	6.7	51
INTERNATIONAL FALLS	359	[illegible]	[illegible]	24.9	11.3	18.2	2.7	32.8	24+	6.1	9	2	0	9.4	60	106	8	48	11	4	0	0	0.9	20	15.6	30	9	4	10	16	7.1	
MINNEAPOLIS	254	[illegible]	[illegible]	27.2	14.4	20.8	1.5	36.7	10	8.3	22	4	0	12.2	59	27	- 75	12	8	8	0	0	1.5	23	17.0	SE	18	7	13	10	6.0	70
ROCHESTER	[illegible]	[illegible]	1011.1	26.6	13.7	20.2	0.7	33.9	10+	8.9	22	2	0	13.9	68	92	- 31	23	12	8	0		2.6	22	23.7	13	18	7	9	14	6.0	
ST CLOUD	[illegible]	[illegible]		25.8	11.7	18.7	0.3	34.4	9	5.6	22	1	0			74	- 40	25	9		0	0						7	11	12	5.8	

See footnotes at end of table

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CLIMATOLOGICAL DATA

METRIC UNITS

JUNE 1973

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M.p.s		M.p.s							%
MISSISSIPPI																																
JACKSON	94	1004.4	1015.9	33.1	21.5	27.4	0.8	35.6	29	18.9	23+	24	0	19.4	67	8	- 88	5	5	8	0		0.7	19	12.1	SW	13	2	12	16	7.2	61
MERIDIAN	88	1005.4	1016.2	31.9	20.3	26.1	- 0.3	33.9	29+	17.2	23	14	0	18.9	69	68	- 36	38	7	11	0		0.4	18	10.3	33	21	1	15	14	7.0	
MISSOURI																																
COLUMBIA REGIONAL	270			28.9	17.1	23.0	0.2	33.9	26+	12.2	7+	3	0			105	- 5	41	11	10	0	0			13.4	SW	16	9	8	13	5.7	78
KANSAS CITY	309	976.0	1011.7	29.6	17.6	23.6	0.1	35.0	25	10.6	6	7	0	15.0	62	72	- 69	26	8	10	0		2.1	20	14.3	[illegible]	1	12	8	10	4.8	76
ST JOSEPH	247			31.1	17.8	24.5	1.2	36.7	25	11.1	6	14	0	13.9	55	88	- 62	35	8				2.3	18	13.0	19	4	12	9	9	5.0	
ST LOUIS	163	993.9	1013.8	29.7	17.7	23.7	0.3	34.4	16	11.1	1	7	0	18.3	74	107	- 2	54	14	12	0	0	2.1	22	19.2	N	18	13	7	10	4.3	75
SPRINGFIELD	386	969.5	1014.1	29.1	16.1	22.6	- 0.8	32.8	30+	10.0	6	4	0	17.2	75	139	11	47	13	12	0	0	2.6	20	14.3	W	4	12	9	9	4.8	[illegible]
MONTANA																																
BILLINGS	1087	888.9	1010.9	25.7	10.9	18.3	- 0.1	35.0	23+	4.4	3	5	0	4.4	43	21	- 44	10	9	2	0	0	2.3	29	18.8	NW	18	7	7	16	6.6	61
GLASGOW	696			26.1	11.2	18.7	1.8	35.6	14	5.0	11	4	0			110	35	52	10	6	0	0			14.8	32	18+	4	13	13	6.6	
GREAT FALLS	1116	886.2	1011.4	24.4	10.6	17.6	2.1	35.0	28	6.1	18+	3	0	4.4	46	36	- 37	17	9	5	0	0	3.9	24	17.0	SW	8	2	9	19	7.8	64
HAVRE	788			24.9	10.5	17.7	1.6	33.9	28	2.2	11	3	1			75	6	24	10	4	0				18.3	W	24	5	11	14	6.7	80
HELENA	1167	879.4	1013.0	23.6	8.8	16.2	0.9	33.9	22	3.3	11	3	0	1.7	43	19	- 38	11	7	4	0	0	3.7	27	19.7	NW	18	2	11	17	7.6	[illegible]
KALISPELL	904	910.3	1013.8	22.6	7.2	14.9	0.1	33.3	22	- 0.2	11	2	1	4.4	53	39	- 18	23	12	4	T	0	1.7	21	15.6	23	23+	6	4	20	7.4	
MILES CITY	801	918.1	1009.2	26.2	12.2	19.2	0.6	35.0	13	3.3	18	5	0	8.9	55	84	15		10	5	T		1.9	30								
MISSOULA	972	903.8	1014.7	23.6	7.4	15.6	0.8	35.6	22	1.1	12+	2	0	5.6	57	40	- 9	30	10	1	T		1.8	30	15.2	N	8	4	9	17	7.4	55
NEBRASKA																																
GRAND ISLAND	561	946.2	1010.8	29.9	14.8	22.4	0.7	41.1	24	8.3	17	12	0	13.2	54	21	- 75	12	6	5	0	0	1.6	21	14.8	33	18	15	11	4	4.0	
LINCOLN	360	969.2	1010.9	30.3	15.6	23.0	0.8	38.3	24	9.4	22+	12	0	12.8	56	20	-107	7	7	6	0	0	1.3	20	14.8	S	18	13	12	5	4.1	77
NORFOLK	471			29.2	14.8	22.0	0.4	36.1	24	9.4	6	10	0			34	- 74	15	7		0							12	15	3	[illegible]	
NORTH PLATTE	846	915.3	1011.2	28.6	11.1	19.8	- 0.8	36.7	24	5.6	20+	9	0	10.6	59	22	- 60	13	7	5	0	0	0.4	21	18.8	NW	18	12	12	6	4.0	75
OMAHA	298	976.3	1010.9	30.1	15.8	22.9	0.1	36.1	15	10.0	6	1	0	15.0	62	40	- 75	14	8	4	0		1.3	[illegible]	13.4	NW	18	18	7	5	4.0	71
SCOTTSBLUFF	1206	877.8	1010.8	28.7	10.7	19.7	0.3	36.7	9	4.4	5	9	0	5.6	45	22	- 56	7	6	6	0	0	1.0	28	17.9	31	29	9	11	10	5.3	
VALENTINE	789			28.5	11.9	20.2	0.5	37.8	24+	6.1	5	5	0			24	- 55	14	7		0	0			20.6	NW	18	14	11	5	4.3	78
NEVADA																																
ELKO	1539	844.9	1013.0	27.1	7.1	17.1	1.6	35.0	27+	- 0.6	18	8	1	[illegible]	[illegible]	14	- 4	13	4	1	0	0	1.4	25	14.3	27	17	16	5	9	3.9	
ELY	1906	809.7	1011.8	26.0	4.6	15.3	0.6	33.3	26	- 2.8	13	6	6	- 6.1	27	29	16	14	5	3	0	0	2.4	22	12.5	S	22+	14	6	10	4.7	83
LAS VEGAS	659	934.6	1008.9	37.9	21.2	29.6	1.3	45.0	27	13.3	15	26	0	[illegible]	17	1	0	1	1	2	0		2.4	21	17.0	SW	28	17	7	6	3.0	88
RENO	1342	865.9	1013.1	29.6	6.3	17.9	2.3	37.2	26	0.6	18	11	0	[illegible]	33	2	- 8	2	1	2		0	1.4	28	15.2	W	13	18	7	5	3.3	97
WINNEMUCCA	1311	868.9	1013.6	29.9	7.4	18.7	2.3	39.9	27	- 0.8	18	15	2	[illegible]	35	2	- 18	1	2		0		1.2	27	12.1	SW	28	16	8	6	3.6	83
NEW HAMPSHIRE																																
CONCORD	104	1003.1	1015.7	25.8	13.0	19.4	1.3	35.6	21	0.6	3	3	0	[illegible]	77	123	32	69	11	5	0		0.6	22	10.3	NW	12	4	10	16	7.3	45
MT WASHINGTON OBS	1909			10.9	4.6	7.8	0.6	18.3	21	- 6.7	0	0	7			406	241	165	16	5	T	T			42.9v	SE	30	1	2	27	9.0	24
NEW JERSEY																																
ATLANTIC CITY	20	1013.9	1016.4	27.0	17.9	22.5	1.4	33.9	11	11.7	15	4	0	18.3	81	110	38	28	11	7	0	0	1.8	20	10.3	19	29	4	10	16	7.1	51
ATLANTIC CITY U	3			23.2	17.6	20.4	- 0.1	29.4	10	14.4	18+	0	0			185	108	69	12						19.7	W	4					
NEWARK	2	1014.9	1015.8	27.7	19.7	23.7	1.8	35.0	12+	15.0	1	5	0	17.2	71	102	15	59	15	8	0	0	1.4	20	10.3	15	29	4	10	16	7.1	
TRENTON U	17			27.6	18.7	23.2	1.5	34.4	11	13.3	[illegible]	4	0			142	50	59	9		0				14.8	[illegible]	29	6	7	17	6.7	48
NEW MEXICO																																
ALBUQUERQUE	1619	838.5	1010.5	31.7	14.4	23.1	- 0.8	38.3	26	8.9	2	15	0	2.2	20	35	20	27	3	3	0		.4	33	17.0	E	13+	20	8	2	3.6	87
CLAYTON	1515			28.8	12.0	20.4	- [illegible]	36.1	26	5.6	5	4	0			26	- 11	22	5		0							20	8	2	3.5	
ROSWELL	1112	888.6	1009.8	33.8	15.3	24.1	- 1.9	41.0	28	[illegible]	[illegible]	16	0	[illegible]	38	25	- 7	16	3	5			1.6	19	[illegible]	W	28	24	5	1	2.0	93
NEW YORK																																
ALBANY	84	1005.1	1015.6	26.7	14.0	20.4	0.8	33.3	11	3.3	3	0	0	15.0	76	187	104	81	14	9	0	0	1.7	20	12.1	W	30	4	9	17	7.0	53
BINGHAMTON	485	958.0	1016.2	24.1	14.0	19.1	1.5	32.6	11	6.7	17+	0	0	13.9	75	74	- 23	26	15	12	0	0	2.0	21	15.2	W	12	4	12	14	6.9	59
BUFFALO	215	989.5	1014.7	24.9	15.3	20.1	1.9	[illegible]	26+	9.4	17	0	0	13.9	72	43	- 22	13	15	5	0	0	3.5	23	13.0	W	12	6	11	13	6.5	66
NEW YORK U	40	1012.9	1016.2	27.3	18.7	[illegible]	1.1	35.0	11	14.4	17	4	0	16.1	73	116	31	47	14	7	0		0.7	20	13.0	W	1					48
NEW YORK KENNEDY	4	1015.6	1016.2	24.4	16.9	20.7	- 0.5	32.8	11	12.8	17	1	0	16.7	83	133	48	57	12	7	0	0	2.4	19	12.5	24	1	5	11	14	6.8	
NEW YORK LA GUARDIA	3	1015.2	1016.2	26.2	19.0	22.6	0.7	33.9	11	14.4	17+	3	0	16.1	71	172	87	93	15	9	0	0	1.2	20	14.3	NW	9	3	10	17	7.2	
ROCHESTER	167	994.9	1014.8	27.8	15.2	21.5	2.1	33.9	11	8.9	3	5	0	14.4	67	72	7	30	10	5	0		1.9	23	[illegible]	SW	6	7	9	14	6.3	73
SYRACUSE	125	999.7	1014.5	26.8	14.9	20.9	1.3	33.3	11	5.0	3	1	0	15.0	71	190	104	56	14	7	0		[illegible]	20	16.5	W	12	3	8	14	6.2	55

See footnotes at end of table

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CLIMATOLOGICAL DATA

METRIC UNITS

JUNE 1973

State and Station	Elevation ground	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No of days: Max 32.2 °C or above	No of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow, Ice pellets: Total	Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No of days sunrise to sunset: Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover tenths sunrise to sunset	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	Mps		Mps							%
NORTH CAROLINA																																
ASHEVILLE	652	942.8	1017.7	27.6	15.8	21.7	0.5	31.6	17	10.6	1	0	0	17.2	80	98	9	40	14	9	0	0	0.2	16	10.7	34	28	4	9	17	7.2	48
CAPE HATTERAS R	2	1017.3	1017.7	28.1	21.3	24.7	0.7	31.1	17	15.0	3	0	0	21.1	81	109	4	34	13	8	0	0	2.2	23	9.8	26	13	6	9	15	6.6	65
CHARLOTTE	224	989.8	1016.9	28.6	18.8	23.7	- 1.3	32.2	30+	15.6	1	2	0	18.3	77	125	33	38	12	7	0	0	0.8	14	10.3	S	9	4	12	14	7.0	69
GREENSBORO	273	985.8	1017.1	29.0	19.2	24.1	0.3	33.9	17	13.3	2+	1	0	19.4	80	124	36	47	13	11	0	0	1.1	19	13.0	SW	28	3	12	15	7.0	53
RALEIGH	132	1001.4	1016.8	29.3	18.6	23.9	0.0	35.0	17	13.9	2	1	0	19.4	82	238	144	87	12	11	0	0	1.0	18	9.4	15	24	3	14	13	6.9	58
WILMINGTON	9	1015.9	1017.1	29.5	20.0	24.8	- 0.6	34.4	17	15.0	2	3	0	20.6	81	272	164	132	16	11	0		1.5	16	13.0	NE	14	5	9	16	7.1	55
NORTH DAKOTA																																
BISMARCK	502	949.9	1008.6	25.6	9.2	17.4	- 0.7	33.3	14	1.1	12	1	0	10.0	64	29	- 57	12	9	8	0		1.5	27	18.8	NW	26	8	14	8	6.4	74
FARGO	273	976.3	1008.5	25.6	10.7	18.2	- 0.1	33.3	9	3.9	12+	2	0	11.1	66	45	- 32	11	13	3	0		1.5	24	16.1	W	16	9	11	10	6.7	66
WILLISTON	579	941.1	1008.4	25.4	10.7	18.1	0.8	34.4	14	3.9	17	1	0	8.3	[illegible]	58	- 26	26	7	4	0		1.8	29	18.8	NW	3	9	13	8	6.7	71
OHIO																																
AKRON	368	971.2	1015.1	27.4	15.9	21.7	0.9	31.7	10	10.0	16	0	0	15.6	71	92	- 16	32	12	9	0	0	2.2	21	13.0	29	26	8	10	12	5.9	
CINCINNATI ABBE OB	232			29.0	17.7	23.4	0.4	32.2	11+	11.1	1	3	0			206	100	65	17		0				9.4	E	19					[illegible]
CLEVELAND	237	985.8	1014.6	26.7	15.9	21.3	1.4	32.2	10	10.0	15+	1	0	16.7	76	171	84	50	13	10	0	0	2.4	22	16.5	SW	4	8	10	12	6.0	[illegible]
COLUMBUS	247	985.8	1015.2	28.4	16.7	22.6	[illegible]	32.8	11	11.1	14+	2	0	16.7	72	223	117	[illegible]	13	[illegible]			2.3	20	16.1	W	26	5	13	[illegible]	6.4	51
DAYTON	305	979.3	1014.7	28.7	17.3	23.1	1.1	33.3	19	10.6	1	3	0	16.7	70	145	41	32	15	12	0		2.7	[illegible]	17.0	SW	4	8	[illegible]	12	6.0	64
MANSFIELD	395			27.5	16.7	22.1	0.8	31.7	11+	11.1	[illegible]	0	0	16.7	74	180	72	56	15	13	0		2.9	21	17.9	23	3	8	10	12	6.2	
TOLEDO	204	988.8	1013.5	27.4	14.0	21.2	[illegible]	32.2	11	10.0	16	0	[illegible]	[illegible]	[illegible]	165	65	33	13	13			2.1	22	19.2	W	26	7	8	15	6.5	52
YOUNGSTOWN	359	973.2	1015.1	26.2	15.1	20.7	1.2	31.7	[illegible]	7.8	[illegible]	0	[illegible]		76	89	- 2	25	13	7			[illegible]	22	11.2	21	5	6	10	12	6.1	
OKLAHOMA																																
OKLAHOMA CITY	392	967.2	1012.6	30.7	18.3	24.5	- 1.6	36.1	27	11.7	[illegible]	5	0	17.8	72	166	47	47	9	[illegible]	0		3.1	17	18.3	NW	4	11	10	9	4.9	64
TULSA	198	989.2	1013.1	30.2	19.4	24.8	- 1.3	34.4	23	14.4	[illegible]	4	0	[illegible]	71	195	76	56	12	11	0		3.3	18	22.1	S	11	10	10	[illegible]	5.5	[illegible]
OREGON																																
ASTORIA	2	1018.0	1018.6	17.6	9.7	13.7	- 0.4	26.1	[illegible]	3.9	10	0	0	9.4	77	108	31	33	14	0	0	0	2.1	25	9.4	17	12	1	5	4	8.4	
BURNS	1265			24.7	7.1	15.9	[illegible]	[illegible]	17+	[illegible]	18	4	4			1	- 21	1	1		1	T						11	9	[illegible]	6.4	
EUGENE	109	1004.4	1017.8	23.8	[illegible]	16.5	0.4	33.3	21	[illegible]	[illegible]	1		[illegible]	68	34	- 2	16	6	0	0		1.0	28	9.4	25	12	6	[illegible]	10	6.6	
MEACHAM	1234	877.4	1015.1	19.7	6.6	13.1	1.1	31.7	21	- 1.6	17	0	2			15	- 47	11	5		T	0			10.3	29	17	8	4	18	[illegible]	
MEDFORD	396	969.5	1016.7	[illegible]	10.4	19.7	1.8	39.4	21	3.9	18	[illegible]	0	6.1	45	2	- 24	1	[illegible]	1	0	0	1.9	33	10.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
PENDLETON	452	961.7	1014.8	27.3	11.4	19.4	0.6	39.4	[illegible]	5.6	[illegible]	7	0	[illegible]	34	4	- 26	[illegible]	2	1	0		3.3	[illegible]	15.6	[illegible]	16	8	9	13	[illegible]	
PORTLAND	6	1016.3	1017.6	23.5	11.9	17.7	1.1	33.9	21	6.7	[illegible]	[illegible]	0	9.4	[illegible]	37	- 6	14	9	3			1.7	29	12.5	W	16	[illegible]	6	[illegible]	[illegible]	48
SALEM	[illegible]	1010.5	1017.7	23.2	9.2	16.2	0.3	32.8	21	1.1	1	2	0	7.2	58	38	1	14	6	0			[illegible]	26	[illegible]	26	16	4	8	18	[illegible]	
SEXTON SUMMIT R	[illegible]	885.5	1016.3	[illegible]	6.8	[illegible]	[illegible]	31.1	21	0.0	17	0	1		58	11	- 28	6	5		T	T			15.6	18	22	15	6	9	[illegible]	
PACIFIC AREA																																
GUAM [illegible]	[illegible]			30.4	23.1	26.8	[illegible]	31.1	24+	[illegible]	19	0	0			123	[illegible]	43	26		0	0			9.0	E	[illegible]					[illegible]
JOHNSTON	2	1014.2	1014.7	[illegible]	24.5	26.3	[illegible]	28.9	19+	[illegible]	16	0		[illegible]	[illegible]	17	- 5	6	13	1	0	0	7.4	9	13.4	E	8+	4	12	13	6.5	[illegible]
KOROR	[illegible]			31.6	24.7	28.2	[illegible]	33.3	[illegible]	22.3	28	11				350	20	78	26	[illegible]	0				[illegible]	[illegible]	17	[illegible]	5	15	8.5	[illegible]
KWAJALEIN	[illegible]	1009.5	[illegible]	[illegible]	25.4	27.8	[illegible]	31.7	15	22.8	4	0	0	23.9	81	218	2	46	21		0		5.8	7	11.5	[illegible]	14	[illegible]	8	[illegible]	[illegible]	
MAJURO	[illegible]			29.4	24.7	[illegible]	[illegible]	[illegible]	17	20.8	[illegible]	0				311	- 15	55	25		0				[illegible]	[illegible]	14			18	8.0	[illegible]
PAGO PAGO	4	1011.7	1012.2	[illegible]	24.3	26.9		31.1	[illegible]	21.7	14	0		[illegible]	[illegible]	155		38	[illegible]	1	0		5.1	11	4.8	E	[illegible]				6.7	[illegible]
PONAPE	[illegible]			30.8	23.3	[illegible]	[illegible]	[illegible]	17+	21.7	[illegible]	0				594	170	127	26	4	0				8.9	NE	[illegible]	1	8	[illegible]	9.3	[illegible]
TRUK MOEN ISLAND	[illegible]			30.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	- 4	42	24	[illegible]	0				[illegible]	E	[illegible]	[illegible]	[illegible]	[illegible]	6.8	44
WAKE	[illegible]	1014.6	1014.8	30.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	0		5.5	8	[illegible]	E	[illegible]	4	[illegible]	11	[illegible]	[illegible]
YAP	[illegible]			[illegible]	24.3	27.6	0.1	[illegible]	[illegible]	23.3	[illegible]	1	0			314	41	58	[illegible]	1	0				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]
PENNSYLVANIA																																
ALLENTOWN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	136	33	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
ERIE	[illegible]	[illegible]	[illegible]	[illegible]	14.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	160	82	64	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
HARRISBURG	[illegible]	[illegible]	[illegible]	[illegible]	17.3	[illegible]	[illegible]	33.9	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	95	- 2	24	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	W	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PHILADELPHIA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	97	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	W	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PITTSBURGH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	32.2	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	74	- 17	29	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SCRANTON	[illegible]	[illegible]	[illegible]	[illegible]	14.8	[illegible]	[illegible]	31.1	[illegible]	[illegible]	18	[illegible]	0	[illegible]	[illegible]	152	53	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
WILLIAMSPORT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	35.6	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	67	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
RHODE ISLAND																																
BLOCK ISLAND	[illegible]			[illegible]	15.4	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	0				[illegible]	[illegible]	[illegible]			0											
PROVIDENCE	[illegible]	[illegible]	[illegible]	[illegible]	16.5	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	88	18	[illegible]	8	2	0		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	7.6	49

See footnotes at end of table

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Climatological data Right half - Metric

CLIMATOLOGICAL DATA

METRIC UNITS

JUNE 1973

State and Station	Elevation ground	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 25 mm or more	Precipitation: No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear 0-3	No. of days: Partly cloudy 4-7	No. of days: Cloudy 8-10	Sky cover tenths (sunrise to sunset)	Possible sunshine
SOUTH CAROLINA	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm.	Mm.	M p s		M p.s							%
CHARLESTON	12	1014.9	1016.9	30.3	21.2	25.8	- 0.4	36.1	17	17.2	4+	6	0	21.1	79	692	565	257	17	16	0	0	1.3	16	17.9Y	SE	8	3	12	15	7.2	59
CHARLESTON U	3			29.1	22.7	25.9	- 0.6	34.4	17	20.6	26+	3	0			489	381	292	17		0	0			15.6	SE	8					
COLUMBIA	65	1008.8	1016.8	30.4	19.8	25.1	- 1.4	33.9	17	13.9	1	6	0	20.0	78	376	278	138	14	14	0	0	0.4	11	13.0	19	15	6	4	20	7.3	57
GRNVLLE-SPRTNBRG	292	982.7	1016.7	29.0	18.3	23.7	1.3	32.8	17	13.3	1	1	0	18.3	77	98	25	46	13	8	0	0	0.1	11	13.0	W	28	6	8	16	6.9	55
SOUTH DAKOTA																																
ABERDEEN	395	962.8	1008.9	28.1	12.1	20.1	0.9	35.0	9	6.1	29	6	0	10.2	63	35	- 61	15	8	9	0	0	1.1	24	13.4	24	18	12	11	7	4.7	
HURON	390	963.4	1009.2	27.6	11.3	19.4	- 0.3	33.9	9	5.0	17	4	0	11.7	64	21	- 59	10	5	3	0	0	1.3	23	13.9	SW	18	6	19	5	5.0	75
RAPID CITY	964	902.1	1010.8	25.7	10.6	18.2	- 0.1	31.7	23	3.9	3	0	0	8.3	54	16	- 62	9	5	5	0	0	1.4	32	21.9	W	17	6	19	5	5.4	68
SIOUX FALLS	432	960.4	1010.7	28.0	13.0	20.5	0.4	35.0	25+	7.2	17	6	0	12.8	63	60	- 50	29	6	8	0	0	1.6	23	[illegible]	28	20+	10	16	4	4.8	
TENNESSEE																																
BRISTOL	459	963.8	1016.8	28.4	17.2	22.8	- 0.1	31.7	11	12.2	1	0	0	17.8	78	76	- 10	27	12	9	0	0	0.3	25	15.6	26	17	2	16	12	6.5	
CHATTANOOGA	203	991.9	1016.1	30.4	18.9	24.7	- 0.9	32.8	17	13.9	29	4	0	19.9	73	116	22	57	16	15	0	0	0.9	19	17.0	SW	15	7	8	15	6.7	54
KNOXVILLE	299	982.1	1016.5	28.6	18.9	23.8	- 0.5	31.7	19	15.0	29+	0	0	18.9	78	134	49	42	13	9	0	0	0.6	27	13.0	S	3	4	15	11	6.8	70
MEMPHIS	79	1004.7	1014.9	32.6	21.8	27.2	1.4	36.1	25+	16.7	7	16	0	[illegible]	69	25	- 68	19	4	6	0	0	1.9	20	13.0	24	27	4	11	15	6.5	67
NASHVILLE	180	993.9	1015.3	30.2	18.8	24.5	- 0.7	32.2	18	14.4	24	7	0	19.4	77	122	39	45	9	8	0	0	1.9	20	12.1	NW	27	7	9	15	6.5	64
OAK RIDGE R	276			28.7	17.9	23.3	- 0.3	31.7	19+	13.9	29	0	0			176	94	47	13		0	0			15.2Y		15	6	7	17	7.1	
TEXAS																																
ABILENE	544	950.9	1012.1	31.7	18.8	25.2	- 1.6	36.1	18	13.9	21+	12	0	17.8	47	56	- 12	19	7	9	0	0	3.7	18	18.8	SW	2	9	12	9	5.4	74
AMARILLO	1098	889.9	1010.2	32.1	15.7	23.9	- 1.1	38.3	26	9.4	[illegible]	14	0	9.4	43	21	- 52	17	5	5	0	0	3.0	20	15.2	NE	19+	22	8	0	2.3	91
AUSTIN	182	992.2	1013.6	30.3	21.2	25.8	- 1.9	33.3	30+	16.7	7	13	0	20.0	74	119	38	55	10	8	0	0	2.5	17	15.2	NE	20	3	14	13	6.8	47
BROWNSVILLE	6	1012.2	1012.8	30.6	23.9	27.3	- 0.9	33.3	4	20.0	9+	12	0	22.8	81	192	117	86	7	7	0	0	4.2	14	13.9	SE	3	2	20	8	6.5	68
CORPUS CHRISTI	12	1011.9	1013.4	31.0	23.6	27.3	- 0.7	33.3	5+	18.9	5	13	0	23.9	83	339	278	64	13	6	0	0	4.4	13	16.5	N	13	2	14	14	6.9	66
DALLAS	147			31.4	21.1	26.3	- 1.1	35.6	28	15.6	6	15	0	19.4	69	195	113	71	11	7	0	0	3.5	17	15.6	19	3	7	11	12	6.2	
DEL RIO	313	976.3	1011.7	32.8	20.7	26.7	- 2.4	37.2	19+	15.6	10	21	0	18.3	66	82	24	43	9	8	0	0	4.1	12	14.8	36	19	4	11	15	7.0	
EL PASO	1194	881.1	1009.7	34.1	15.4	24.8	- 2.4	42.2	30	11.1	1	21	0	4.4	29	18	1	18	2	4	0	0	0.2	21	14.3	N	12	23	7	0	1.8	97
FORT WORTH	164	993.6	1013.6	31.8	20.7	26.3	- 1.2	35.0	28+	13.9	6	16	0	20.6	75	149	74	54	11	9	0	0	3.0	17	13.4	17	2	7	10	13	6.3	
GALVESTON U	2			28.8	24.3	26.6	- 1.0	31.1	30	19.4	5	0	0			102	35	42	10		0	0			12.1	W	12					59
HOUSTON INTERCON	29	1011.2	1014.9	30.9	21.4	26.2	- 1.0	34.4	30+	17.2	7	10	0	22.2	83	342	252	168	13	10	0	0	1.8	15	20.1	30	5	0	15	15	7.6	47
LUBBOCK	992	902.5	1010.9	32.7	17.2	24.9	- 0.3	37.8	29	9.4	20	18	0	8.9	40	8	- 56	8	2	6	0	0	2.5	16	14.8	1	19	21	8	1	2.4	94
MIDLAND	869	914.7	1010.7	32.9	17.1	25.0	- 2.3	38.3	18	11.1	20	17	0	9.4	43	9	- 33	6	3	5	0	0	3.2	15	16.5	11	29	16	12	2	3.2	
PORT ARTHUR	5	1014.6		30.9	21.7	26.3	- 0.7	33.3	28	17.2	7	9	0	22.2	82	147	38	48	14	11	0	0	2.0	17	13.0	NE	5	3	13	14	7.0	59
SAN ANGELO	580	946.8	1011.9	33.4	18.7	26.1	- 2.0	38.9	18	13.9	7	16	0	17.2	64	70	24	25	9	9	0	0	3.3	18	13.4	20	2	7	14	9	5.6	
SAN ANTONIO	240	986.1	1013.6	30.7	21.7	26.2	- 1.5	33.9	2	15.0	7	14	0	20.6	74	265	190	117	11	5	0	0	2.7	13	13.0	N	19	1	14	15	7.6	50
VICTORIA	32	1009.8	1013.8	31.2	22.9	27.1	- 0.3	34.4	5+	18.9	12	15	0	22.2	80	322	245	109	11	7	0	0	2.8	15	19.2Y	S	2	1	13	16	7.4	
WACO	153	995.9	1013.6	30.1	20.3	25.2	- 2.6	35.0	28	15.6	6	9	0	20.0	75	180	113	56	7	6	0	0	3.6	16	19.2	23	1	5	13	17	6.7	
WICHITA FALLS	303			31.8	17.6	24.7	- 2.9	37.8	27	12.8	7	14	0	17.8	71	131	50	82	7	8	0	0	2.7	16	23.2	31	2	13	9	8	4.4	
UTAH																																
MILFORD	1533	846.3		28.9	7.2	18.1	- 0.5	37.2	27	- 1.1	19	13	1			23	12	9	5		0	0			15.6	SW	14	15	7	8	4.2	80
SALT LAKE CITY	1286	871.0	1012.1	29.4	13.0	21.2	1.6	38.3	9	4.4	19	15	0	3.9	35	5	- 20	4	4	1	0	0	1.2	17	15.2	NW	17+	13	8	9	4.7	83
WENDOVER	1291	870.0	1012.6	28.3	15.0	21.7	0.7	37.8	9	6.7	18	11	0	- 1.1	25	12	1	9	4		0	0						15	6	9	4.7	
VERMONT																																
BURLINGTON	101	1002.0	1014.5	24.9	13.8	19.4	1.5	31.1	11	1.7	3	0	0	14.4	77	195	107	44	15	12	0	0	1.6	17	14.8	SW	24+	2	12	16	7.5	41
VIRGINIA																																
LYNCHBURG	279	983.4		28.6	17.4	23.0	0.2	31.7	17	11.1	1	0	0			106	3	39	9		0	0			12.5	SW	6	8	10	12	5.7	65
NORFOLK	7	1015.9	1016.9	29.3	20.6	24.9	0.7	33.9	10	15.6	2	5	0	19.4	74	151	59	50	13	6	0	0	2.0	18	9.8	18	22	7	6	17	6.9	53
RICHMOND	50	1010.2	1016.5	29.8	19.1	24.4	0.5	32.8	11+	13.3	2	7	0	18.9	75	62	- 33	22	8	7	0	0	1.4	19	15.6	NE	3	6	13	11	6.4	67
ROANOKE	350	975.6	1016.8	29.2	17.2	23.2	0.2	33.9	17	10.6	1	3	0	17.8	74	93	- 4	40	11	10	0	0	0.7	21	11.2	13	17	7	12	11	6.0	
WALLOPS ISLAND	3			25.9	19.1	22.5		31.7	10	15.6	15+	0	0			152		102	8		0	0			14.3Y	NE	17					
WASHINGTON																																
OLYMPIA	59	1010.2	1017.6	20.8	7.9	14.4	- 0.7	33.3	21	2.2	2	1	0	9.4	77	66	21	19	14	0	0	0	1.7	22	10.7	25	12	0	8	22	8.4	
QUILLAYUTE	55	1010.5	1017.9	17.5	7.9	12.7	- 0.5	28.3	20	2.2	10	0	0	8.3	79	139	53	30	17	0	T	0	1.4	23	9.8	S	12	0	8	22	8.8	26
SEATTLE	6			20.2	11.6	15.9	- 0.6	29.4	21	7.8	18	0	0			44	12	17	12		0	0			13.0Y	SW	22					
SEATTLE-TACOMA	122	1001.0	1017.3	19.4	10.9	15.2	- 0.3	30.0	21	6.7	2	0	0	8.9	71	64	23	25	13	1	0	0	1.0	21	9.4	W	12	0	7	23	8.5	53
SPOKANE	718	930.6	1013.4	23.7	9.6	16.7	0.1	37.8	22	2.8	1	2	0	3.9	47	14	- 23	4	8	3	0	0	3.4	22	13.9	SW	23	5	11	14	6.9	61

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

JUNE 1973

State and Station	Elevation (ground)	Pressure: Station ∅	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No of days: Max 32.2 °C or above	No of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow, Ice pellets: Total	Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p.s.		M p s							%
WASHINGTON																																
STAMPEDE PASS R	1206	880.1		17.3	4.7	8.5	- 0.9	26.7	22+	- 0.6	17+	0	5			135	31	21	19		53	25						1	3	26	8.0	
WALLA WALLA U	289			26.6	13.3	20.0	0.4	37.8	22	7.8	18+	6	0			10	- 21	4	5		0	0			9.4	NW	17	7	9	14	6.3	66
YAKIMA	321	976.3	1014.3	27.2	8.7	18.0	0.0	37.2	21	2.2	10	6	0	3.9	41	1	- 20	T	2	1	0	0	2.1	30	15.6	2[illegible]	22	8	10	12	6.1	
WEST INDIES																																
SAN JUAN P.R.	4	1013.9	1016.2	31.6	25.3	28.4	1.9	34.4	2	23.9	12+	8	0	21.7	70	120	- 24	36	16	5	0	0	3.5	9	12.1	E	20	5	16	9	6.0	64
WEST VIRGINIA																																
BECKLEY	763	930.2	1016.3	26.3	14.6	20.4	0.6	28.9	11	6.7	1	0	0	15.6	76	54	- 60	14	10	9	0	0	1.3	21	17.9	27	27	0	14	16	7.1	
CHARLESTON	286	982.4	1016.1	29.8	16.1	22.9	0.7	33.9	12	7.2	1	6	0	17.2	75	114	20	36	12	9	0		0.9	21	16.5	3	5	2	19	9	6.7	
ELKINS	594	947.2		26.9	12.1	19.6	0.1	29.4	19+	1.7	1	0	0			90	- 42	23	12		0	0						4	17	9	6.1	
HUNTINGTON	252	985.8	1015.5	29.7	17.3	23.5	1.3	32.8	26+	10.0	1	6	0	17.8	75	83	- 24	27	12	8			1.4	19	15.6	24	5	1	13	16	7.3	
PARKERSBURG U	187			29.4	17.1	23.2	0.7	32.8	10	9.4	1	5	0			51	- 57	18	13		0				1[illegible].7	W	27+					60
WISCONSIN																																
GREEN BAY	208	985.8	1010.9	26.1	14.1	20.1	.5	32.8	11+	10.0	24	3	0	13.9	66	81	- 4	36	15	6	0	0	1.6	23	13.4	S	15	5	11	14	6.5	59
LA CROSSE	198	987.5	1011.4	27.4	15.1	21.3	.8	35.0	10	10.6	29	4	0	15.6	74	114	7		10	7	0		1.1	21								
MADISON	262	980.7	1011.4	26.7	13.2	19.9	1.0	32.2	11+	8.9	24+	2	0	14.4	[illegible]	21	- [illegible]	5	12	8	0	0	2.2	22	18.3	NW	26	7	13	10	6.0	63
MILWAUKEE	205	986.8	1011.6	26.2	15.2	20.7	1.3	31.1	11+	9.4	25	0	0	14.4	68	50	- [illegible]	25	11	6	0	0	2.6	23	25.0	SW	16	7	10	13	6.3	67
WYOMING																																
CASPER	1627	836.8	1011.3	26.3	8.1	17.2	- 1.1	33.9	9	0.6	15	3	[illegible]	4.4	49	17	- 15	5	7	4	0	0	2.7	26	16.5	21	15	10	[illegible]	[illegible]	5.6	
CHEYENNE	1867	812.7	1012.1	24.9	9.4	17.2	- 1.1	32.8	10	1.7	3	[illegible]	[illegible]	1.7	40	30	- 23	21	5	6	0	0	2.7	28	24.6	NW	18	[illegible]	19	7	5.6	63
LANDER	1696	828.7	1011.1	25.8	9.4	17.6	0.9	33.3	20	0.0	19	3	1	1.7	33	6	- 29	4	3	3	0	0	2.0	26	[illegible]	W	17	8	11	11	5.5	66
SHERIDAN	1208	876.7	1011.6	25.4	8.8	17.2	0.6	34.4	23	2.2	4+	4	0	6.1	57	56	- 3	22	11	6	0	0	2.0	32	16.1	NW	18	8	[illegible]	[illegible]	6.0	64

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

B Number of days maximum 21.1 C or above for Alaskan stations.
Y Peak Gust.
+ And also on an earlier date or dates.
∅ Station pressures apply to elevations shown in the "Elevations" table of the annual issue of this publication.

Conversion formulae to English units are as follows:

1 foot = 0.3048 meters
F = $\frac{9}{5}$ x °C + 32

1 inch = 25.4 millimeters
1 mile per hour = 0.447 meters per second

MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F)

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
ALABAMA														
BIRMINGHAM	0	0	9	135	486	534	749	629	217	228	48	0	3035	2551
HUNTSVILLE	0	0	10	195	544	561	767	618	219	213	53	0	3180	3070
MOBILE	0	0	0	33	284	308	442	368	86	75	0	0	1596	1693
MONTGOMERY	0	0	2	67	380	393	575	502	135	119	18	0	2191	2291
ALASKA														
ANCHORAGE	185	252	608	1025	1308	1627	1925	1448	1258	866	654	399	11555	10648
ANNETTE	198	201	376	644	690	982	981	797	827	668	543	408	7315	7069
BARROW	681	750	1009	1350	1909	2106	2436	2193	2667	2035	1416	950	19502	20174
BARTER ISLAND	785	731	1030	1365	1927	2164	2397	2287	2792	2009	1320	920	19727	19862
BETHEL	228	293	632	929	1399	1721	2149	1576	1829	1182	775	447	13160	13196
BETTLES	123	272	804	1354	1968	2199	2783	2029	2004	1246	600	211	15593	
BIG DELTA	129	209	755	1153	1659	2049	2528	1737	1635	905	542	268	13569	
COLD BAY	500	457	505	774	915	1065	1295	960	1105	998	895	668	10137	9880
FAIRBANKS	63	184	738	1177	1739	2091	2582	1864	1637	883	439	150	13547	14279
GULKANA	172	295	729	1176	1808	2277	2490	1939	1437	902	664	377	14266	
HOMER	396	351	546	841	1045	1332	1645	1201			720	498		
JUNEAU	207	293	535	810	907	1275	1423	1126	986	752	584	404	9302	9075
KING SALMON	298	319	576	888	1177	1508	1962	1268	1411	864	679	402	11352	11343
KODIAK							1431	936	1080	803	730	550		8861
KOTZEBUE	192	304	710	1104	1651	1964	2324	1701	2177	1663	1060	680	15530	16105
MC GRATH	129	219	657	1040	1705	2107	2585	1902	1749	1024	566	259	13942	14283
NOME	286	365	691	1006	1334	1686	2180	1517	1968	1398	918	665	14014	14171
ST. PAUL ISLAND	691	585	625	840	947	1077	1292	1102	1385	1156	1064	760	11524	11199
SHEMYA	566	471	521	732	957	974	1098	988	1001					
SUMMIT	275	411	860	1314	1570	1946	2276	1721	1578	1150	861	498	14460	
TALKEETNA	131	257	675	1124	1396	1719	2103	1537	1354	914	651	342	12203	11559
UNALAKLEET	193	257	655	978	1439	1767	2234	1530	1858	1236				
YAKUTAT	274	342	542	800	913	1258	1381	1082	1029	822	657	485	9585	9092
ARIZONA														
FLAGSTAFF	22	78	241	584	1055	1330	1297	1006	1176	801	370	164	8124	7152
PHOENIX	0	0	0	38	205	395	422	200	254	39	0	0	1553	1765
TUCSON	0	0	0	96	358	489	533	320	410	174	19	0	2399	1800
WINSLOW	0	0	10	243	681	957	1014	658	640	433	99	31	4766	4782
YUMA	0	0	0	13	147	344	355	167	147	17	0	0	1190	1217
ARKANSAS														
FORT SMITH	[illegible]	0	14	176	648	887	873	688	315	258	59	0	3919	3292
LITTLE ROCK	0	0	8	142	530	736	777	637	216	186	28	0	3260	3219
CALIFORNIA														
BAKERSFIELD	0	0	0	59	362	657	521	205	324	87	3	0	2218	2122
BISHOP	0	1	36	343	654	930	1028	676	681	376	66	2	4793	4227
BLUE CANYON	20	62	199	476	755	990	1001	788	962	590	266	138	6247	5507
EUREKA U	217	204	269	328	389	590	542	395	537	439	393	293	4596	4643
FRESNO	0	0	2	108	437	740	610	358	444	140	12	2	2853	2492
LONG BEACH	0	0	0	31	169	334	352	203	295	77	29	0	1490	1711
LOS ANGELES	0	0	0	15	138	248	314	177	287	146	89	12	1426	1799
LOS ANGELES U	0	0	0	14	97	230	266	136	214	77	32	2	1068	1349
MT SHASTA R	14	67	238	456	775	1096	1022	720	831	488	227	111	6045	5722
OAKLAND	47	20	38	101	326	621	547	318	415	212	159	78	2882	2870
RED BLUFF	0	0	11	131	467	774	693	386	466	139	19	0	3086	2515
SACRAMENTO	0	0	6	115	451	749	636	325	424	141	15	1	2863	2773
SANDBERG R	18	30	81	401	613	848	885	685	841	493	188	96	5179	4209
SAN DIEGO	0	0	0	29	149	224	286	131	208	107	61	1	1196	1439
SAN FRANCISCO	64	42	75	131	350	613	521	334	416	241	197	103	3087	3012
SAN FRANCISCO U	144	139	110	115	298	546	455	277	380	225	267	167	3123	3001
SANTA MARIA	53	56	91	146	363	521	542	326	496	320	180	82	3176	2967
STOCKTON	0	0	0	112	445	704	602	344	421	119	12	2	2761	2676
COLORADO														
ALAMOSA	55	97	267	561	1384	1695	1839	1360	1028	859	449	188	9782	8529
COLORADO SPRINGS	41	34	136	476	1049	1281	1221	912	877	715	359	76	7177	6423
DENVER	42	15	107	397	960	1239	1162	820	771	646	290	56	6505	6283
GRAND JUNCTION	0	0	31	335	832	1303	1651	999	705	499	139	49	6543	5641
PUEBLO	16	2	58	340	987	1294	1093	832	685	532	197	25	6061	5462
CONNECTICUT														
BRIDGEPORT	7	2	43	418	691	920	1066	996	704	472	290	8	5617	5617
HARTFORD	6	9	82	494	782	1054	1097	1051	665	444	229	13	5926	6172
DELAWARE														
WILMINGTON	0	0	20	356	586	716	902	820	477	322	143	0	4342	4930
DIST.OF COLUMBIA														
WASHINGTON DULLES	2	3	38	414	686	788	964	886	500	371	186	1	4839	
WASHINGTON NATIONAL	0	0	8	278	543	654	843	777	423	286	109	0	3921	4224
FLORIDA														
APALACHICOLA U	0	0	0	11	172	232	310	332	71	44	0	0	1172	1308
DAYTONA BEACH	0	0	0	0	62	139	226	251	38	29	0	0	745	879
FORT MYERS	0	0	0	0	25	82	94	141	2	[illegible]	0	0	348	442
JACKSONVILLE	0	0	0	10	169	204	351	329	67	52	7	0	1189	1239
KEY WEST	0	0	0	0	0	8	16	37	0	0	0	0	61	108
LAKELAND U	0	0	0	0	76	127	172	207	21	20	0	0	626	661
MIAMI	0	0	0	0	3	30	41	64	0	0	0	0	138	214
ORLANDO	0	0	0	0	54	105	160	169	12	9	0	0	509	766
PENSACOLA	0	0	0	24	254	277	390	350	70	63	0	0	1428	1463
TALLAHASSEE	0	0	0	13	228	275	409	393	106	89	15	0	1528	1485
TAMPA	0	0	0	0	65	130	166	223	18	21	0	0	623	683
WEST PALM BEACH	0	0	0	0	5	37	56	81	4	5	0	0	188	253
GEORGIA														
ATHENS	0	0	3	113	420	472	669	583	248	224	65	0	2797	2929
ATLANTA	0	0	3	136	465	511	725	617	240	230	72	0	2999	2983
AUGUSTA	0	0	0	82	355	410	613	563	181	166	42	0	2412	2397
COLUMBUS	0	0	1	56	328	336	572	536	143	146	28	0	2146	2383
MACON	0	0	1	50	327	324	562	529	137	128	27	0	2085	2136
ROME	0	0	6	171	491	557	794	654	250	242	72	0	3237	3326
SAVANNAH	0	0	0	25	239	261	462	423	98	85	4	0	1597	1819

MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F)

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
IDAHO														
BOISE	11	0	222	406	727	1270	1056	708	673	470	182	91	5816	5809
LEWISTON	13	1	178	419	706	1112	1007	719	588	427	173	59	5402	5542
POCATELLO	30	9	281	527	860	1445	1394	1057	895	643	290	135	7566	7033
ILLINOIS														
CAIRO	0	0	17	219	593	876	882	745	298	259	52	0	3942	3821
CHICAGO O HARE	15	10	109	481	811	1269	1135	1012	645	503	311	0	6301	6639
CHICAGO MIDWAY	15	12	93	454	818	1224	1118	967	609	489	284	0	6083	6155
MOLINE	8	7	80	459	824	1319	1170	1013	598	452	223	1	6154	6408
PEORIA	9	19	87	461	855	1271	1161	1005	566	423	216	0	6073	6025
ROCKFORD	17	26	119	491	845	1338	1193	1061	675	520	281	2	6568	6830
SPRINGFIELD	3	11	58	375	795	1181	1089	957	512	398	174		5553	5429
INDIANA														
EVANSVILLE	2	3	26	356	702	940	997	844	345	312	136		4633	4435
FORT WAYNE	15	17	86	490	809	1081	1102	1046	607	473	259	0	5985	6205
INDIANAPOLIS	9	4	36	413	746	1018	1059	937	477	416	184	0	5298	5699
SOUTH BEND	24	35	112	468	801	1115	1080	977	561	446	268	0	5887	6439
IOWA														
BURLINGTON	10	8	82	443	842	1323	1190	989	576	443	181		6067	6114
DES MOINES	7	10	112	523	925	1442	1326	1039	594	470	173		6621	6808
DUBUQUE	20	20	141	582	961	1476	1311	1095	696	588	285	7	7182	7376
SIOUX CITY	6	5	116	493	854	1452	1342	1099	679	434	179	4	6663	6951
WATERLOO	23	28	158	571	945	1509	1428	1130	712	589	264	[illegible]	7359	7320
KANSAS														
CONCORDIA	5	2	69	422	807	1236	1171	883	622	414	154	5	5789	5479
DODGE CITY	6	0	70	345	831	1164	1122	822	717	537	201	0	5815	4986
GOODLAND	28	24	117	454	980	1355	1177	881	770	602	265	28	6681	6141
TOPEKA	10	0	59	337	764	1152	1158	864	537	378	129		5388	5182
WICHITA	2	0	46	319	750	1123	1159	816	506	386	125	0	5232	4620
KENTUCKY														
COVINGTON	2	3	24	404	733	891	1025	888	445	425	206	3	5049	5265
LEXINGTON	10	1	20	366	612	739	920	827	353	371	167	0	4386	4683
LOUISVILLE	0	0	16	298	628	793	927	796	349	343	129	0	4279	4660
LOUISIANA														
ALEXANDRIA	0	0	5	88	412	483	633	456	133	162	14	0	2386	1921
BATON ROUGE	0	0	0	19	252	338	479	384	77	91	0	0	1640	1560
LAKE CHARLES	0	0	1	56	319	377	498	370	74	99	1	0	1795	1459
NEW ORLEANS	0	0	0	28	293	314	447	351	72	114	9	0	1628	1385
SHREVEPORT	0	0	6	92	419	597	621	429	135	145	9	0	2453	2184
MAINE														
CARIBOU	55	145	326	818	1130	1775	1711	1464	1092	807	491	122	9936	9767
PORTLAND	27	53	190	607	893	1264	1292	1157	842	575	419	99	7418	7511
MARYLAND														
BALTIMORE	2	0	16	357	649	759	935	854	511	365	191	1	4640	4654
MASSACHUSETTS														
BLUE HILL OBS R	12	30	115	522	802	1038	1101	1064	729	491	304	35	6243	6368
BOSTON	3	4	51	405	673	985	1033	971	666	450	258	24	5523	5634
WORCESTER	16	41	171	622	897	1152	1200	1120	738	555	338	37	6887	6969
MICHIGAN														
ALPENA	72	108	292	694	911	1287	1306	1338	913	709	486	86	8202	8506
DETROIT	21	18	91	486	770	1048	1085	1101	670	484	267	1	6042	6232
DETROIT METRO.	24	28	113	539	822	1096	1115	1103	667	480	289	3	6279	6516
FLINT	34	40	139	574	835	1118	1116	1136	725	542	374	17	6650	6885
GRAND RAPIDS	28	41	126	577	867	1185	1162	1178	708	552	341	4	6769	6998
HOUGHTON LAKE	77	92	242	716	933	1326	1324	1307	829	653	442	54	7995	8342
LANSING	56	56	173	616	884	1186	1158	1218	774	564	370	20	7075	6909
MARQUETTE U	103	121	305	653	950	1423	1323	1239	916	752	598	159	8542	8393
MUSKEGON	41	44	118	529	797	1152	1147	1137	726	602	401	15	6709	6696
SAULT STE MARIE	105	122	348	722	972	1432	1414	1406	923	748	574	192	8958	9048
MINNESOTA														
DULUTH	134	146	440	802	1167	1792	1654	1429	1022	793	526	171	10076	10000
INTERNATIONAL FALLS	72	74	412	769	1180	1893	1720	1561	993	800	393	60	9927	10606
MINNEAPOLIS	34	52	218	651	974	1664	1474	1208	761	611	299	13	7959	8382
ROCHESTER	39	71	219	667	1005	1671	1525	1251	792	674	353	20	8287	8295
ST CLOUD	48	76	297	717	1049	1775	1624	1333	849	670	348	48	8834	8879
MISSISSIPPI														
JACKSON	0	0	4	71	400	466	634	503	135	146	19	0	2378	2203
MERIDIAN	0	0	5	79	401	434	602	467	125	147	19	0	2279	2289
MISSOURI														
COLUMBIA REGIONAL	2	0	43	336	751	1162	1080	890	499	387	142	0	5292	5121
KANSAS CITY	1	0	37	355	751	1155	1160	868	529	394	127	0	5377	5152
ST JOSEPH	6	4	54	399	781	1211	1194	896	490	362	115	0	5512	5484
ST LOUIS	2	0	29	317	751	1069	997	849	430	348	121	0	4913	4900
SPRINGFIELD	9	0	40	266	727	1029	981	808	409	359	145	0	4774	4561
MONTANA														
BILLINGS	85	26	311	660	915	1451	1296	994	810	699	333	99	7678	7049
GLASGOW	71	11	338	703	958	1814	1452	1152	802	691	277	68	8337	8996
GREAT FALLS	109	23	331	668	856	1458	1240	983	785	739	303	125	7620	7750
HAVRE	74	9	360	741	947	1635	1273	1173	792	713	266	99	8082	8700
HELENA	136	49	418	798	1010	1588	1465	1174	892	732	374	155	8791	9129
KALISPELL	113	26	413	792	959	1444	1410	1059	787	668	383	205	8259	8191
MILES CITY	55	10	277	653	941	1603	1379	1063	752	671	281	74	7759	7723
MISSOULA	81	39	400	688	936	1416	1343	946	800	651	353	186	7839	8125
NEBRASKA														
GRAND ISLAND	6	9	116	494	894	1389	1273	980	734	520	240	11	6666	6530
LINCOLN	2	6	108	492	855	1340	1281	1018	688	458	199	1	[illegible]	6292
NORFOLK	12	20	145	545	884	1457	1353	1086	735	497	221	12	6967	6979
NORTH PLATTE	24	15	169	567	1047	1479	1343	967	756	567	283	34	7251	6684
OMAHA	6	7	106	488	831	1357	1307	1014	636	437	191	0	6380	6218
SCOTTSBLUFF	41	14	146	495	1041	1379	1245	980	825	684	312	57	7219	6673
VALENTINE	30	38	165	596	1056	1483	1356	1013	779	592	297	28	7433	7425

MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F)

1972-1973

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
NEVADA														
ELKO	17	28	317	573	985	1419	1386	931	867	652	273	135	7583	7433
ELY	16	86	320	599	1019	1384	1379	1059	1067	769	376	195	8269	7733
LAS VEGAS	0	0	0	108	453	727	744	428	437	132	12	0	3041	2709
RENO	8	26	249	503	803	1229	1127	760	834	630	199	87	6455	6332
WINNEMUCCA	1	6	255	525	855	1370	1184	780	859	616	218	97	6766	6761
NEW HAMPSHIRE														
CONCORD	27	82	223	695	1007	1284	1357	1250	905	596	370	78	7874	7383
MT WASHINGTON OBS	474	579	675	1196	1388	1677	1830	1672	1306	1239	983	567	13586	13817
NEW JERSEY														
ATLANTIC CITY	5	8	28	410	612	691	885	842	523	414	207	3	4628	4812
ATLANTIC CITY U	2	0	23	328	553	658	796	738	508	330	245	9	4190	4741
NEWARK	0	0	22	356	599	776	906	882	504	339	163	1	4548	5067
TRENTON U	3	0	35	391	624	772	925	891	562	368	202	3	4776	4980
NEW MEXICO														
ALBUQUERQUE	0	3	14	244	740	925	1020	811	607	440	113	▮	4920	4348
CLAYTON	25	14	91	376	921	1018	1025	805	735	612	250	24	5896	5158
ROSWELL	0	0	13	216	660	785	800	594	386	310	73	0	3837	3242
NEW YORK														
ALBANY	16	38	154	590	890	1113	1168	1198	709	486	299	47	6708	6875
BINGHAMTON	19	56	173	680	937	1097	1210	1250	770	584	411	47	7234	7286
BUFFALO	16	33	113	574	860	1054	1152	1173	696	542	318	24	6555	7062
NEW YORK U	2	0	25	355	611	812	907	903	572	362	188	▮	4739	4871
NEW YORK KENNEDY	0	0	21	321	549	732	876	831	530	325	242	13	4440	5219
NEW YORK LA GUARDIA	4	0	37	389	653	813	920	904	613	371	195	4	4903	4811
ROCHESTER	7	24	92	534	833	982	1118	1189	690	519	279	17	6284	6748
SYRACUSE	9	23	98	567	833	1053	1128	1217	687	547	325	31	6518	6756
NORTH CAROLINA														
ASHEVILLE	3	0	8	304	578	605	846	737	374	362	158	0	3975	4466
CAPE HATTERAS R	0	0	0	61	257	335	578	597	302	151	50	0	2331	2612
CHARLOTTE	0	0	3	195	490	564	780	693	341	241	74	0	3381	3191
GREENSBORO	▮	0	9	314	562	642	889	774	396	292	111	0	3990	3805
RALEIGH	0	0	9	238	504	576	790	692	334	231	88	0	3462	3393
WILMINGTON	0	0	0	81	299	399	567	546	217	154	30	0	2293	2347
NORTH DAKOTA														
BISMARCK	41	39	256	724	1116	1762	1528	1201	787	714	332	93	8593	8851
FARGO	25	41	261	695	1089	1897	1688	1361	893	701	328	79	9058	9226
WILLISTON	75	25	380	789	1089	1805	1488	1213	855	708	316	78	8821	9243
OHIO														
AKRON	25	16	84	470	755	905	1082	1043	538	455	243	▮	5617	6037
CINCINNATI ABBE OB.	11	▮	27	361	696	878	969	834	407	397	152	0	4733	4806
CLEVELAND	32	27	95	485	752	937	1067	1033	569	450	254	3	5704	6196
COLUMBUS	22	18	77	473	727	889	1041	934	444	427	184	0	5236	5660
DAYTON	15	6	63	443	771	967	1038	941	502	444	204	0	5394	5622
MANSFIELD	9	16	70	471	783	966	1078	1037	534	453	219	▮	5637	5782
TOLEDO	28	36	134	543	810	1073	1135	1106	639	499	285	3	6291	6494
YOUNGSTOWN	51	39	154	580	842	972	1157	1116	630	512	324	6	6383	6417
OKLAHOMA														
OKLAHOMA CITY	0	0	23	225	640	940	975	701	380	283	55	0	4222	3725
TULSA	0	0	19	183	634	964	954	700	321	233	42	0	4050	3860
OREGON														
ASTORIA	99	65	230	388	525	810	755	574	635	473	357	246	5158	5186
BURNS U	47	41	394	513	888	1369	1211	857	864	624	313	189	7310	6957
EUGENE	23	27	202	424	536	945	825	567	615	444	276	132	5016	4726
MEACHAM	116	103	440	679	893	1354	1268	894	954	763	443	299	8206	7874
MEDFORD	2	11	178	385	599	1031	835	519	616	379	139	48	4742	5008
PENDLETON	5	4	165	422	663	1170	1036	738	588	434	169	73	5467	5127
PORTLAND	10	▮	153	363	497	848	799	560	525	378	202	89	4430	4635
SALEM	34	42	239	454	552	919	803	586	626	468	288	141	5152	4754
SEXTON SUMMIT R	40	111	288	479	749	1068	999	689	925	600	364	300	6612	6254
PENNSYLVANIA														
ALLENTOWN	4	11	69	513	745	924	1055	995	633	446	275	6	5676	5810
ERIE	55	47	144	546	820	976	1090	1146	697	568	379	40	6508	6927
HARRISBURG	0	▮	25	395	686	865	964	926	607	422	227	7	5125	5251
PHILADELPHIA	0	0	22	378	635	775	940	874	547	359	176	1	4707	5101
PITTSBURGH	20	11	63	506	767	853	1087	1006	508	474	264	2	5563	5987
SCRANTON	21	20	125	603	860	988	1124	1131	704	521	354	25	6476	6254
WILLIAMSPORT	12	19	91	565	810	942	1125	1089	664	479	306	16	6118	5934
RHODE ISLAND														
BLOCK ISLAND	4	4	53	409	636	808	984	926	716	542	325	37	5444	5804
PROVIDENCE	8	10	64	473	717	945	1044	984	653	451	268	16	5633	5954
SOUTH CAROLINA														
CHARLESTON	0	0	0	33	268	302	520	524	167	141	18	0	1973	2033
CHARLESTON U	0	0	0	30	219	286	475	450	150	88	5	0	1703	1794
COLUMBIA	0	0	0	98	350	423	618	583	219	179	47	0	2517	2484
GRNVLLE SPRTNBRG	0	0	4	189	476	519	734	641	323	229	61	0	3176	3044
SOUTH DAKOTA														
ABERDEEN	19	35	176	638	1033	1688	1484	1135	783	580	238	27	7836	8473
HURON	26	38	171	621	997	1530	1428	1144	776	578	271	31	7611	8223
RAPID CITY	74	43	193	649	1010	1436	1181	1008	847	659	350	83	7533	7345
SIOUX FALLS	29	43	194	631	984	1555	1440	1166	775	549	256	19	7641	7839
TENNESSEE														
BRISTOL	8	0	10	281	559	652	898	779	334	333	152	0	4006	4143
CHATTANOOGA	0	0	10	253	567	674	890	767	294	246	80	0	3781	3254
KNOXVILLE	0	0	9	251	522	622	828	697	283	272	97	0	3581	3494
MEMPHIS	0	0	12	172	583	766	809	679	237	200	32	0	3490	3232
NASHVILLE	0	0	10	168	533	682	830	702	261	275	83	0	3544	3578
OAK RIDGE R	0	0	10	241	536	642	848	745	304	301	122	0	3749	3817

MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F)

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
TEXAS														
ABILENE	0	0	13	158	554	702	844	574	235	228	43	0	3351	2624
AMARILLO	13	2	48	274	833	987	972	706	548	438	113	0	4934	3985
AUSTIN	0	0	0	46	375	513	586	405	72	128	3	0	2128	1711
BROWNSVILLE	0	0	0	0	144	217	339	190	4	27	0	0	921	[illegible]
CORPUS CHRISTI	0	0	0	8	188	295	415	262	23	44	0	0	1235	914
DALLAS	0	0	3	109	425	642	682	477	113	140	12	0	2603	2363
DEL RIO	0	0	0	21	283	429	531	381	31	72	0	0	1748	1504
EL PASO	0	0	3	87	480	563	679	499	384	218	31	0	2944	[illegible]
FORT WORTH	0	0	3	96	446	644	690	475	155	182	12	0	2703	2405
GALVESTON U	0	0	0	23	225	289	424	329	39	73	0	0	1402	1235
HOUSTON INTERCON	0	0	2	50	320	410	540	379	75	117	5	0	1898	1676
LUBBOCK	2	0	23	220	672	831	928	688	416	312	58	0	4150	3578
MIDLAND	0	0	19	158	551	660	804	587	320	249	55	0	3403	2591
PORT ARTHUR	0	0	0	57	340	390	532	389	77	118	2	0	1905	1447
SAN ANGELO	0	0	3	97	438	577	738	514	183	191	20	0	2761	2255
SAN ANTONIO	0	0	0	29	334	457	551	362	29	94	1	0	1857	1546
VICTORIA	0	0	0	14	264	376	476	301	20	64	0	0	1515	1173
WACO	0	0	4	89	426	638	696	492	149	170	13	0	2677	[illegible]
WICHITA FALLS	0	0	8	193	571	771	839	577	213	234	47	0	3453	[illegible]
UTAH														
MILFORD	0	6	132	470	898	1523	1570	1003	895	660	243	111	7511	6497
SALT LAKE CITY	0	0	110	347	761	1307	1400	909	711	515	135	67	6262	6052
WENDOVER	0	0	133	375	816	1295	1308	896	745	476	113	58	6215	[illegible]
VERMONT														
BURLINGTON	26	69	212	694	982	1310	1344	1410	855	608	345	86	7941	8269
VIRGINIA														
LYNCHBURG	2	0	20	310	593	671	893	809	435	339	158	0	4230	4166
NORFOLK	0	0	4	197	406	486	752	703	403	217	47	0	3215	3421
RICHMOND	0	0	17	285	513	588	843	735	394	247	79	0	3701	3865
ROANOKE	10	1	33	391	582	628	852	812	428	344	144	1	4226	[illegible]
WALLOPS ISLAND	1	0	7	256	492	588	855	791	515	352	136	0	3993	
WASHINGTON														
OLYMPIA	85	69	295	570	651	909	874	681	659	528	345	223	5889	5236
QUILLAYUTE	160	131	379	508	608	845	800	638	675	543	409	299	5995	5745
SEATTLE						797	783	558	639	429	235	148	4759	4493
SEATTLE TACOMA	48	32	295	455	544	825	807	586	639	484	272	183	5170	5145
SPOKANE	36	18	292	545	795	1219	1171	838	734	558	286	152	6644	6655
STAMPEDE PASS R	241	218	574	682	963	1345	1334	980	1033	862	644	529	9405	9283
WALLA WALLA U	12	3	146	369	641	1062	972	705	500	346	138	61	4955	4805
YAKIMA	26	11	258	486	717	1179	1153	760	610	390	230	95	5915	5941
WEST VIRGINIA														
BECKLEY	35	10	74	475	737	776	1036	936	506	477	258	11	5331	5390
CHARLESTON	16	2	14	378	642	701	945	832	394	351	157	4	4436	4476
ELKINS	30	13	76	504	745	793	1068	966	522	509	304	28	5558	5675
HUNTINGTON	8	2	14	429	664	757	950	866	363	385	158	1	4597	4446
PARKERSBURG U	10	3	12	383	655	755	981	877	367	395	156	0	4594	4754
WISCONSIN														
GREEN BAY	37	54	180	606	895	1469	1350	1172	785	632	367	9	7556	8029
LA CROSSE	21	32	147	586	913	1523	1389	1119	727	608	299	8	7372	7589
MADISON	44	42	188	587	905	1475	1279	1143	720	596	325	15	7319	7863
MILWAUKEE	40	32	133	534	859	1381	1242	1101	769	659	426	6	7182	7635
WYOMING														
CASPER	67	42	251	641	1025	1461	1415	1124	984	861	424	117	8412	7410
CHEYENNE	85	75	248	599	1056	1358	1275	980	1017	824	414	122	8053	7278
LANDER	56	46	245	645	1105	1625	1720	1432	1186	918	386	122	9486	7870
SHERIDAN	95	28	303	633	942	1502	1380	1010	915	766	387	130	8091	7683

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Note: "Heating Degree Days" has been discontinued in the June issues of this publication. Data which would usually be shown in that table for June are shown in the last three columns of the above Table.

COOLING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals January through this month
	This month	Period January through this month	
ALABAMA			
BIRMINGHAM	333	517	
HUNTSVILLE	344	474	
MOBILE	508	990	
MONTGOMERY	438	768	
ALASKA			
ANCHORAGE	0	0	
ANNETTE	0	0	
BARROW	0	0	
BARTER ISLAND	0	0	
BETHEL	0	0	
BETTLES	9	9	
BIG DELTA	3	3	
COLD BAY	0	0	
FAIRBANKS	13	13	
GULKANA	0	0	
HOMER	0	0	
JUNEAU	0	0	
KING SALMON	0	0	
KODIAK	0	0	
KOTZEBUE	0	0	
MC GRATH	2	2	
NOME	0	0	
ST. PAUL ISLAND	0	0	
SUMMIT	0	0	
TALKEETNA	0	0	
YAKUTAT	0	0	
ARIZONA			
FLAGSTAFF	34	34	
PHOENIX	701	1309	
TUCSON	495	788	
WINSLOW	165	203	
YUMA	709	1342	
ARKANSAS			
FORT SMITH	297	425	
LITTLE ROCK	415	605	
CALIFORNIA			
BAKERSFIELD	528	978	
BISHOP	230	317	
BLUE CANYON	86	124	
EUREKA U	1	1	
FRESNO	419	715	
LONG BEACH	203	263	
LOS ANGELES	70	89	
LOS ANGELES U	220	320	
MT SHASTA R	73	109	
OAKLAND	66	79	
RED BLUFF	413	673	
SACRAMENTO	295	470	
SANDBERG R	223	285	
SAN DIEGO	97	124	
SAN FRANCISCO	64	71	
SAN FRANCISCO U	43	50	
SANTA MARIA	61	79	
STOCKTON	371	612	
COLORADO			
ALAMOSA	14	14	
COLORADO SPRINGS	104	104	
DENVER	138	140	
GRAND JUNCTION	222	257	
PUEBLO	219	248	
CONNECTICUT			
BRIDGEPORT	177	183	
HARTFORD	221	251	
DELAWARE			
WILMINGTON	332	393	
DIST.OF COLUMBIA			
WASHINGTON DULLES	281	331	
WASHINGTON NATIONAL	371	441	
FLORIDA			
APALACHICOLA U	498	924	
DAYTONA BEACH	450	1129	
FORT MYERS	517	1532	
JACKSONVILLE	451	930	
KEY WEST	545	2069	
LAKELAND U	477	1231	
MIAMI	499	1876	
ORLANDO	548	1490	
PENSACOLA	510	984	
TALLAHASSEE	453	885	
TAMPA	510	1320	
WEST PALM BEACH	509	1767	
GEORGIA			
ATHENS	332	447	
ATLANTA	322	426	
AUGUSTA	379	579	
COLUMBUS	416	668	
MACON	439	728	
ROME	393	519	
SAVANNAH	434	835	
HAWAII			
HILO	294	1421	
HONOLULU	432	1960	
KAHULUI	335	1455	
LIHUE	377	1713	
IDAHO			
BOISE	177	228	
LEWISTON	144	204	
POCATELLO	94	101	
ILLINOIS			
CAIRO U	403	497	
CHICAGO O HARE	189	197	
CHICAGO MIDWAY	243	250	
MOLINE	226	230	
PEORIA	211	221	
ROCKFORD	178	184	
SPRINGFIELD	251	275	
INDIANA			
EVANSVILLE	331	389	
FORT WAYNE	240	250	
INDIANAPOLIS	256	287	
SOUTH BEND	226	234	
IOWA			
BURLINGTON	221	231	
DES MOINES	267	288	
DUBUQUE	133	133	
SIOUX CITY	232	270	
WATERLOO	197	205	
KANSAS			
CONCORDIA	298	320	
DODGE CITY	352	367	
GOODLAND	171	184	
TOPEKA	304	338	
WICHITA	360	406	
KENTUCKY			
COVINGTON	228	252	
LEXINGTON	266	317	
LOUISVILLE	325	389	
LOUISIANA			
ALEXANDRIA	390	695	
BATON ROUGE	486	985	
LAKE CHARLES	453	859	
NEW ORLEANS	507	958	
SHREVEPORT	412	717	
MAINE			
CARIBOU	67	67	
PORTLAND	71	72	
MARYLAND			
BALTIMORE	263	307	
MASSACHUSETTS			
BLUE HILL OBS R	126	141	
BOSTON	180	205	
WORCESTER	118	130	
MICHIGAN			
ALPENA	50	50	
DETROIT	244	252	
DETROIT METRO	156	161	
FLINT	97	101	
GRAND RAPIDS	157	167	
HOUGHTON LAKE	58	59	
LANSING	106	113	
MARQUETTE U	25	25	
MUSKEGON	67	71	
SAULT STE MARIE	9	9	
MINNESOTA			
DULUTH	[illegible]	1	
INTERNATIONAL FALLS	59	59	
MINNEAPOLIS	158	163	
ROCHESTER	123	124	
ST CLOUD	78	79	
MISSISSIPPI			
JACKSON	498	837	
MERIDIAN	426	741	
MISSOURI			
COLUMBIA REGIONAL	261	290	
KANSAS CITY	291	325	
ST JOSEPH	341	390	
ST LOUIS	294	337	
SPRINGFIELD	240	277	
MONTANA			
BILLINGS	107	120	
GLASGOW	91	104	
GREAT FALLS	87	101	
HAVRE	73	82	
HELENA	45	49	
KALISPELL	26	27	
MILES CITY	128	143	
MISSOULA	43	43	
NEBRASKA			
GRAND ISLAND	238	257	
LINCOLN	258	283	
NORFOLK	218	242	
NORTH PLATTE	121	132	
OMAHA	257	283	
SCOTTSBLUFF	138	142	
VALENTINE	136	154	
NEVADA			
ELKO	74	77	
ELY	38	38	
LAS VEGAS	612	1048	
RENO	75	88	
WINNEMUCCA	124	142	
NEW HAMPSHIRE			
CONCORD	145	150	
MT WASHINGTON OBS	0	0	
NEW JERSEY			
ATLANTIC CITY	233	264	
ATLANTIC CITY U	131	143	
NEWARK	296	342	
TRENTON U	270	310	
NEW MEXICO			
ALBUQUERQUE	267	315	
CLAYTON	143	164	
ROSWELL	316	436	
NEW YORK			
ALBANY	164	177	
BINGHAMTON	92	96	
BUFFALO	126	134	
NEW YORK U	260	303	
NEW YORK KENNEDY	145	161	
NEW YORK LA GUARDIA	242	272	
ROCHESTER	194	215	
SYRACUSE	177	184	
NORTH CAROLINA			
ASHEVILLE	190	207	
CAPE HATTERAS R	352	511	
CHARLOTTE	292	400	
GREENSBORO	319	382	
RALEIGH	310	441	
WILMINGTON	354	594	
NORTH DAKOTA			
BISMARCK	47	48	
FARGO	76	76	
WILLISTON	72	79	
OHIO			
AKRON	188	202	
CINCINNATI ABBE OB	279	320	
CLEVELAND	168	188	
COLUMBUS	236	270	
DAYTON	260	293	
MANSFIELD	210	229	
TOLEDO	163	171	
YOUNGSTOWN	137	143	
OKLAHOMA			
OKLAHOMA CITY	312	450	
TULSA	357	516	
OREGON			
ASTORIA	0	[illegible]	
BURNS U	63	80	
EUGENE	38	40	
MEACHAM	25	31	
MEDFORD	132	196	
PENDLETON	137	200	
PORTLAND	65	99	
SALEM	34	40	
SEXTON SUMMIT R	28	52	
PACIFIC AREA			
GUAM TAGUAC R	463	2474	
JOHNSTON	436	2167	
KOROR R	536	3122	
KWAJALEIN	520	3151	
MAJURO	480	2961	
PAGO PAGO	464	3085	
PONAPE R	495	2993	
TRUK MOEN ISLAND	529	3101	
WAKE	502	2491	
YAP R	509	3025	
PENNSYLVANIA			
ALLENTOWN	212	222	
ERIE	84	90	
HARRISBURG	266	287	
PHILADELPHIA	294	345	
PITTSBURGH	185	200	
SCRANTON	132	136	
WILLIAMSPORT	186	190	
RHODE ISLAND			
BLOCK ISLAND	48	50	
PROVIDENCE	181	206	
SOUTH CAROLINA			
CHARLESTON	412	738	
CHARLESTON U	416	763	
COLUMBIA	375	579	
GRNVLLE-SPRTNBRG	297	416	
SOUTH DAKOTA			
ABERDEEN	129	141	
HURON	98	102	
RAPID CITY	80	87	
SIOUX FALLS	143	156	
TENNESSEE			
BRISTOL	249	280	
CHATTANOOGA	350	452	
KNOXVILLE	298	377	
MEMPHIS	486	681	
NASHVILLE	339	439	
OAK RIDGE R	277	329	
TEXAS			
ABILENE	379	647	
AMARILLO	310	366	
AUSTIN	407	797	
BROWNSVILLE	490	1354	
CORPUS CHRISTI	489	1225	
DALLAS	433	789	
DEL RIO	460	1108	
EL PASO	355	514	
FORT WORTH	435	732	
GALVESTON U	454	885	
HOUSTON INTERCON	434	844	
LUBBOCK	364	536	
MIDLAND	368	564	
PORT ARTHUR	440	808	
SAN ANGELO	425	772	
SAN ANTONIO	431	947	
VICTORIA	477	1095	
WACO	375	672	
WICHITA FALLS	351	530	
UTAH			
MILFORD	102	102	
SALT LAKE CITY	226	264	
WENDOVER	244	313	
VERMONT			
BURLINGTON	149	152	
VIRGINIA			
LYNCHBURG	260	313	
NORFOLK	363	518	
RICHMOND	338	484	
ROANOKE	269	316	
WALLOPS ISLAND	231	270	
WASHINGTON			
OLYMPIA	14	20	
QUILLAYUTE	2	4	
SEATTLE	20	27	
SEATTLE-TACOMA	19	35	
SPOKANE	67	98	
STAMPEDE PASS R	4	4	
WALLA WALLA U	154	235	
YAKIMA	84	118	
WEST INDIES			
SAN JUAN P.R.	553	2818	
WEST VIRGINIA			
BECKLEY	130	146	
CHARLESTON	256	316	
ELKINS	98	112	
HUNTINGTON	284	342	
PARKERSBURG U	270	331	
WISCONSIN			
GREEN BAY	112	114	
LA CROSSE	174	178	
MADISON	112	114	
MILWAUKEE	140	140	
WYOMING			
CASPER	65	66	
CHEYENNE	65	65	
LANDER	92	96	
SHERIDAN	73	74	

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural stations.

STORM SUMMARY

JUNE 1973

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
								† DAMAGE				DAMAGE				† DAMAGE				DAMAGE				† DAMAGE				† DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	† DAMAGE	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS
Alabama	1	1							C		1	5		1	2	4												4	
Alaska	No Storm Data Report received for this State																												
Arizona *																													
Arkansas	1	1			4					5	11	5		1															
California	Report Incomplete																												
Colorado						4	5					5				3												4	3
Connecticut	3	3		1	4																								
Delaware	1	1			4									1		4													
Florida	3	3			4							4		2	4	4													
Georgia	1	1			4							5	5			5													
Hawaii *																													
Idaho								2	5		4	4																	
Illinois	26	6			6							6		2		4													
Indiana	30	[illegible]		1	6			4	C	2		6	C			1													
Iowa	8	3	2	20	6			5	5	2	26	6	5	2	2	1										1		4	4
Kansas	[illegible]	2			5			5	5		21	6	4	1	1	2													
Kentucky	7	4		4	5			4	5		5	5	3	1	2	6	4												
Louisiana	2	2			3						1	3		1												3	1		
Maine	2	2			4		2	3	4			[illegible]	3			4													
Maryland	3	2		1	5							4				3												3	
Massachusetts									2	1		[illegible]	4	1		4												5	4
Michigan	19	6		3	6				[illegible]	1		6		2	6	3											10	4	
Minnesota	7	1		3	6			[illegible]	5			5	4	1		4													
Mississippi											[illegible]	4	C°			4													
Missouri	10	[illegible]		16	3						5	5																	
Montana												4	4		1														
Nebraska	2	2			5			5	[illegible]			6	2			4													
Nevada	No Storm Data Report received for this State																												
New Hampshire	1	1						3	3		1	4	3			2													
New Jersey	2	1			4																								
New Mexico											7	4		1															
New York	1	1		2	3			4	4	1	4	6	3		2	5												9	5
North Carolina	2	2		2	3				5					2		5											4	5	
North Dakota	5	2			5			4	6			5	5																
Ohio	15	5		2	5			4	3		3	5	4	1	1	2													
Oklahoma	24	5		64	6			5	6	2	7	6	4	1	2	4												4	
Oregon *																													
Pacific Area	No Storm Data Report received for this State																												
Pennsylvania	6	2			5			3	4		1	6	4		3	5										11	4	6	5
Puerto Rico *																													
Rhode Island *																													
South Carolina												3														3		6	7
South Dakota	6	5		1	4			3	5			3	4			2													
Tennessee									5			5	5	2	2	5										1	4	5	5
Texas	24	11		3	7		8	7	6		8	6		1	2	5										10		8	7
Utah												4																4	
Vermont	2	2			[illegible]			4	3							5										1		8	5
Virgin Islands *																													
Virginia	1	1			1											4												3	
Washington *																													
West Virginia	1	1																											
Wisconsin	5	5		2	5			5	5	3	11	6				5													
Wyoming								5	6	1	1	5																	

Includes crop damage.
Crop damage.
* No occurrence of storms or unusual weather phenomena reported.
: Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
· Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5 Million
7 $5 Million to $50 Million
8 $50 Million to $500 Million
9 $500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JUNE 1973

Herbert J. Thompson and Ray J. Haley,
Office of Hydrology

This month was marked by serious flooding in New England and other eastern states, Texas, a record flood on the Black River in South Carolina, the continuation of the drought in the Pacific Northwest, of excessive snowmelt runoff in the Southwest, and the end of the history-making flood on the Mississippi River system in the Midwest. This latter flood was not only the highest of record at many points, but the longest. The Missouri River at St. Charles was above flood stage for 72 days, the Mississippi River at St. Louis for 76 days, the Ohio River at Cairo for 97 days, and the Illinois River at Beardstown for 126 days. Damage along the upper Mississippi River above Cape Girardeau and the lower Missouri River has been estimated at $222 million. Damage prevented by flood forecasts has been estimated at $450 million and by control structures aided by forecasts at $1,270 million. Damage along the lower Mississippi has been estimated at $494,600,000, with damages prevented estimated at $7,411,800,000. A total of 15,610,000 acres were flooded, and 50,225 people were evacuated.

Hydrologic events of unusual significance or involving loss of life or property damage are discussed in more detail below.

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	ST. LAWRENCE DRAINAGE		
Lake Champlain Basin	Rains of 3 to 6 inches occurred over many areas of Vermont on the 29th-30th, resulting in widespread flash flooding, as well as stream flooding which extended into July. Damage was extensive to all phases of the economy and included $6.5 million to agriculture, $4.0 million to commercial and industrial facilities, $3.7 million to residential, and $2.0 million to public facilities. More than 800 people were evacuated at Montpelier, Vt., where the Winooski River crested at a stage of 17.53 feet - second only to the record stage of 27.1 feet which occurred in 1927. A slightly lower crest of 17.31 feet occurred in 1912. A near-record crest was also reported at Center Rutland, Vt., where the crest stage of 13.21 feet was second only to the 13.45 feet crest which occurred in 1938. Rutland, Vermont's second largest city, was nearly isolated by the flood. A state of emergency was declared by the Governor of Vermont on the 30th, and federal assistance was approved on July 6.	0	16,235
	ATLANTIC SLOPE DRAINAGE		
New England Streams	Serious flooding occurred in the New England states as a result of heavy rainfall during the period June 27 to July 1. Western Connecticut, the Naugatuck, and lower Housatonic River Basins received up to nearly 8 inches. Western Massachusetts had up to 6 inches along the eastern slope of the Berkshire Mountains. Storm totals for central and eastern Massachusetts and Connecticut varied from 2-1/2 to 4 inches. The eastern slopes of the Green Mountains in Vermont and the White Mountains in New Hampshire had a north-south maximum of 7-1/2 inches, while the northern White	11	63,600

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	ATLANTIC SLOPE DRAINAGE-Cont'd.		
	Mountains had a maximum of 9 inches. The mountains of western Maine received a maximum of 6 inches. The Connecticut River Basin bore the brunt of the flooding, with Ludlow, Vt., on the Black River, the recipient of 7-1/2 inches of rainfall, being particularly hard hit. Many people were evacuated from Ludlow before routes from the town were closed. At Lebanon, N.H., on the Mascoma River, 150 people were evacuated from low-lying areas. Seven families were evacuated when the Green River flooded the town of Alford in western Massachusetts. In all, evacuations were made from more thqn a score of communities. Many highway and railroad bridges were washed out, and hundreds of tourists and holiday vacationers were stranded. Along the Connecticut River crests were not excessively high when compared to a normal spring flood, but at this time of year the flood plain is planted to crops and losses were heavy. Damage estimates include $47.2 million in Vermont, $15.0 million in New Hampshire, $1.9 million in Connecticut, and half a million dollars in Maine and Massachusetts. Four flood-related deaths were reported in Vermont, 4 in New Hampshire, and 3 in Massachusetts.		
Hudson River Basin	Several thousands persons evacuated homes and businesses in southeastern New York counties as a result of the storm of the 29th-30th. Numerous small streams overflowed. Trailer parks along Wappingero Creek northeast of Poughkeepsie, N. Y., and Little Hoosic River in Rensselaer County were flooded. Kinderhook Creek crested 6-8 feet above normal near Nassau. More than 2,500 sandbags were used along Hoosic Creek in East Nassau. Shaker's Creek flooded the Albany County Airport parking lot with damage to about 80 cars. Many roads were flooded and some bridges washed out. No lives were reported lost.	0	N.A.
Delaware River Basin	The storm of the 28th-30th produced rainfall totals of 4 to 6 inches over most of the upper Delaware Basin and 2 to 4 inches over the lower Delaware. Widespread flooding and damage occurred in the northern Delaware Basin with most flooding confined to the smaller streams. However, flooding was reported along the Delaware, Lehigh, Lackawapen, and Schuylkill Rivers, and crests along the Delaware were the highest since 1955. Hardest hit was the lower Neshaminy watershed with damage estimated at $2.0 million. Damage estimates in the Delaware Basin in New York State ranged up to $5.2 million, while damage in Pennsylvania was estimated at over $5 million.	3	8,450

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	ATLANTIC SLOPE DRAINAGE-Cont'd.		
	Two persons were drowned and one was missing and presumed dead in Pennsylvania. The crest of 19.02 feet on Neshaminy Creek at Langhorne, Pa., was the second highest of record. Only the 1955 crest was higher.		
Susquehanna River Basin	The storm of the 28th-30th yielded rainfall totals of up to 4 inches over the northern Susquehanna Basin in Pennsylvania. Flooding was limited to small streams, with only a minor rise on the Susquehanna River.	0	1,350
Tar, Neuse, and Cape Fear River Basins	Heavy rain from a stationary line of thunderstorms occurred over the headwaters of the Tar, Neuse, and Cape Fear Rivers on the 28th-29th. Rainfall totals ranged from 3 to 6 inches. Serious flash flooding occurred along Crabtree Creek and other small streams in the Raleigh-Durham area with severe damage. On the Neuse River, crests ranged from about 7 feet over flood stage along the upper portion down to 3 feet over flood stage along the lower portion. Along the Tar River, crests ran 2 to 3 feet over flood stage, and along the Cape Fear River from 1 to 2 feet over flood stage.	0	10,000
Black River Basin	A record flood occurred on the Black River during June. The crest at Kingstree, S.C., on the 14th of 19.77 feet was 1.77 feet higher than the previous record which occurred in 1928. Records began at Kingstree in 1894. Most of the upper part of the basin reported from 9 to 17 inches during the period 9th-12th, with the heaviest concentration of rainfall around Manning, S.C. Highways, bridges, and railroad embankments received major damage, particularly in Sumter and Clarendon Counties, with water flowing across roads for up to 5 days and many roads closed for 1 to 2 weeks. Damage to the Seaboard Coastline Railroad was estimated at $150,000. Damage in Williamsburg County was estimated at $401,700 by the Corps of Engineers, most of which occurred in Kingstree to commercial and residential buildings. In Clarendon County, the town of Manning was isolated and the northern edge of town was flooded by the Pocotaligo River. Many bridges were washed out across the Pocataligo River. Downstream in Georgetown County, ten homes were flooded at Andrews, S.C., with damages of $15,000. Highway damage was $3,000. There were 3 flood-related fatalities in the basin. Damage to the tobacco crop, estimated in millions of dollars, was mainly from excessive rainfall rather than flooding.	3	978
Santee River Basin	At Newberry, S.C., on the 15th, 3 inches of rain fell in 45 minutes, and a flash flood	1	N.A.

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	ATLANTIC SLOPE DRAINAGE-Cont'd.		
	occurred on Scotts Creek, a tributary of the Saluda River. Damage was estimated at $100,000, with 25 families evacuated and 17 automobiles damaged. At Charlotte, N.C., 3 inches of rain on the 12th caused flash flooding of Briar and Sugar Creeks, with damage estimated at $10,000. Ten to 12 inches of rain fell over the lower Santee Basin during the period 8th-12th. Discharge through the flood gates at Lake Marion began on the 10th and ended on the 30th with a maximum discharge of 52,800 c.f.s. on the 12th. The Santee crested at Jamestown on the 18th, 2.7 feet over flood stage. Damage was minor, but economic losses were extensive when logging was stopped for a month. One flood-related fatality was reported.		
Cooper & Ashley Edisto River · Basins	Total rainfall for the month was unusually heavy, with the Charleston, S.C., Airport reporting 27.24 inches. This is the greatest monthly total recorded since settlers began keeping records in 1738. This unusually heavy rainfall extended about 50 miles north and northwest of Charleston. During the period the 8th-12th, a total of 17.08 inches was recorded at the airport station. Urban flooding was severe. Seventy percent of the roads in Charleston County were flooded on one day. Total damage for the county was estimated at $120,000, including roads $15,000, commercial buildings $38,000, utilities $17,000, and residential $50,000. Areas hardest hit were College Heights, the Hawthorne trailer area, and Indian Street off King Street. Flooding of over 40 homes in the Tranquil Acres subdivision on Eagle Creek in eastern Dorchester County occurred on the 11th. Damage was estimated at $485,000. A total of $25,000 was spent by the Red Cross to aid 84 families. Continued rainfall and a high tide caused flooding of many of these homes again on the 19th. Damage to streets in Summerville, S.C., was $45,000. Overflow from Sawmill Branch caused $45,000 damage at Givhans and Twin Lakes, S.C. Damage to primary roads was $30,000 and to secondary roads $300,000. Total damage $885,000. In the Edisto River Basin local rainfall amounts of up to 10 inches occurred during the period 8th-13th, with 24-hour totals of more than 4 inches. The crest of 15.84 feet at Givhans Ferry State Park on the 14th was the highest since 1945. Damage was estimated at $20,000.	0	1,025

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	EAST GULF OF MEXICO DRAINAGE		
Chattahoochee River Basin	Intense rainfall of 3 to 4 inches in the northern portions of Fulton and Dekalb Counties on the afternoon of the 5th caused rapid rises on Peachtree Creek and its tributaries, as well as other small streams in the area. Peachtree Creek runs through Atlanta, Ga. Substantial damage resulted from the flash flooding including $430,000 along Nancy Creek, $713,000 along the North Fork of Peachtree Creek, $1,358,800 along the South Fork of Peachtree Creek, and $30,000 along the main stem of Peachtree Creek.	0	2,532
	UPPER MISSISSIPPI BASIN		
Wapsipinican River Basin	Heavy rainfall occurred during the middle of June, with flash flooding in Scott County, Ia. A bucket survey in the flood-stricken area around Dixon, Ia., indicated amounts in excess of 7 inches in a period of only 3 hours. The Wapsipinican River went slightly over flood stage at DeWitt, Ia.	0	N.A.
Illinois River Basin	The upper Illinois River was below flood stage early in June, but heavy rains brought the stream back over flood stage until late in the month. Below Peoria, Ill., the Illinois River continued above flood stage the entire month aided by the above normal rainfall. At Moline, precipitation for June was above normal for the eighth consecutive month and the fourteenth month out of the last 15. For the 1973 calendar year, cumulative precipitation totaled 36.74 inches through June as compared with a normal of 20.05 inches.	0	N.A.
Upper Mississippi Main Stem	The continued heavy rains over a portion of the basin caused a slight secondary rise which crested above flood stage at Muscatine and Burlington, Iowa, Keithsburg, Ill., and Gregory Landing, Mo., during the early part of the month. Below Gregory Landing the river continued above flood stage from May, finally falling below flood stage about the middle of June. Another rise occurred toward the end of the month which went slightly above flood stage between Hannibal, Mo., and Grafton, Ill., from the 19th to the 24th. The prolonged flooding did not cause significant additional damage and mainly hindered farm work and rehabilitation efforts.	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

JUNE 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	MISSOURI BASIN		
Smoky Hill River Basin	On the 4th-5th rains of 1 to 2 inches caused overflows of 3,000 acres in the basin. Crop damage was reported along Gypsum Creek near Gypsum, Kans.	0	5
	OHIO BASIN		
Kanawha River Basin	Flash flooding occurred in Kanawha County, W. Va., on the 21st. There was considerable residential damage and several small bridges washed out. No deaths were reported.	0	N.A.
	RED BASIN		
Sulphur River	Three to 5 inches of rain during the period 2d-5th caused significant flooding with a crest 6 feet above flood stage at Naples, Tex., on the 10th. Losses occurred to public property, crops, and livestock.	0	100
	LOWER MISSISSIPPI BASIN		
Mississippi Main Stem	By the end of May the river had fallen below flood stage above Greenville, Miss., and below Donaldsonville, La., and by the end of June it was below flood stage at all points. Heavy rains over the Ohio and Tennessee Basins the last week of May caused a rise on the Mississippi below the mouth of the Ohio River which brought stages at New Madrid and Caruthersville back over flood stage early in June and prolonged the time that a considerable portion of the unprotected lowlands was unavailable for use. This rise had little effect downstream.	0	N.A.
	WEST GULF OF MEXICO DRAINAGE		
Upper Sabine River	Three to 5 inches of rain over the basin on the 2d-5th caused major flooding with crests of up to 9 feet over flood stage. Losses occurred to public property and to agriculture.	0	103
Neches River Basin	Much of north-central and northeastern Texas reported above normal rainfall in June with totals in excess of 8 inches occurring generally east of a Gainesville-Weatherford-Waco line. This rain fell in three distinct periods with amounts of up to 6 inches on the 3d-4th, amounts of up to 10 inches on the 12th-15th and 2 to 4 inches on the 20th-21st. Significant flooding occurred along the Upper Neches from above Alto to below Rockland with crests of 3 to nearly 7 feet over flood stage. Agricultural damage was estimated at $214,000 and other damage at $660,000. The Angelina River	0	11,153

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	WEST GULF OF MEXICO DRAINAGE-Cont'd.		
	flooded from above Lufkin to Sam Rayburn Reservoir. The main tributary of the Angelina, Attayac Bayou, also flooded near Chireno, Texas. Crests were 3 to 4 feet over flood stage. Damage to agriculture was estimated at $109,400 and other damage at $169,300. In just two counties, Angelina and Nacogdoches, a total of 45,000 acres were inundated. In southeastern Texas similar amounts of rainfall occurred during approximately the same periods as above, and serious flooding occurred along the lower Neches River with the Lakeview and Montrose sections of Beaumont, Texas, particularly hard hit. Damage was estimated at $10 million for loss of farm crops and ship loading and to bridges, highways, and commercial and residential structures.		
Trinity River Basin	The rainfall discussed above also caused serious flooding along the Upper Trinity River. There were two rises to over flood stage at Dallas, while downstream near Long Lake the river remained in flood for two weeks. Major crests ranged from 7 to 14 feet over flood stage. Damage along the Upper Trinity was estimated at $9,560,000 by the Corps of Engineers, including $377,500 to crops on Texas Prison System farmlands. More than 112,000 acres were inundated. On the East Fork of the Trinity a levee break caused extensive lowland flooding around Crandall. During the night of the 12th 7 inches of rain fell in the Lake Livingston and Liberty areas. On the morning of the 13th, with the storm moving downstream, the gates at Lake Livingston were opened to discharge 75,000 c.f.s. A major flood developed with serious flooding lasting 12 days. Crest stages were the second highest of record at Goodrich and Liberty. The crest at Goodrich was 46.0 feet, 10.0 feet above flood stage on the 15th, compared with the record crest of 52.0 feet in May 1942. The crest at Liberty was 29.0 feet, 5.0 feet above flood stage, compared with the record crest of 29.38 feet on May 12, 1942. Preliminary estimates indicate damages in excess of $20 million. In Liberty County 140 homes received major damage and 400 minor damage; 75 mobile homes were destroyed and 450 damaged; 1,100 families were affected with 400 people evacuated; 20 farm buildings received major damage and 25 small businesses were destroyed.	0	29,560
San Jacinto River	A major flood, the worst in 25 years and exceeding that from Hurricane Carla, occurred along the San Jacinto River on the 12th-16th.	10	62,500

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	WEST GULF OF MEXICO DRAINAGE-Cont'd.		
	Rainfall over the basin averaged 8 to 11 inches during the period of the 10th-15th, with 13.5 inches reported from Cold Spring in 14 hours on the 13th. The East Fork of the San Jacinto River at Cleveland, Texas, crested at 23.97 feet, essentially the same as the record crest of 24.0 feet in 1940. Harris, San Jacinto, Montgomery, and the northern portions of Brazoria and Galveston Counties were affected. All streams and bayous in these counties were out of their banks. Heaviest flooding occurred in Conroe and the Houston metropolitan area, with a combined population of 2 million people. These cities were almost impassable at times due to high water. Dams at McRae and Spring Lakes broke. In Harris County damage exceeded $50 million. One home was destroyed, 450 received major damage, and 859 minor damage. Ten mobile homes were destroyed and 150 received major damage. A total of 1500 families suffered major residential losses. In Montgomery County damage exceeded $10 million. Five homes were destroyed, 200 received major damage, and 375 minor damage. Seventy-five mobile homes were destroyed and 110 received major damage. A total of 820 families suffered major residential losses. Damage in Galveston and Brazoria Counties exceeded $2,500,000. Seven drownings occurred in Harris County, two in Montgomery County, and one in Fort Bend County.		
Colorado River (Texas)	Up to nearly 14 inches of rain fell over the lower Colorado Basin the 10th-15th, with 10 inches reported at Columbus on the 12th. Crests of 3.5 feet over flood stage at Columbus, Texas, and more than 6 feet over flood stage at Wharton, Texas, were reported. Damage occurred along the river from Columbus to Matagorda.	0	50
Lavaca, Navidad, and Guadalupe Rivers	From 5 to 8 inches of rain were reported over the Gonzales area on the 12th-15th. Crests ranged from 2.3 feet over flood stage at Gonzales, Texas, to 11.2 feet over flood stage at Cuero, Texas. Heavy local flooding occurred in Victoria, Texas, on the 12th-13th. Damage along the river was confined to crops and farmland estimated at $75,000. Nine to 12 inches of rain fell over the Lavaca River Basin on the 11th-13th. The crest of 30.80 feet at Edna, Texas, (flood stage 21 feet) was the third highest of record. Damage was confined to agricultural land. Ten to 12 inches of rain fell over the lower Navidad Basin and up to 15 inches over the Upper Basin on the 10th-15th. The crest of 39.80 feet at Ganado,	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

JUNE 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	WEST GULF OF MEXICO DRAINAGE-Cont'd.		
	Texas, (flood stage 21 feet) equaled the record crest of 1936. Damage was confined to agricultural land.		
San Antonio River Basin	On the 25th, 3 inches of rain in the San Antonio area caused minor flooding along Almos, Leon, and Salado Creeks. Two children drowned while playing along Salado Creek.	2	0
Nueces River Basin	Two periods of rainfall each totaling 4 to 6 inches occurred the 12th-14th and 20th-25th, resulting in two periods of flooding in the basin. Crests of 8 to 15 feet over flood stage occurred on the Nueces and the Atascosa, a tributary, and crests 2 to 4 feet over flood stage along the Frio, another tributary of the Nueces. Damage to roads, crops, homes, and pastureland was reported along the Nueces, but only minor damage along the Atascosa and Frio Rivers.	0	100
Rio Grande Basin	Runoff from the above-normal snowpack continued from May. Localized flooding and minor damage occurred - mostly on smaller tributaries. River control agencies spent $600,000 keeping the Rio Grande within banks and levees. This work, in conjunction with the use of flood control structures in the headwaters, averted an extimated $3,300,000 potential damage. Elephant Butte Reservoir reached its highest level in 14 years.	0	N.A.
	GULF OF CALIFORNIA DRAINAGE		
Colorado River Basin	Excessive runoff from melting of the unusually heavy snowpack continued into June. However there was no serious flooding. Navajo Reservoir on the San Juan River spilled for the first time in its 11-year history.	0	0
	GREAT BASIN		
North Creek	Excessive runoff from snowmelt damaged irrigation systems in the vicinity of Beaver, Utah.	0	77
	PACIFIC SLOPE DRAINAGE		
Columbia River Basin	Precipitation over the basin for the first six months of 1973 was only 50 to 60 percent of the 15-year average. The average June stage of 4.0 feet was the lowest in 70 years of record, and probably the lowest in 100 years. The lower Columbia is of course regulated for power and other requirements. The peak stage for the April-June snow runoff season was 6.6 feet on the high tide of April 19 - the lowest in about 100 years.		

N. A. Damages not available.

FLOOD STAGE DATA

(All dates in June unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest	
		From—	To—	Stage	Date
	Ft			*Ft*	
ST. LAWRENCE DRAINAGE					
Lake Erie Basin					
Saint Joseph:					
Montpelier, Ohio	10	May 29 14	4 16	12.40 10.7	1 14
Lake Michigan					
Wolf:					
New London, Wis.	9	May 31	6	9.60	1
Otter Creek:					
Center Rutland, Vt.	7	30	Jul 2	13.21	30
Winooski:					
Montpelier, Vt.	15	30	Jul 1	17.53	30
ATLANTIC SLOPE DRAINAGE					
Androscoggin:					
Gulf Island Dam, Me.	35,000 c.f.s.	Jul 1	Jul 2	43,000 c.f.s.	Jul 1
Pemigewasset:					
Plymouth, N. H.	11	30	Jul 2	22.7	Jul 1
Merrimack:					
Manchester, N. H.	7	Jul 2	Jul 2	7.2	Jul 2
Ammonoosuc:					
Bath, N. H.	10	30	30	U	30
White:					
West Hartford, Vt.	18	30	30	18.7	30
Connecticut:					
White River Junc., Vt.	18	30	Jul 3	25.8	30
North Walpole, N. H.	28	30	Jul 1	28.5	Jul 1
Montague City, Mass.	28	30	Jul 3	31.5	30
Northampton, Mass.	112	Jul 1	Jul 1	112.5	Jul 1
Holyoke, Mass.	9	Jul 2	Jul 2	9.1	Jul 2
Hartford, Conn.	16	Jul 1	Jul 7	21.27	Jul 3
Bodkin Rock, Conn.	[illegible]	Jul 1	Jul 8	12.1	Jul 4
Wanaque:					
Wanaque, N. J.	5	30	Jul 1	E 5.8	30
Pompton:					
Pompton Plains, N. J.	12	29	30	16.03	29
Ramapo:					
Mahwah, N. J	8	29	30	E 8.2	30
Passaic:					
Little Falls, N. J.	6	30	Jul 1	E 7.5	29
Millstone:					
Blackwells Mills, N. J.	7	30	Jul 1	E 9.0	30
Raritan:					
Manville, N. J.	12	30	30	E15.5	30
Bound Brook, N. J.	8	30	Jul 1	11.4	30
West Branch Delaware:					
Hale Eddy, N. Y.	11	30	30	11.96	30
East Branch Delaware:					
Fishs Eddy, N. Y.	11	7 29	7 Jul 1	11.1 16.80	7 29
Lackawaxen:					
Hawley, Pa.	11	29	30	12.95	29
Lehigh:					
Lehighton, Pa.	10	29	29	11.50	29
Walnutport, Pa.	8	29	29	9.25	29
Easton, Pa.	9	29	30	11.3	29
Assunpink:					
Trenton, N. J.	7	22	22	7.25	22
ATLANTIC SLOPE DRAINAGE-Contd					
Neshaminy Creek:					
Langhorne, Pa	9	29	30	19.02	[illegible]
Perkiomen Creek:					
Graterford, Pa.	11	29	29	12.0	29
Schuylkill:					
Pottstown, Pa.	13	29	29	14.28	29
Philadelphia, Pa.	11	29	30	11.23	29
Brandywine Creek:					
Chadds Ford, Pa.	9	30	30	9.27	30
Delaware:					
Barryville, N. Y.	17	29	30	20.02	29
Easton, Pa.	22	30	30	24.21	30
Tar:					
Rocky Mount, N. C.	9	Jul 2	Jul 4	10.1	Jul 3
Tarboro, N. C.	19	Jul 5	Jul 6	20.4	Jul [illegible]
Greenville, N. C.	13	Jul 6	Jul 8	14.1	Jul 7
Neuse:					
Neuse, N. C.	14	28	Jul 4	20.75	29
Smithfield, N. C.	13	29	Jul 6	20.42	Jul 2
Goldsboro, N. C.	14	Jul 5	Jul 11	18.3	Jul 8
Kinston, N. C.	14	Jul 8	Jul 12	14.9	Jul 10
Cape Fear:					
Fayetteville, N. C.	35	24	24	36.0	24
Huske L&D, N. C.	42	24 Jul 1	26 Jul 2	[illegible] 43.8	24 Jul 1
Elizabethtown, N. C.	20	24 Jul 1	27 Jul 2	27.0 21.9	25 Jul [illegible]
Lumber:					
Lumberton, N. C	9	24	Jul 7	10.0	30 Jul 4
Black:					
Kingstree, S. C.	12	13	22	19.77	14
Pee Dee					
Peedee, S. C.	19	25	29	20.1	27
Broad:					
Blair, S. C.	14	16	17	16.2	17
Saluda:					
Chappells, S. C.	14	23	23	14.1	23
Wateree:					
Wateree Reservoir, S. C.	100	23	24	100.1	23, 24
Santee:					
Jamestown, S. C.	10	17	26	12.7	18
N. Fork Edisto:					
Orangeburg, S. C.	8	12	23	9.8	13
Edisto:					
Givhans Ferry, S. C.	10	13	Jul 6	15.84	14
Savannah:					
Millhaven-Wade 2 SE, Ga.	15	4	Jul 3	17.9	24
Clyo, Ga.	[illegible]	5	Jul 11	16.5	21
Ogeechee:					
Scarboro, Ga.	8	17	20	8.1	18
Satilla:					
Waycross, Ga.	16	22	29	16.5	23
EAST GULF OF MEXICO DRAINAGE					
Peachtree Creek:					
Atlanta, Ga.	13	6	6	15.6	6
Apalachicola:					
Blountstown, Fla.	15	[illegible] 23	25	15.5	24

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FLOOD STAGE DATA

(All dates in June unless otherwise specified)

JUNE 1973

River and station	Flood stage	Above flood stages -dates		Crest	
		From—	To—	Stage	Date
	Ft			Ft	
EAST GULF OF MEXICO DRAINAGE (Continued)					
Choctawhatchee					
Caryville, Fla.	12	May 25	3	#13.78	May 31
Oostanaula:					
Resaca, Ga.	22	May 29	1	27.8	May 30
Pearl:					
Bogalusa, La.	15	2	4	E15.3	2
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Kickapoo River:					
Steuben, Wis.	8	May 30	2	8.57	1
Wapsipinicon River:					
DeWitt, Iowa	10	May 28 17	8 22	10.68 11.50	4 18
Kishwaukee River:					
Perryville, Ill.	10	17	18	10.4	18
Green River:					
Geneseo, Ill.	8	17	17	9.47	17
Rock River:					
Joslin, Ill.	12	Apr 21 18	8 21	16.3 13.0	May 4 18
Moline, Ill.	12	19	19	12.0	19
Iowa River:					
Marshalltown, Iowa	13	May 28 12 18	6 13 20	14.39 13.92 14.61	May 29 13 20
Wapello, Iowa	10	5	7	10.4	6
North Raccoon River:					
Jefferson, Iowa	10	19	20	10.5	20
Des Moines River:					
Saylorville, Iowa	13	May 28	7	15.69	30
Illinois River:					
La Salle, Ill.	20	7 18	9 24	20.55 21.95	7 21
Peoria, Ill.	18	21	27	18.9	23
Havana, Ill.	14	Mar 9	Jul 11	23.8	May 1
Beardstown, Ill.	14	Mar 9	Jul 12	26.85	May 1
Meredosia, Ill.	14	M	Jul 10	26.75	Apr 29
Big Muddy River:					
Murphysboro, Ill.	16	May 9	15	M	M
Mississippi River:					
Muscatine, Iowa	16	6	8	16.19	7
Keithsburg, Ill.	12	May 28	12	#14.0	7, 8
Burlington, Iowa	15	4	11	#16.2	9
Gregory Landing, Mo.	15	5	11	#16.1	8
Quincy, Ill.	17	Mar 12	13	24.45 #18.2	May 4 10
Hannibal, Mo.	16	Mar 10 19	15 22	24.5 #18.4 16.8	May 4 9, 10 20
Louisiana, Mo.	15	Mar 9 20	15 22	#17.2 16.2	11 21
Dam 24 TW, Clarksville, Mo.	25	Mar 9 20	16 22	27.2 #26.5	7-11 21
Dam 25 TW, Winfield, Mo	26	Mar 10 20	16 22	36.93 #26.7	Apr 27 21
Grafton, Ill.	18	Mar 8 20	18 24	33.12 #19.7	Apr 28 22
Dam 26 TW, Alton, Ill.	21	Mar 8	14	36.89 #25.3	Apr 28 2
St. Louis, Mo.	30	Mar 11	5	43.23 #31.1	Apr 28 2
Chester, Ill.	27	Mar 9	14	43.32 #30.7	Apr 30 3
MISSISSIPPI SYSTEM-Continued					
Mississippi River-Continued:					
Cape Girardeau, Mo.	32	M	15	45.6 #35.9	May 1 [illegible], 5
Missouri Basin					
Little Sioux River:					
Linn Grove, Iowa	12	May 30	2	12.51	May 31
North Platte:					
North Platte, Nebr.	6	May 6	28	5.98	5
Mud Creek:					
Sweetwater, Nebr.	15	2	3	17.72	2
South Loup River:					
Ravenna, Nebr.	5	2	3	5.31	2
Platte:					
Brady, Nebr. (Channel No. 1)	5	May 4	28	9.6	May 14
Cozad, Nebr. (So. Channel)	4.5	May 5	27	9.3	May 29-30
Overton, Nebr. (No. Channel)	6	May 9	10	6.38	May 15
Odessa, Nebr.	4.5	May 15	8	5.80	May 17
Grand Island, Nebr.	4	May 11	28	5.63	May 18
Duncan, Nebr.	7	M	7	5.45	1, 2
North Bend, Nebr.	6	May 18	9	7.98	May 28
Gypsum Creek:					
Gypsum, Kans.	15	4	5	18.0	5
Stranger Creek:					
Easton, Kans.	15	4	5	17.0	5
Grand River:					
Brunswick, Mo.	12	May 29	1	14.70	May 30
Blackwater River:					
Valley City, Mo.	22	5	5	22.28	5
Missouri River:					
Herman, Mo.	21	May 29	3	22.5	1
St. Charles, Mo.	25	May 31	3	25.4	1
Ohio Basin					
Scioto:					
Circleville, Ohio	14	20	23	18.5	21
Piketon, Ohio	16	22	24	17.17	23
Embarrass:					
Lawrenceville, Ill.	11	21 29	23 Jul 3	12.7 12.9	22 Jul 1
White:					
Spencer, Ind.	14	6	10	15.67	7
Elliston, Ind.	18	7	9	18.60	7
Edwardsport, Ind.	15	8	11	15.5	10
Little Wabash:					
Wilcox, Ill.	16	5 20 28	8 24 Jul 5	#18.94 #18.70 #20.16	7 21 Jul 2
Wabash:					
Lafayette, Ind.	11	6	8	13.88	6
Covington, Ind.	16	6	[illegible]	17.72	7
Montezuma, Ind.	14	5 19	10 20	17.29 15.96	7 19
Terre Haute, Ind.	14	6 20	10 20	15.4 14.2	8, 9 20
Tennessee:					
Whitesburg, Ala.	560MSL	May [illegible]	5	566.97	May 31
Florence, Ala.	419MSL	May 28	3	421.05	1
Gilbertsville, Ky.	320MSL	May 31	13	322.51	8
Ohio:					
Grand Chain, Ill. (Dam 53)	42	May 29	13	44.4	5

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FLOOD STAGE DATA

(All dates in June unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From—	Above flood stages -dates To—	Crest Stage	Crest Date
	Ft			Ft	
MISSISSIPPI SYSTEM-Continued					
White Basin					
Cache:					
Patterson, Ark.	7	Oct 29	19	10.6	May 7
Black:					
Pocahontas, Ark.	17	May 28	8	18.21 17.47	May 29 3
Black Rock, Ark.	14	Mar 8	17	24.4 27.3 25.5 24.5 22.8 18.7	Mar 12 Apr 24 May 2 May 8 May 28 6
White:					
Georgetown, Ark.	21	Apr 19	3	30.1	Apr 27
Clarendon, Ark.	26	Mar 12	26	29.45 34.9	Mar 26 May 3
St. Charles, Ark.	25	Jan 29	21	36.5	May 7
Arkansas Basin					
Bird Creek:					
Avant, Okla.	16	18	19	#18.77	19
Little:					
Tecumseh, Okla.	11	2	5	11.0 11.8 11.3	2 2 4
North Canadian:					
Yukon, Okla.	11	2 5	U 5	#13.30 11.28	2 5
Fourche La Fave:					
Houston, Ark.	25	3 6	3 9	25.2 26.5	3 7
Arkansas:					
Ozark LD 12, TW, Ark.	357MSL	4	7	358.80	5
Morrilton, Ark.	30	6	6	30.0	6
Red Basin					
Salt Fork:					
Mangum, Okla.	9	2	3	#10.85	2
North Fork Red:					
Headrick	12	3	4	13.15	4
Blue:					
Blue, Okla.	21	3	5	28.00	4
Sulphur:					
Naples, Tex.	22	7	17	28.0	10
Ouachita:					
Monroe, La.	40	Mar 18	12	48.7	May 9-11
Columbia L D, La.	65	Mar 24	10	70.7	May 13
Black:					
Jonesville L/D, La.	52	Mar 24	30	59.65	May 17
Lower Mississippi Basin					
St. Francis:					
Fisk, Mo.	20	Mar 11	Jul 1	P22.48	9
St. Francis, Ark.	18	Mar 11	Jul 4	P19.7	14-15
Tallahatchie:					
Swan Lake, Miss.	26	Apr 19	11	30.9	May 4
Yazoo:					
Yazoo City, Miss.	29	Mar 16	27	35.2	Apr 19
Mississippi:					
New Madrid, Mo.	34	Mar 14 4	May 23 9	43.3 34.5	Apr 3 [illegible]
Caruthersville, Mo.	32	May 31	14	33.4	7
Greenville, Miss.	48	Mar 26	3	P58.2	May 12-14
Vicksburg, Miss.	43	Mar 26	20	P53.1	May 13-14
Natchez, Miss.	48	Mar 26	22	P56.7	May 13-16

River and station	Flood stage	Above flood stages -dates From—	Above flood stages -dates To—	Crest Stage	Crest Date
	Ft			Ft	
MISSISSIPPI SYSTEM-Continued					
Lower Mississippi Basin-Continued					
Mississippi-Contd:					
Red River Landing, La.	45	Mar 25	26	P54.7	May 13-16
Baton Rouge, La.	35	Mar 28	23	P42.1	May 10
Donaldsonville, La.	28	Mar 30	8	P32.3	Apr 9
Atchafalaya Basin					
Atchafalaya:					
Simmesport, La.	41	Apr 3	11	49.0	May 14-16
Melville, La.	41	Apr 17	2	44.3	May 14
Morgan City, La.	7	Dec 20	Jul 17	13.7	May 27
WEST GULF OF MEXICO DRAINAGE					
Sabine:					
Emory, Tex.	12	4	20	15.0	6
Mineola, Tex.	14	4	25	19.0	7
Gladewater, Tex.	26	5	23	35.0	12
Longview, Tex.	25	5	26	33.0	16
Tatum, Tex.	25	17	21	26.0	17
Deweyville, Tex.	14	17	30	14.54	19
Attoyac Bayou:					
Chireno, Tex.	14	14	21	17.38	17
Angelina:					
Lufkin, Tex.	8	11	Jul 3	12.40	15
Neches:					
Alto, Tex. (Near)	16	10	24	19.25	12
Diboll, Tex. (Near)	10	13	26	16.61	17
Rockland, Tex. (Near)	22	16	22	27.7	17
Lawsons Crossing, Tex.	4	15	29	5.85	20
Trinity:					
Dallas, Tex.	30	3 20	6 22	37.53 32.14	5 21
Rosser, Tex.	26	4	9	32.93	6
Trinidad, Tex.	28	4	17	41.99	[illegible]
Long Lake, Tex.	35	7	21	43.66	10
Romayor, Tex.	30	12	17	31.6	15
Goodrich, Tex.	36	13	22	46.0	15
Liberty, Tex.	24	12	29	29.0	17
Moss Bluff, Tex.	4	11	Jul 18	9.3	19
Navasota:					
Easterly, Tex. (Near)	14	3 14	11 17	17.6 15.1	[illegible] 16
Bryan, Tex. (Near)	12	5	21	14.56	[illegible]
Brazos:					
East Columbia, Tex.	30	15	[illegible]	31.7	16
Colorado:					
Columbus, Tex.	24	13	15	27.47	14
Wharton, Tex.	26	13	17	[illegible]	15-16
Navidad:					
Ganado, Tex. (Near)	21	12 21	19 25	39.80 24.92	[illegible] 23
Lavaca:					
Edna, Tex (Near)	21	12	17	[illegible]	14
Guadalupe:					
Gonzales, Tex.	20	12	15	22.3	13-14
Cuero USGS, Tex.	20	12	18	31.2	15
Victoria, Tex.	21	12	20	29.05	17
Dupont, Tex.	20	12	Jul 6	26.8	14
Sabinal:					
Sabinal, Tex.	12	11	13	12.5	12

FLOOD STAGE DATA

(All dates in June unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–	Above flood stages -dates To–	Crest Stage	Crest Date
	Ft			*Ft*	
WEST GULF OF MEXICO DRAINAGE (Continued)					
[illegible]:					
[illegible]	6	13	15	8.6	14
[illegible]	12	22	28	15.5	25
[illegible]:					
Whitsett, Tex.	2[illegible]	13 22	17 29	35.0 27.8	14 27
[illegible]:					
Three Rivers, Tex. [illegible]	2[illegible]	1[illegible] 2[illegible]	18 30	35.89 32.52	16 28
Mathis Bridge, Tex.	[illegible]	14 23	21 [illegible]	28.40 27.93	17 29
Calallen, Tex.		15	1	9.66	27
WEST GULF OF MEXICO DRAINAGE (Continued)	*Ft*			*Ft.*	
Rio Grande:					
Del Norte, Colo.	4.8	11	15	5.08	12
Monte Vista, Colo.	6	11	15	6.79	12
Lobatos Bridge, Colo.	4	11	18	4.35	15
Embudo, N. Mex.	8	13	16	8.36	15
Albuquerque, N. Mex.	6	1 27	19 30	7.19 U	4 U

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* Provisional.

= Highest Stage Of Record.

[illegible]

[illegible]

M Missing.

E Dates and crest estimated [illegible]

± Estimated.

♦ See Previous Monthly Report for additional crest information.

U Unknown.

CHS 50005

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	86	17.4	15.0	19	1.3
1000	29	142	16.8	14.1	20	1.5
950	30	578	16.3	12.2	24	3.3
900	30	1,038	14.6	9.7	27	4.9
850	30	1,520	11.8	6.5	27	6.2
800	30	2,026	9.4	.6	27	7.9
750	30	2,559	6.4	-2.6	27	9.2
700	30	3,122	3.7	-7.1	27	10.7
650	30	3,721	.6	-10.5	27	11.8
600	30	4,360	-2.6	-14.4	26	13.3
550	30	5,045	-6.5	-20.7	26	14.3
500	30	5,784	-10.9	-24.8	26	15.5
450	30	6,586	-16.3	-27.5	26	15.8
400	30	7,462	-22.1	-33.2	27	16.4
350	30	8,434	-29.2	-39.7	26	16.8
300	30	9,514	-37.6	-46.4	26	18.6
250	30	10,745	-47.4		26	20.0
200	30	12,187	-57.5		27	20.6
175	29	13,024	-59.7		27	18.1
150	29	13,989	-59.2		26	15.1
125	29	15,131	-59.7		27	12.3
100	29	16,523	-60.7		28	7.7
80	28	17,914	-59.1		31	3.1
70	28	18,752	-58.4		32	1.1
60	28	19,726	-57.0		06	1.3
50	28	20,885	-55.0		08	3.8
40	27	22,314	-53.3		09	5.4
30	26	24,179	-50.1		09	6.3
25	25	25,371	-48.6		08	7.0
20	20	26,853	-46.1		08	7.9
15	17	28,794	-42.9		09	10.1
10	10	31,586	-37.3			
7						
5						

ALBUQUERQUE, N. MEX.
839 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,619	16.0	1.8	08	1.4
1000						
950						
900						
850						
800	30	2,023	16.7	-2.8	21	.7
750	30	2,569	13.6	-5.5	30	3.0
700	30	3,145	9.3	-8.2	31	5.5
650	30	3,755	4.6	-9.6	31	6.1
600	30	4,401	-.3	-13.2	29	7.1
550	30	5,090	-5.5	-17.4	29	7.5
500	30	5,831	-10.4	-24.4	28	7.3
450	30	6,635	-15.7	-30.7	29	8.0
400	30	7,512	-22.0	-37.5	29	8.0
350	30	8,484	-29.4	-44.0	28	8.0
300	29	9,565	-38.2	-50.0	29	9.1
250	29	10,795	-47.5		28	10.1
200	28	12,236	-55.7		28	13.6
175	28	13,081	-58.7		28	13.3
150	28	14,042	-61.5		28	12.4
125	28	15,166	-63.8		29	10.1
100	27	16,527	-66.0		28	[illegible]
80	27	17,883	-65.2		32	.3
70	27	18,700	-62.9		08	2.0
60	27	19,655	-60.9		08	4.1
50	25	20,788	-58.8		09	5.8
40	25	22,197	-56.3		09	6.6
30	24	24,042	-52.1		09	7.8
25	24	25,229	-49.6		09	7.6
20	22	26,697	-47.5		09	8.4
15	20	28,619	-44.3		08	8.6
10	12	31,321	-41.1			
7						
5						

AMARILLO, TEXAS
891 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,095	16.9	9.0	22	2.9
1000						
950						
900						
850	30	1,498	19.5	4.3	23	6.2
800	30	2,018	17.2	.8	25	4.8
750	30	2,565	13.6	-1.4	26	3.7
700	30	3,141	9.2	-4.5	28	3.5
650	30	3,751	4.5	-7.3	28	4.1
600	30	4,397	-.2	-11.5	29	4.7
550	30	5,088	-4.9	-16.7	28	5.8
500	30	5,831	-10.0	-22.9	28	6.1
450	30	6,635	-15.1	-28.9	28	6.6
400	30	7,515	-21.6	-36.1	28	6.5
350	30	8,486	-29.3	-42.5	29	7.2
300	30	9,565	-37.9	-49.0	27	8.5
250	29	10,795	-47.0		26	10.0
200	28	12,238	-55.4		26	13.7
175	28	13,084	-58.5		27	14.2
150	27	14,050	-60.5		27	12.4
125	26	15,176	-62.2		27	10.9
100	26	16,547	-64.5		27	6.5
80	26	17,910	-64.3		19	.8
70	25	18,731	-62.3		09	2.4
60	26	19,688	-60.1		08	4.2
50	26	20,831	-58.1		09	5.2
40	26	22,245	-55.6		09	7.1
30	25	24,095	-51.7		09	7.7
25	24	25,283	-49.1		09	7.9
20	23	26,759	-47.3		08	7.4
15	19	28,675	-44.2		08	7.7
10	11	31,429	-39.2			
7						
5						

• ANCHORAGE, ALASKA
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	45	[illegible]	4.7	[illegible]	3.2
1000	28	106	[illegible]	4.3	[illegible]	3.8
950	30	525	[illegible]	2.4	[illegible]	3.7
900	30	969	4.9	.2	[illegible]	1.3
850	30	1,433	1.7	-1.3	11	1.9
800	30	1,920	-.8	-3.0	[illegible]	2.1
750	30	2,434	-3.7	-6.4	[illegible]	2.8
700	30	2,976	-7.0	-10.9	[illegible]	3.6
650	30	3,550	-10.3	-15.[illegible]	[illegible]	3.8
600	30	4,173	-14.[illegible]	-23.[illegible]	09	4.2
550	30	4,818	[illegible]	-27.8	08	4.3
500	30	5,523	[illegible]	-33.1	09	[illegible]
450	30	6,265	-24.8	-37.6	09	[illegible]
400	30	7,119	[illegible]	-43.7	08	6.7
350	30	[illegible]	-42.[illegible]	-50.[illegible]	09	7.7
300	30	[illegible]	-49.1		08	8.4
250	30	10,244	-51.6		07	[illegible]
200	30	[illegible]	-47.0		09	3.7
175	30	12,596	-46.3		10	3.1
150	30	13,621	-46.4		12	3.3
125	30	14,829	-47.3		13	2.8
100	30	[illegible]	-47.7		13	2.7
80	30	17,776	-48.1		12	3.4
70	29	18,653	-48.2		12	3.1
60	29	19,609	-48.5		11	3.3
50	27	20,874	-48.7		11	3.9
40	27	22,344	-47.6		10	4.4
30	26	24,252	-46.5		10	5.4
25	24	25,457	-45.2		09	6.6
20	23	26,951	-43.1		09	7.6
15	21	[illegible]	[illegible]		09	8.6
10	20	31,686	-34.9		09	9.9
7	16	34,209	-29.7		09	12.0
5	5	36,485	-26.6			

• [illegible]
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1000	29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
950	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
900	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
850	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
800	[illegible]	1,931	-2.2	[illegible]	[illegible]	[illegible]
750	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
700	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
650	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
600	[illegible]	[illegible]	[illegible]	-23.5	[illegible]	[illegible]
550	[illegible]	[illegible]	[illegible]	-27.5	[illegible]	[illegible]
500	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.2
450	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
400	[illegible]	7,115	-35.5	-43.2	[illegible]	[illegible]
350	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
300	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
250	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
200	[illegible]	11,727	[illegible]		[illegible]	[illegible]
175	[illegible]	12,614	-46.4		[illegible]	[illegible]
150	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
125	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
100	[illegible]	16,311	[illegible]		[illegible]	4.4
80	[illegible]	17,773	[illegible]		[illegible]	3.4
70	[illegible]	[illegible]	[illegible]		[illegible]	2.9
60	[illegible]	[illegible]	[illegible]		[illegible]	2.6
50	29	[illegible]	-51.1		[illegible]	2.3
40	29	[illegible]	-49.8		[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
25	25	[illegible]	-46.2		[illegible]	7.4
20	[illegible]	[illegible]	[illegible]		[illegible]	7.3
15	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
10	18	31,641	-35.4		[illegible]	[illegible]
7	[illegible]	[illegible]	-31.2			
5						

ATHENS, GEORGIA
988 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	19.6	18.4	36	.5
1000						
950	30	587	21.3	17.0	31	.7
900	30	1,055	18.8	13.6	30	.6
850	30	1,544	15.5	10.0	29	1.1
800	30	2,056	12.3	6.1	28	1.4
750	30	2,595	9.2	1.9	27	1.6
700	30	3,164	6.0	-3.0	28	2.3
650	30	3,768	3.0	-8.5	27	3.4
600	30	4,413	-.6	-12.0	27	4.1
550	30	5,103	-4.6	-16.5	26	4.6
500	30	5,848	-9.1	-21.8	25	5.0
450	30	6,656	-14.1	-25.9	26	5.4
400	30	7,539	-20.2	-32.5	26	6.2
350	30	8,519	-27.3	-38.9	26	7.7
300	30	9,606	-35.9	-47.8	26	8.8
250	30	10,846	-46.2		26	10.1
200	30	12,292	-57.1		28	11.8
175	30	13,128	-61.5		28	10.7
150	29	14,078	-63.4		28	8.3
125	29	15,194	-64.6		29	7.0
100	29	16,551	-66.5		31	3.2
80	29	17,904	-65.1		04	2.3
70	29	18,722	-63.2		05	3.1
60	29	19,675	-61.5		07	4.9
50	29	20,813	-58.6		08	7.0
40	29	22,225	-55.7		09	7.8
30	29	24,076	-51.6		09	8.4
25	28	25,266	-49.4		09	8.7
20	25	26,738	-47.3		09	9.3
15	23	28,650	-44.3		09	10.4
10	12	31,415	-38.7		09	12.7
7	5	33,915	-36.4			

• BARROW, ALASKA
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	6	-.5	-1.0	05	2.8
1000	30	130	-.9	-1.3	07	3.4
950	30	542	1.3	-2.9	08	3.1
900	30	978	1.6	-4.7	09	2.2
850	29	1,438	-.2	-6.2	11	1.7
800	29	1,921	-2.7	-10.0	13	1.1
750	29	2,431	-5.4	-13.4	17	1.4
700	29	2,969	-8.4	-18.6	20	1.1
650	29	3,541	-11.6	-21.3	20	1.2
600	29	4,150	-15.1	-25.7	23	1.7
550	29	4,803	-19.2	-29.8	24	1.9
500	29	5,505	-24.3	-34.8	25	2.5
450	29	6,265	-29.8	-40.1	24	2.8
400	29	7,093	-36.1	-44.8	26	4.2
350	25	8,024	-41.9		27	5.3
300	25	9,050	-48.4		27	5.6
250	25	10,243	-49.7		27	4.2
200	24	11,720	-44.7		27	2.4
175	23	12,611	-44.6		28	2.1
150	23	13,643	-45.0		26	1.4
125	23	14,861	-45.3		21	1.1
100	23	16,348	-46.0		17	.8
80	23	17,833	-46.1		12	1.5
70	22	18,722	-45.9		10	1.3
60	22	19,749	-45.9		11	2.2
50	22	20,963	-45.7		10	2.5
40	21	22,451	-44.7		09	3.1
30	17	24,370	-43.2		08	3.9
25	12	25,593	-42.5		09	4.6
20	7	27,095	-41.3			

BARTER IS., ALASKA
1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	15	.3	.1	08	1.9
1000	30	116	.1	.1	09	2.3
950	30	530	3.5	.8	10	3.0
900	30	971	4.1	-3.7	12	2.1
850	30	1,434	2.4	-5.6	14	2.2
800	30	1,922	-.5	-8.9	17	1.7
750	30	2,435	-3.6	-12.0	20	2.2
700	30	2,977	-7.2	-15.6	21	2.2
650	30	3,550	-10.8	-20.5	22	2.5
600	30	4,162	-14.5	-24.9	23	3.4
550	30	4,815	-18.8	-29.6	22	4.0
500	30	5,519	-23.7	-34.3	22	4.4
450	30	6,280	-29.1	-39.9	22	5.3
400	30	7,112	-35.4	-44.3	23	5.5
350	30	8,032	-41.7		22	6.4
300	30	9,060	-48.0		22	7.6
250	30	10,254	-49.7		22	6.8
200	30	11,733	-44.9		22	3.9
175	30	12,627	-44.6		22	3.2
150	30	13,659	-44.6		20	2.7
125	30	14,876	-45.7		21	2.2
100	29	16,358	-46.3		18	1.8
80	29	17,840	-46.4		17	1.2
70	29	18,728	-46.3		13	.7
60	29	19,752	-46.4		11	2.1
50	29	20,965	-45.9		10	2.3
40	28	22,447	-45.1		09	3.3
30	28	24,376	-43.6		09	4.2
25	28	25,604	-42.9		09	5.0
20	27	27,110	-41.7		09	5.6
15	27	29,074	-38.7		09	6.3
10	20	31,909	-32.6		08	7.6
7	7	34,534	-28.1			

BETHEL, ALASKA
[illegible]8 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	[illegible]	6.0	4.3	31	2.8
1000	29	[illegible]	6.9	4.3	32	2.9
950	30	528	6.4	.9	01	1.7
900	30	970	[illegible]	-2.5	02	.5
850	30	1,434	2.3	-5.7	21	.2
800	30	1,922	-.4	-8.1	11	.5
750	30	2,435	-3.5	-11.6	14	.9
700	30	2,976	-6.6	-16.1	11	1.3
650	30	3,553	-9.9	-19.3	11	1.6
600	30	4,167	-13.6	-22.5	11	2.1
550	30	4,823	-17.7	-27.5	11	1.9
500	30	5,530	-22.2	-30.6	11	2.1
450	29	6,301	-27.3	-34.9	08	1.9
400	29	7,138	-33.6	-40.9	07	2.2
350	29	8,065	-40.3	-43.1	07	2.0
300	29	9,097	-47.0		06	2.3
250	29	10,286	-53.0		05	2.2
200	29	11,730	-50.0		06	1.5
175	29	12,607	-48.1		06	1.1
150	29	13,626	-47.5		11	1.5
125	29	14,827	-47.7		12	1.8
100	28	16,298	-48.2		11	2.4
80	27	17,769	-48.3		11	2.4
70	27	18,649	-48.4		11	3.2
60	27	19,664	-48.5		10	[illegible]
50	27	20,863	-49.5		10	3.5
40	26	22,335	-47.8		10	3.9
30	26	24,241	-46.5		10	4.7
25	25	25,454	-45.2		09	5.9
20	23	26,942	-43.3		09	6.6
15	16	28,910	-40.1		09	7.9
10	6	31,788	-34.5			

• BISMARCK, N. DAK.
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	[illegible]	[illegible]	8.7	[illegible]	[illegible]
1000						
950	18	547	[illegible]	7.9	31	[illegible]
900	30	[illegible]	[illegible]	[illegible]	27	4.5
850	30	1,443	[illegible]	2.5	[illegible]	[illegible]
800	30	1,953	10.9	-.4	23	6.5
750	30	2,468	7.6	-3.3	[illegible]	8.2
700	30	[illegible]	3.6	[illegible]	[illegible]	9.2
650	30	[illegible]	-.3	-13.0	[illegible]	[illegible]
600	30	[illegible]	[illegible]	-17.9	[illegible]	[illegible]
550	30	4,965	[illegible]	-22.0	[illegible]	[illegible]
500	30	[illegible]	-13.7	-26.9	[illegible]	[illegible]
450	30	6,490	[illegible]	-31.1	[illegible]	[illegible]
400	30	7,356	-25.1	-36.7	[illegible]	[illegible]
350	29	8,316	[illegible]	-44.1	[illegible]	[illegible]
300	29	[illegible]	[illegible]	-49.4	[illegible]	[illegible]
250	29	[illegible]	[illegible]		[illegible]	[illegible]
200	29	12,046	[illegible]		[illegible]	[illegible]
175	29	[illegible]	[illegible]		[illegible]	[illegible]
150	[illegible]	13,888	-53.9		[illegible]	[illegible]
125	29	15,058	-54.8		[illegible]	[illegible]
100	29	16,476	[illegible]		[illegible]	[illegible]
80	29	[illegible]	-57.5		[illegible]	[illegible]
70	29	[illegible]	-56.9		[illegible]	[illegible]
60	29	19,709	-56.3		[illegible]	[illegible]
50	29	20,871	[illegible]		[illegible]	2.2
40	27	[illegible]	[illegible]		[illegible]	[illegible]
30	25	24,171	-49.9		[illegible]	[illegible]
25	25	[illegible]	[illegible]		[illegible]	[illegible]
20	24	26,844	[illegible]		[illegible]	8.4
15	23	[illegible]	[illegible]		[illegible]	9.5
10	7	[illegible]	[illegible]			

BOISE, IDAHO
914 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	871	13.6	1.5	16	1.1
1000						
950						
900	30	1,005	16.1	1.1	21	.3
850	30	1,490	15.1	-1.3	31	2.6
800	30	2,000	11.7	-3.4	31	3.8
750	30	2,536	7.8	-5.5	29	5.3
700	30	3,100	3.8	-8.7	27	7.1
650	30	3,698	-.4	-12.0	27	8.8
600	30	4,334	-4.4	-15.8	27	10.6
550	30	5,013	-8.9	-20.6	26	12.0
500	30	5,745	-13.6	-25.9	26	13.9
450	30	6,538	-19.1	-30.6	26	14.6
400	30	7,405	-25.0	-35.1	26	15.8
350	30	8,364	-32.2	-42.1	26	17.9
300	30	9,430	-40.6	-48.2	26	19.5
250	30	10,648	-49.3		26	20.4
200	30	12,089	-55.7		26	21.2
175	30	12,936	-56.8		26	20.2
150	30	13,912	-56.9		26	17.1
125	30	15,065	-58.0		26	13.1
100	30	16,466	-59.5		26	7.6
80	30	17,866	-58.6		24	3.4
70	30	18,706	-58.0		23	1.2
60	30	19,679	-57.2		15	.9
50	30	20,836	-56.0		08	2.4
40	30	22,262	-54.0		09	4.6
30	29	24,121	-50.8		09	5.9
25	27	25,316	-49.1		09	6.4
20	27	26,789	-46.7		08	8.6
15	25	28,717	-42.8		09	10.1
10	16	31,509	-37.7		09	10.8
7						
5						

BOOTHVILLE, LA.
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	22	1	25.5	23.1	20	.5
1000	22	142	25.7	22.1	19	1.3
950	22	593	22.9	18.7	20	2.6
900	22	1,064	19.9	14.9	18	2.6
850	22	1,555	16.7	10.7	19	3.1
800	22	2,069	13.8	5.9	20	3.2
750	22	2,612	10.9	.9	20	2.9
700	22	3,184	7.5	-2.4	21	2.3
650	22	3,791	3.9	-5.5	24	3.1
600	22	4,437	-.1	-10.4	25	4.3
550	22	5,128	-4.4	-14.2	24	4.2
500	22	5,873	-9.0	-18.4	25	4.3
450	22	6,682	-13.6	-23.7	23	4.7
400	22	7,568	-19.2	-29.2	23	4.2
350	22	8,551	-26.2	-35.9	24	4.6
300	22	9,644	-34.7	-43.6	24	5.2
250	22	10,890	-45.0		23	6.4
200	22	12,345	-56.3		24	11.8
175	22	13,183	-61.2		25	12.5
150	22	14,131	-65.5		26	9.3
125	22	15,238	-66.8		27	4.8
100	22	16,579	-68.9		03	1.0
80	22	17,915	-67.4		08	3.7
70	22	18,725	-64.8		07	5.3
60	22	19,673	-62.2		08	7.4
50	20	20,810	-59.3		08	9.1
40	19	22,220	-55.8		09	9.4
30	19	24,068	-51.6		08	11.0
25	18	25,254	-49.4		09	11.8
20	15	26,729	-46.6		09	11.8
15	14	28,651	-44.4		08	10.9
10	10	31,395	-39.3			
7						
5						

• BROWNSVILLE, TEXAS
1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	7	24.5	22.5	14	2.8
1000	30	110	25.2	24.3	14	4.8
950	30	561	22.5	20.9	15	10.2
900	30	1,032	20.3	16.2	16	10.5
850	30	1,524	17.7	11.9	16	9.9
800	30	2,042	15.5	6.2	16	8.6
750	30	2,587	12.4	2.4	16	6.2
700	30	3,162	8.8	-1.6	17	3.5
650	30	3,772	5.2	-4.2	17	1.2
600	30	4,421	1.2	-8.8	31	1.3
550	30	5,116	-3.2	-14.6	32	2.4
500	29	5,865	-7.7	-19.6	31	3.2
450	29	6,677	-12.6	-25.8	29	3.5
400	29	7,566	-18.5	-30.6	28	5.4
350	29	8,552	-25.6	-36.7	28	8.1
300	29	9,648	-34.0	-45.6	27	10.1
250	29	10,898	-44.1		27	11.6
200	29	12,359	-55.0		27	14.5
175	29	13,201	-60.7		27	15.2
150	28	14,148	-65.8		27	12.3
125	28	15,245	-69.5		28	7.1
100	27	16,569	-71.7		01	2.7
80	27	17,889	-69.9		08	6.4
70	27	18,690	-66.9		09	8.2
60	27	19,627	-64.5		09	10.3
50	27	20,752	-60.6		09	11.7
40	25	22,152	-57.7		09	11.7
30	24	23,987	-52.8		09	13.5
25	22	25,169	-50.8		09	13.6
20	22	26,637	-46.9		09	13.7
15	22	28,551	-44.7		08	15.2
10	19	31,301	-40.4		09	19.1
7	11	33,782	-36.1		10	22.1
5	5	36,119	-33.2			

BUFFALO, N. Y.
990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	218	17.[illegible]	14.[illegible]	21	2.9
1000						
950	30	568	17.5	11.4	24	6.5
900	30	1,029	15.7	8.3	25	6.8
850	30	1,512	12.7	5.7	26	7.4
800	30	2,019	9.4	3.0	27	8.5
750	30	2,553	6.6	-1.5	26	9.7
700	30	3,116	3.5	-5.7	26	10.7
650	30	3,714	.4	-11.1	26	11.6
600	30	4,352	-3.3	-15.3	26	12.2
550	30	5,036	-7.2	-20.5	26	12.9
500	30	5,773	-11.6	-25.0	26	14.1
450	30	6,573	-16.8	-28.8	26	14.7
400	30	7,446	-23.[illegible]	-35.1	26	14.9
350	30	8,413	-30.3	-41.4	26	14.9
300	30	9,488	-38.5	-47.4	26	15.3
250	30	10,717	[illegible]		26	17.1
200	29	12,155	-55.4		26	17.3
175	29	[illegible]	[illegible]		27	15.2
150	[illegible]	13,976	[illegible]		27	13.6
125	[illegible]	15,133	[illegible]		27	12.2
100	[illegible]	16,530	-54.7		27	9.1
80	29	[illegible]	-59.3		[illegible]	3.4
70	29	18,764	[illegible]		34	1.4
60	[illegible]	19,739	-56.6		07	1.3
50	[illegible]	20,900	-54.7		07	2.4
40	[illegible]	22,332	-53.2		09	4.5
30	[illegible]	24,200	-49.9		08	[illegible]
25	[illegible]	25,397	[illegible]		08	[illegible]
20	[illegible]	26,876	-45.5		08	7.9
15	[illegible]	[illegible]	-42.6		08	8.6
10	[illegible]	31,578	-40.3			

CAPE HATTERAS, N. C.
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	[illegible]	21.1	23	1.4
1000	[illegible]	154	23.4	19.7	27	2.9
950	30	602	[illegible]	16.5	22	4.1
900	30	1,069	[illegible]	12.7	24	3.9
850	30	[illegible]	15.1	[illegible]	24	3.3
800	[illegible]	[illegible]	[illegible]	3.4	24	[illegible]
750	[illegible]	[illegible]	[illegible]	-1.1	24	[illegible]
700	[illegible]	[illegible]	[illegible]	-5.5	24	[illegible]
650	[illegible]	[illegible]	3.5	[illegible]	24	[illegible]
600	30	4,429	-.3	-12.9	24	[illegible]
550	[illegible]	[illegible]	[illegible]	-18.3	24	[illegible]
500	[illegible]	[illegible]	-8.6	-23.1	24	[illegible]
450	[illegible]	[illegible]	[illegible]	-28.3	[illegible]	[illegible]
400	[illegible]	[illegible]	-20.1	[illegible]	25	6.7
350	[illegible]	[illegible]	-27.3	[illegible]	[illegible]	[illegible]
300	[illegible]	[illegible]	[illegible]	[illegible]	26	[illegible]
250	[illegible]	[illegible]	-45.9		[illegible]	[illegible]
200	[illegible]	12,314	[illegible]		27	[illegible]
175	[illegible]	13,149	-61.9		[illegible]	[illegible]
150	[illegible]	14,097	-63.9		[illegible]	.3
125	[illegible]	15,214	-64.3		[illegible]	4.8
100	[illegible]	[illegible]	-65.2		32	3.1
80	[illegible]	17,943	[illegible]		[illegible]	[illegible]
70	[illegible]	[illegible]	[illegible]		[illegible]	3.4
60	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
50	[illegible]	20,872	[illegible]		[illegible]	[illegible]
40	[illegible]	22,294	[illegible]		[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]

See reference note at end of table

RAWINSONDE DATA

Average monthly values

• CARIBOU, MAINE
991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	191	14.4	12.4	21	1.9
1000						
950	30	551	13.3	8.6	26	4.1
900	30	1,006	11.9	6.0	27	5.5
850	30	1,463	9.2	3.6	27	6.2
800	30	1,983	6.2	.7	27	7.1
750	30	2,510	2.9	-2.8	27	7.7
700	30	3,066	-.2	-8.1	27	9.3
650	30	3,656	-3.3	-12.9	27	10.1
600	30	4,286	-6.6	-16.4	27	10.5
550	30	4,961	-10.4	-21.4	27	11.5
500	30	5,689	-14.5	-26.8	27	12.6
450	30	6,479	-19.8	-32.4	27	13.9
400	29	7,350	-25.6	-37.0	27	15.4
350	29	8,308	-32.4	-40.5	26	17.5
300	29	9,374	-40.0	-47.1	26	19.3
250	29	10,601	-47.0		27	22.5
200	29	12,053	-54.6		27	23.5
175	29	12,903	-56.4		27	19.7
150	28	13,880	-55.5		27	15.3
125	28	15,041	-56.2		28	11.9
100	27	16,451	-57.2		28	7.4
80	27	17,865	-56.4		29	4.3
70	26	18,717	-55.6		28	2.2
60	26	19,702	-54.7		12	.1
50	26	20,872	-53.6		09	2.2
40	26	22,313	-51.8		09	4.2
30	25	24,189	-49.4		09	6.0
25	2.	25,391	-47.7		09	6.9
20	20	26,865	-45.6		09	7.1
15	19	28,793	-42.3		09	9.5
10	18	31,562	-36.9		09	10.3
7	8	34,112	-31.7			

CHARLESTON, S. C.
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	13	22.1	20.4	18	.7
1000	30	144	23.1	20.4	19	1.7
950	30	592	21.1	17.2	20	3.1
900	30	1,059	18.5	13.4	21	2.9
850	30	1,547	15.6	10.1	21	2.3
800	30	2,060	12.7	6.0	21	1.9
750	30	2,600	9.6	2.8	22	2.4
700	30	3,170	6.3	-1.6	23	3.3
650	30	3,775	3.2	-6.2	24	3.4
600	30	4,420	-.3	-10.2	23	3.6
550	29	5,112	-3.8	-15.3	24	4.3
500	29	5,858	-8.5	-19.3	24	4.6
450	29	6,668	-13.6	-25.5	24	5.5
400	29	7,554	-19.6	-30.4	25	5.2
350	29	8,534	-26.8	-36.7	26	6.1
300	29	9,625	-35.4	-46.4	27	6.6
250	29	10,867	-45.6		27	7.0
200	29	12,316	-57.1		28	8.2
175	29	13,151	-62.2		28	7.4
150	29	14,096	-64.9		29	6.5
125	28	15,205	-65.5		30	4.2
100	28	16,556	-66.9		34	2.5
80	25	17,908	-65.8		05	3.4
70	28	18,724	-63.2		07	4.2
60	28	19,677	-61.2		07	5.7
50	27	20,818	-58.3		08	7.6
40	27	22,233	-55.0		09	8.6
30	25	24,086	-51.2		09	9.2
25	25	25,278	-48.9		09	8.7
20	24	26,753	-46.6		09	8.5
15	22	28,681	-44.2		09	9.9
10	12	31,409	-40.0			

CHATHAM, MASS.
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	16	15.7	14.2	27	.9
1000	30	142	17.4	14.5	26	2.2
950	30	582	17.4	11.3	27	4.3
900	30	1,042	15.1	7.6	27	5.1
850	30	1,525	12.3	4.5	27	6.6
800	30	2,031	9.9	-.1	26	8.1
750	30	2,565	6.8	-4.0	26	9.7
700	30	3,129	4.1	-7.5	26	10.9
650	30	3,729	1.1	-10.9	26	12.2
600	30	4,369	-2.2	-13.8	26	14.2
550	30	5,055	-6.3	-18.4	27	15.2
500	30	5,794	-10.9	-24.3	27	15.5
450	30	6,597	-16.0	-27.8	27	16.6
400	30	7,475	-21.6	-32.3	27	17.1
350	30	8,448	-28.6	-39.1	27	18.0
300	30	9,531	-37.0	-46.1	27	19.2
250	28	10,756	-47.2		27	20.5
200	28	12,199	-57.2		28	19.4
175	28	13,036	-60.6		27	17.4
150	28	13,994	-60.4		27	14.2
125	28	15,131	-60.6		29	11.2
100	27	16,517	-60.9		29	6.1
80	27	17,907	-59.6		31	2.3
70	27	18,746	-58.1		02	.7
60	25	19,720	-57.0		10	1.7
50	24	20,880	-55.8		09	3.2
40	22	22,310	-53.7		09	5.3
30	20	24,176	-50.7		09	7.2
25	15	25,374	-48.0		09	6.5
20	14	26,854	-45.6		08	7.2
15	12	28,779	-42.7		09	8.2
10	9	31,568	-38.6			
7	5	34,066	-33.0			

CHIHUAHUA, MEXIC.
857 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,428	18.5	5.9	32	.1
850	30	1,501	20.2	6.0	35	.2
800	30	2,024	18.9	4.9	06	.6
750	30	2,575	15.0	2.3	08	1.0
700	30	3,154	10.8	-.6	06	1.3
650	30	3,768	6.5	-4.6	06	1.2
600	30	4,419	1.6	-8.7	36	1.0
550	30	5,114	-3.1	-14.1	31	1.4
500	30	5,862	-8.4	-20.0	30	3.2
450	30	6,672	-13.3	-28.5	30	5.1
400	30	7,559	-19.5	-33.6	29	6.6
350	30	8,541	-26.5	-39.9	28	8.0
300	30	9,632	-35.0	-47.4	28	11.3
250	30	10,878	-44.8		28	13.9
200	30	12,338	-54.7		29	15.2
175	30	13,183	-59.5		29	14.1
150	30	14,138	-63.5		29	12.3
125	30	15,249	-66.8		29	7.8
100	30	16,584	-70.6		31	4.8
80	30	17,915	-68.2		06	3.3
70	30	18,722	-64.9		09	5.5
60	30	19,668	-62.7		08	7.7
50	29	20,800	-59.3		09	8.3
40	29	22,207	-56.7		09	9.6
30	25	24,048	-52.6		09	11.5
25	27	25,232	-50.4		09	12.0
20	26	26,701	-47.0		09	11.7
15	20	28,615	-44.3		09	12.6
10	16	31,362	-40.3		09	15.6

• COLD BAY, ALASKA
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	30	4.7	3.7	24	1.3
1000	25	113	4.1	3.0	25	1.9
950	28	517	2.5	1.1	21	.6
900	28	955	.7	-1.9	04	1.1
850	28	1,415	.4	-4.9	08	2.0
800	28	1,900	-1.4	-7.9	10	2.4
750	28	2,412	-3.7	-11.6	11	1.8
700	29	2,955	-6.1	-14.7	08	1.1
650	28	3,531	-9.5	-17.1	11	1.0
600	28	4,146	-13.3	-21.0	06	1.2
550	28	4,803	-17.2	-26.5	06	1.1
500	28	5,511	-21.9	-31.6	04	.7
450	28	6,279	-27.3	-37.8	06	.8
400	28	7,116	-33.6	-42.1	05	.3
350	27	8,035	-40.6	-44.1	02	1.3
300	27	9,065	-47.8		31	1.5
250	26	10,243	-52.6		26	1.6
200	26	11,696	-49.8		25	3.7
175	26	12,576	-47.6		25	2.9
150	26	13,593	-48.1		24	3.2
125	26	14,794	-48.5		23	2.7
100	26	16,259	-49.2		21	1.7
80	25	17,721	-49.2		18	2.0
70	25	18,597	-49.2		16	2.2
60	25	19,609	-49.2		14	2.0
50	24	20,803	-49.5		12	2.4
40	24	22,266	-49.2		11	3.2
30	24	24,157	-48.2		10	4.5
25	24	25,383	-46.7		10	5.0
20	21	26,845	-44.7		09	6.2
15	18	28,798	-42.0		09	7.8
10	11	31,581	-36.9			
7	5	34,088	-32.8			

DAYTON, OHIO
981 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	299	18.3	16.3	19	1.4
1000						
950	30	572	19.9	14.1	23	5.0
900	30	1,037	17.5	11.4	25	6.9
850	30	1,524	14.2	7.7	25	7.6
800	30	2,034	11.2	3.0	25	7.8
750	30	2,570	8.2	-2.5	25	7.9
700	30	3,137	5.1	-6.7	26	8.2
650	30	3,739	1.7	-10.4	26	8.9
600	30	4,380	-1.8	-15.7	26	9.1
550	30	5,067	-5.7	-21.1	26	9.9
500	30	5,807	-10.7	-25.6	26	10.5
450	30	6,609	-16.2	-29.7	26	10.7
400	29	7,490	-22.6	-34.6	27	10.7
350	29	8,460	-29.6	-40.8	26	11.4
300	29	9,537	-38.1	-47.7	26	12.6
250	28	10,771	-47.4		26	14.9
200	28	12,216	-56.2		26	15.7
175	28	13,059	-58.9		27	14.8
150	28	14,027	-59.0		27	12.1
125	28	15,165	-60.9		27	10.0
100	28	16,547	-62.7		27	6.5
80	28	17,922	-62.1		29	2.9
70	28	18,751	-60.8		35	1.2
60	28	19,715	-58.7		07	2.1
50	28	20,866	-56.6		08	3.4
40	28	22,289	-54.3		08	4.6
30	26	24,149	-51.2		08	5.7
25	25	25,342	-49.2		08	6.2
20	23	26,815	-46.9		08	7.5
15	16	28,708	-43.7		08	8.0
10	7	31,467	-39.3			

DEL RIO, TEXAS
976 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	26	314	22.2	19.6	11	3.3
950	26	547	21.6	18.9	14	6.3
900	26	1,016	19.1	16.1	16	8.8
850	26	1,507	17.3	12.8	17	7.6
800	26	2,025	16.2	5.5	17	5.0
750	26	2,572	13.6	1.4	18	1.2
700	26	3,149	9.5	-3.1	36	1.1
650	26	3,760	5.4	-6.6	35	2.1
600	26	4,409	.8	-10.0	32	3.1
550	26	5,102	-3.9	-15.7	32	4.4
500	26	5,848	-8.7	-20.5	32	5.0
450	26	6,657	-13.8	-27.1	30	5.3
400	26	7,542	-19.7	-34.1	29	6.9
350	26	8,522	-26.8	-39.5	30	8.0
300	26	9,613	-35.2	-47.7	29	9.4
250	26	10,858	-44.7		29	11.3
200	26	12,316	-55.2		29	13.7
175	26	13,161	-59.3		29	13.3
150	26	14,116	-63.8		29	11.7
125	26	15,226	-66.7		29	7.9
100	25	16,567	-69.4		33	2.7
80	25	17,900	-68.4		07	4.1
70	25	18,706	-65.4		08	6.4
60	24	19,650	-62.9		09	7.6
50	24	20,782	-59.6		09	8.7
40	24	22,188	-56.4		09	9.6
30	23	24,031	-52.3		09	10.9
25	22	25,215	-50.1		09	12.0
20	19	26,698	-47.0		09	12.6
15	19	28,612	-44.9		08	14.5
10	14	31,349	-40.0		09	19.2

DENVER, COLO.
838 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,611	12.5	3.9	20	2.2
800	30	2,001	15.7	.1	24	2.9
750	30	2,546	13.1	-3.7	27	3.2
700	30	3,121	8.7	-6.6	29	3.7
650	30	3,729	3.9	-8.8	30	4.7
600	30	4,374	-1.4	-11.0	30	5.4
550	30	5,060	-6.8	-15.7	29	6.4
500	30	5,797	-11.7	-22.6	29	7.5
450	29	6,596	-16.7	-29.5	28	8.5
400	29	7,470	-22.8	-35.5	27	9.9
350	29	8,438	-30.3	-42.6	27	10.5
300	29	9,511	-39.1	-46.8	27	10.1
250	29	10,745	-47.9		28	11.7
200	26	12,173	-55.8		27	13.1
175	26	13,020	-57.7		28	13.2
150	26	13,989	-59.3		28	12.8
125	26	15,131	-60.2		27	8.7
100	25	16,518	-61.5		27	4.6
80	23	17,896	-61.1		25	1.5
70	22	18,724	-60.1		15	.6
60	22	19,689	-58.7		09	1.5
50	22	20,840	-57.0		09	3.8
40	21	22,258	-55.0		09	4.8
30	19	24,103	-50.9		08	5.6
25	16	25,288	-49.3		09	6.1
20	11	26,772	-46.8		09	7.6
15	9	28,682	-44.3			

DODGE CITY, KANS.
923 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	791	17.4	10.0	22	1.9
900	30	1,007	19.6	8.3	23	4.4
850	30	1,499	19.0	3.8	24	5.5
800	30	2,017	15.9	1.2	28	4.1
750	30	2,562	12.2	-2.3	27	3.0
700	30	3,135	7.7	-5.7	29	3.3
650	30	3,741	3.3	-7.9	29	4.5
600	30	4,385	-1.1	-12.2	29	5.2
550	30	5,074	-5.6	-18.2	28	5.8
500	30	5,815	-10.2	-24.3	28	6.4
450	30	6,618	-15.8	-29.8	28	7.4
400	30	7,495	-22.3	-36.3	27	8.6
350	30	8,464	-29.8	-42.6	28	9.4
300	30	9,541	-38.3	-49.2	27	9.9
250	30	10,771	-47.4		27	10.9
200	29	12,220	-55.3		27	12.2
175	29	13,065	-58.5		28	12.0
150	29	14,031	-59.8		28	11.7
125	29	15,168	-61.2		29	9.2
100	29	16,544	-63.6		28	3.4
80	29	17,914	-63.3		25	.8
70	29	18,739	-61.6		06	1.8
60	29	19,698	-60.0		08	3.4
50	29	20,843	-57.6		09	5.4
40	28	22,261	-55.1		09	5.8
30	27	24,114	-51.4		09	6.7
25	25	25,303	-49.4		09	6.7
20	23	26,774	-46.9		08	7.5
15	21	28,690	-43.9		08	9.2
10	17	31,449	-38.2		09	10.5

EL PASO, TEXAS
881 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,193	18.6	3.8	29	.1
850	30	1,502	21.5	2.2	15	1.0
800	30	2,024	18.6	-.6	19	.6
750	30	2,574	14.6	-3.4	28	1.4
700	30	3,152	10.4	-6.5	29	2.3
650	30	3,764	5.7	-9.5	32	2.4
600	30	4,413	.9	-14.1	32	3.2
550	30	5,105	-4.5	-18.4	31	2.9
500	30	5,848	-9.6	-24.8	30	3.8
450	30	6,654	-15.0	-31.5	29	5.0
400	30	7,534	-21.1	-37.0	29	6.8
350	30	8,509	-28.4	-43.5	29	8.5
300	30	9,593	-36.6	-51.0	28	11.1
250	30	10,831	-46.0		28	13.6
200	29	12,285	-55.4		28	16.2
175	28	13,131	-59.3		28	16.0
150	28	14,069	-62.3		28	13.9
125	28	15,207	-65.3		29	9.6
100	28	16,555	-68.6		28	4.6
80	28	17,894	-67.0		02	1.5
70	28	18,706	-64.1		08	4.0
60	27	19,655	-62.1		09	6.0
50	26	20,789	-59.5		08	7.4
40	26	22,197	-56.3		09	8.6
30	26	24,040	-52.9		09	10.1
25	25	25,224	-50.1		09	10.1
20	23	26,668	-47.4		08	11.2
15	21	28,600	-44.5		09	10.0
10	12	31,348	-40.4			

ELY, NEV.
810 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,908	7.0	-6.0	20	3.5
800	30	2,009	12.2	-1.6	20	2.6
750	30	2,552	12.1	-4.1	21	1.3
700	30	3,125	8.1	-7.6	25	3.5
650	30	3,732	3.5	-10.1	25	5.5
600	30	4,376	-1.4	-12.9	25	7.3
550	30	5,062	-6.7	-16.6	26	8.2
500	30	5,800	-11.5	-23.3	26	8.6
450	30	6,601	-16.6	-29.4	26	9.6
400	30	7,475	-23.1	-35.7	26	10.8
350	30	-	-30.4	-41.1	26	12.0
300	30	9,515	-39.0	-47.6	26	12.9
250	30	10,740	-48.7		27	14.7
200	30	12,179	-56.6		26	14.7
175	29	13,027	-58.5		26	15.6
150	29	13,993	-59.9		27	14.5
125	29	15,130	-61.0		27	11.5
100	28	16,503	-63.0		27	7.0
80	28	17,879	-61.9		25	2.5
70	28	18,708	-60.2		20	.7
60	27	19,672	-59.2		09	1.9
50	27	20,819	-57.4		09	3.5
40	27	22,237	-55.0		09	5.0
30	27	24,090	-51.5		08	5.8
25	26	25,282	-49.5		09	6.6
20	24	26,761	-47.0		09	7.0
15	23	28,691	-43.7		09	8.9
10	20	31,461	-39.1		09	11.3
7	12	33,911	-35.8			

EMPALME, MEXICO
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	12	22.4	18.0	14	.7
1000	30	89	24.4	18.2	13	1.3
950	30	539	24.7	8.3	15	3.5
900	30	1,013	23.9	3.5	16	2.8
850	30	1,510	22.0	1.0	18	2.2
800	30	2,033	18.8	-1.5	19	2.0
750	30	2,583	15.2	-4.4	20	1.8
700	30	3,162	11.4	-7.0	21	2.5
650	29	3,778	7.2	-9.1	22	3.3
600	29	4,430	2.4	-12.0	24	3.0
550	29	5,127	-2.7	-16.8	25	3.5
500	29	5,875	-7.9	-23.5	26	4.6
450	29	6,686	-13.4	-29.0	26	7.6
400	29	7,571	-19.6	-35.4	27	9.1
350	29	8,552	-26.8	-43.1	27	11.8
300	29	9,642	-35.2	-49.6	27	15.9
250	29	10,888	-44.6		27	18.4
200	29	12,348	-54.8		27	20.3
175	29	13,193	-59.6		27	19.3
150	29	14,147	-64.0		27	15.7
125	29	15,254	-67.7		28	11.2
100	29	16,584	-71.3		29	3.4
80	29	17,906	-69.8		04	1.2
70	29	18,708	-66.3		08	4.2
60	28	19,652	-63.1		09	6.1
50	28	20,781	-60.2		09	7.5
40	27	22,181	-57.4		09	9.4
30	24	24,009	-53.1		09	11.9
25	24	25,191	-50.4		09	11.9
20	24	26,657	-47.4		09	12.1
15	22	28,577	-44.5		08	13.5
10	9	31,334	-40.4			

• FAIRBANKS, ALASKA
993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	135	12.0	5.8	33	.8
950	30	506	11.8	3.2	33	1.1
900	30	957	8.8	.8	33	1.1
850	30	1,426	5.2	-1.1	04	.6
800	30	1,919	1.6	-2.7	10	.9
750	30	2,435	-2.2	-5.2	11	.9
700	30	2,980	-6.1	-9.3	12	1.4
650	30	3,557	-9.8	-14.7	11	1.1
600	30	4,170	-13.7	-19.8	09	.9
550	30	4,826	-18.0	-26.1	11	1.0
500	30	5,532	-23.0	-32.7	11	1.7
450	30	6,295	-28.6	-37.8	11	2.2
400	30	7,128	-35.2	-42.9	11	4.1
350	21	8,051	-42.5		11	4.4
300	21	9,072	-50.3		13	4.5
250	21	10,249	-53.8		13	4.6
200	21	11,700	-48.4		14	4.6
175	21	12,582	-47.0		15	4.4
150	21	13,604	-47.1		14	3.8
125	21	14,810	-47.4		14	4.0
100	21	16,284	-48.2		13	3.9
80	21	17,755	-48.1		12	3.3
70	21	18,634	-48.6		12	3.5
60	21	19,648	-48.6		12	3.1
50	20	20,844	-48.4		10	4.2
40	20	22,316	-47.5		11	4.3
30	19	24,224	-46.0		09	5.7
25	19	25,440	-45.0		09	6.8
20	17	26,935	-43.4		09	7.7
15	16	28,871	-40.5		09	6.4
10	13	31,656	-34.8		09	9.3
7	7	34,148	-29.1			

FLINT, MICH.
985 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	236	16.5	14.5	21	2.1
950	30	547	17.4	11.9	24	5.6
900	30	1,008	15.3	9.4	26	7.5
850	30	1,491	12.5	6.2	26	8.5
800	30	1,998	9.6	2.2	26	9.3
750	30	2,532	6.7	-2.1	26	9.3
700	30	3,095	3.3	-5.2	25	9.8
650	30	3,693	.0	-9.7	26	10.3
600	30	4,330	-3.6	-14.8	26	10.6
550	30	5,013	-7.5	-21.0	26	11.6
500	30	5,748	-12.2	-25.5	26	12.9
450	30	6,546	-17.4	-31.5	27	13.2
400	30	7,418	-23.7	-36.1	27	14.5
350	30	8,383	-30.7	-42.8	27	15.4
300	30	9,456	-39.2	-48.1	26	17.0
250	30	10,679	-48.7		26	18.9
200	30	12,124	-55.2		27	18.4
175	30	12,973	-57.1		27	16.4
150	30	13,947	-57.5		27	12.6
125	30	15,098	-58.6		27	11.2
100	30	16,494	-60.1		27	7.9
80	30	17,887	-59.8		29	3.1
70	30	18,724	-58.8		30	1.2
60	29	19,701	-57.1		05	1.4
50	28	20,860	-55.6		07	3.1
40	27	22,266	-53.5		07	4.3
30	27	24,150	-50.6		09	6.7
25	24	25,343	-48.6		09	6.8
20	18	26,807	-46.3		09	8.1
15	1.	28,720	-43.5			

FORT WURTH, TEXAS
993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	180	21.2	19.1	19	2.8
950	30	560	21.6	16.5	20	7.2
900	30	1,029	19.8	12.3	20	8.0
850	30	1,520	17.4	9.0	20	6.4
800	30	2,037	14.5	5.4	19	4.1
750	30	2,580	11.6	.0	20	2.4
700	30	3,153	7.7	-3.0	21	.9
650	30	3,760	3.7	-6.6	30	1.1
600	30	4,406	-.4	-11.1	30	1.9
550	30	5,096	-4.7	-16.0	28	2.2
500	30	5,839	-9.7	-22.7	29	3.3
450	30	6,646	-14.5	-29.0	27	4.9
400	30	7,528	-20.4	-33.4	28	5.4
350	30	8,506	-27.4	-40.1	27	5.9
300	30	9,594	-35.7	-46.9	26	8.5
250	30	10,837	-45.3		26	12.0
200	30	12,291	-55.8		26	13.6
175	30	13,133	-59.6		26	13.9
150	30	14,091	-61.8		28	12.1
125	30	15,215	-63.8		28	8.4
100	30	16,572	-66.6		28	3.4
80	30	17,920	-66.3		06	2.1
70	30	18,734	-63.6		08	4.6
60	29	19,686	-61.1		08	6.0
50	29	20,827	-58.4		09	6.9
40	28	22,240	-56.0		09	7.8
30	26	24,090	-51.7		09	9.1
25	25	25,276	-49.7		09	9.3
20	24	26,748	-47.0		08	9.3
15	20	28,602	-44.2		08	10.4
10	11	31,373	-41.2			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

GLASGOW, MONT. 930 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	696	12.5	6.7	32	1.1
1000						
950						
900	30	968	15.1	5.4	30	4.1
850	30	1,451	12.9	1.9	31	6.5
800	30	1,958	9.4	-.6	30	6.8
750	30	2,490	5.7	-2.8	29	7.6
700	30	3,050	1.7	-5.6	28	8.0
650	30	3,645	-1.7	-9.0	29	9.4
600	30	4,277	-5.8	-12.4	28	11.3
550	30	4,954	-9.9	-17.7	28	12.1
500	30	5,584	-14.2	-22.8	28	12.9
450	30	6,476	-19.2	-28.6	28	14.0
400	30	7,342	-25.3	-35.2	28	14.7
350	30	8,3[illegible]0	-32.4	-41.4	28	16.5
300	30	9,365	-40.9	-47.9	28	17.6
250	30	10,502	-49.7		28	19.2
200	30	12,023	-54.7		27	18.9
175	30	12,879	-53.3		27	16.1
150	30	13,873	-52.7		27	12.8
125	30	15,048	-54.1		27	10.0
100	30	16,471	-56.4		27	6.4
80	30	17,807	-56.6		28	3.0
70	30	18,735	-56.2		27	1.3
60	30	19,717	-55.3		07	.4
50	30	20,884	-54.1		08	2.4
40	29	22,318	-52.5		09	3.5
30	27	24,196	-49.6		09	5.2
25	27	25,394	-48.0		09	6.4
20	26	26,871	-46.0		08	7.3
15	22	28,792	-42.5		09	9.1
10	14	31,534	-38.0		09	9.7
7						

GRAND JUNCTION, COLO. 852 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,472	14.3	1.3	13	3.4
1000						
950						
900						
850	27	1,522	15.8	.7	13	3.3
800	31	2,011	15.7	-.7	13	3.3
750	30	2,556	12.9	-4.1	22	.8
700	30	3,131	8.2	-6.6	28	2.8
650	30	3,738	3.6	-8.6	28	5.0
600	31	4,382	-1.1	-12.1	29	6.9
550	31	5,069	-6.4	-16.2	27	8.1
500	30	5,807	-11.4	-23.0	29	9.0
450	30	6,608	-16.3	-29.4	27	10.0
400	31	7,484	-22.5	-36.4	27	10.5
350	30	8,452	-30.1	-41.9	27	11.1
300	30	9,528	-38.7	-46.5	28	12.7
250	30	10,755	-48.1		28	13.7
200	30	12,200	-55.4		27	15.3
175	31	13,048	-57.3		27	14.5
150	30	14,018	-59.7		27	13.6
125	30	15,154	-61.0		27	11.2
100	30	16,536	-62.2		28	5.8
80	29	17,919	-6[illegible].3		29	1.0
70	29	18,750	-6[illegible].3		09	1.3
60	29	19,714	-58.8		08	2.9
50	28	20,863	-57.3		09	4.1
40	26	22,277	-54.8		08	4.9
30	25	24,130	-51.4		09	6.5
25	24	25,325	-49.4		08	7.1
20	23	26,798	-47.0		08	8.1
15	23	28,714	-43.6		09	9.4
10	12	31,446	-38.7		09	8.5
7						

• GREAT FALLS, MONT. 886 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,118	12.3	4.0	24	3.9
1000						
950						
900						
850	30	1,464	15.[illegible]	-.3	26	6.9
800	30	1,972	9.[illegible]	-1.7	27	6.6
750	30	2,504	4.[illegible]	-3.3	28	7.1
700	30	3,064	1.[illegible]	-5.9	27	8.0
650	30	3,657	-2.[illegible]	-10.2	27	10.0
600	30	4,289	-6.0	-15.8	27	12.0
550	30	4,964	-10.6	-19.9	27	14.1
500	30	5,691	-15.2	-24.3	27	15.0
450	30	6,461	-19.8	-30.1	26	15.8
400	30	7,345	-25.9	-35.7	26	15.8
350	30	8,301	-33.0	-40.7	26	18.3
300	30	9,363	-41.3	-45.4	26	19.8
250	30	10,578	-49.8		26	21.7
200	30	12,018	-54.4		26	22.7
175	30	12,873	-54.2		26	20.4
150	30	13,864	-53.2		26	15.7
125	30	15,037	-54.4		26	10.4
100	30	16,458	-56.5		25	6.4
80	30	17,874	-56.3		25	3.2
70	30	18,723	-56.0		27	1.4
60	30	19,704	-55.7		08	.8
50	30	20,869	-54.6		10	1.6
40	29	22,299	-53.0		09	3.5
30	29	24,107	-50.2		08	5.3
25	28	25,358	-48.4		09	6.8
20	27	26,833	-46.3		09	8.1
15	23	28,769	-43.0		09	9.1
10	[illegible]	31,552	-37.6		09	11.6
7	1[illegible]	34,036	-33.2		09	12.2

GREEN BA 987

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	27	210	15.6	12.9	22	1.1
1000						
950	27	532	17.1	10.5	24	5.2
900	27	993	15.6	6.4	25	7.6
850	27	1,476	12.8	3.4	26	8.0
800	27	1,982	9.6	.2	26	8.1
750	27	2,515	6.2	-4.7	26	8.7
700	27	3,077	3.0	-7.9	26	9.9
650	27	3,674	-.2	-12.4	27	10.4
600	27	4,311	-3.6	-16.1	27	10.9
550	27	4,993	-7.9	-20.3	27	11.2
500	27	5,728	-12.7	-25.2	27	12.2
450	27	6,524	-18.1	-31.5	27	13.0
400	27	7,393	-24.4	-38.8	27	14.5
350	27	8,355	-31.3	-43.0	27	17.4
300	27	9,426	-39.5	-46.8	26	18.[illegible]
250	27	10,650	-48.2		27	20.3
200	27	12,099	-54.3		27	20.1
175	27	12,951	-56.4		27	18.1
150	27	13,927	-56.3		27	15.1
125	27	15,083	-57.6		27	11.1
100	27	16,488	-58.6		27	8.0
80	27	17,890	-58.7		29	4.1
70	27	18,730	-58.0		31	2.3
60	27	19,705	-56.5		34	.9
50	27	20,866	-55.3		06	2.7
40	2[illegible]	22,308	-52.8		08	4.8
30	23	24,178	-50.0		08	6.3
25	22	25,374	-48.6		09	7.6
20	1[illegible]	26,855	-45.7		09	8.9
15	14	28,796	-42.2		09	10.5
10	11	31,565	-37.4			
7						

GREENSBORO, N. C. 986 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	275	20.2	19.0	23	1.1
1000						
950	29	595	20.1	16.6	26	3.0
900	29	1,062	18.2	13.2	26	3.3
850	29	1,550	15.4	10.7	26	3.0
800	29	2,062	12.2	6.6	26	3.1
750	29	2,601	9.1	2.7	26	4.0
700	28	3,169	5.9	-3.8	26	4.5
650	28	3,772	2.6	-8.1	26	4.7
600	28	4,416	-.7	-13.5	25	5.3
550	28	5,107	-4.5	-18.8	25	5.6
500	28	5,851	-9.3	-25.0	26	6.9
450	28	6,658	-14.4	-27.6	26	7.5
400	28	7,540	-20.6	-32.8	26	9.1
350	28	8,517	-27.6	-39.6	26	10.2
300	28	9,604	-36.0	-48.6	26	11.0
250	28	10,843	-46.1		26	12.2
200	28	12,291	-57.2		27	12.3
175	28	13,128	-60.5		27	11.0
150	28	14,082	-62.4		27	9.1
125	27	15,206	-63.2		28	6.9
100	26	16,571	-64.6		31	3.6
80	26	17,935	-63.8		02	2.2
70	26	18,758	-61.7		06	3.1
60	26	19,717	-59.8		07	3.8
50	25	20,862	-57.4		09	5.5
40	23	22,284	-54.4		09	7.1
30	22	24,144	-50.1		09	7.5
25	19	25,330	-48.1		09	7.6
20	17	26,809	-45.9		09	7.1
15	13	28,712	-43.8		10	7.2
10	5	31,444	-39.1			
7						

GUADALUPE IS., MEXICO 1012 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	23	15.3	13.6	34	8.5
1000	30	119	14.4	12.7	33	7.7
950	30	554	17.6	5.1	31	4.9
900	30	1,018	20.2	-.7	32	3.6
850	30	1,510	19.5	-3.[illegible]	31	2.9
800	30	2,029	17.5	-5.6	29	1.7
750	30	2,576	14.1	-8.2	29	1.3
700	30	3,154	10.3	-11.0	26	1.6
650	30	3,766	6.7	-14.0	25	2.0
600	30	4,418	2.5	-17.3	26	2.9
550	30	5,115	-2.3	-22.1	26	3.9
500	30	5,864	-7.8	-26.7	25	6.0
450	29	6,673	-13.8	-31.6	26	7.3
400	29	7,556	-20.5	-36.5	28	6.4
350	29	8,533	-27.6	-42.5	27	5.9
300	28	9,621	-35.7	-49.4	26	7.0
250	28	10,864	-45.4		26	9.0
200	28	12,318	-55.6		26	8.5
175	28	13,161	-59.6		25	10.0
150	28	14,117	-62.8		24	8.8
125	28	15,232	-66.2		25	2.7
100	28	16,569	-70.5		15	.7
80	26	17,893	-69.4		07	6.8
70	26	18,696	-66.8		08	6.9
60	26	19,636	-63.1		08	7.3
50	26	20,767	-59.9		08	7.8
40	26	22,170	-57.3		08	7.8
30	27	24,005	-52.7		07	9.1
25	27	25,190	-50.8		07	8.9
20	20	26,653	-48.7			
15	14	28,565	-45.2			
10	[illegible]	31,324	-40.3			
7						

• GUAM, MARIANA IS. 999 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	111	25.6	23.3	10	3.4
1000						
950	30	553	23.7	21.4	10	8.3
900	30	1,025	21.0	17.5	10	7.3
850	30	1,519	18.1	14.0	10	6.2
800	30	2,038	15.9	9.5	10	5.2
750	30	2,584	13.2	5.0	10	5.4
700	30	3,162	10.3	-.3	09	5.0
650	30	3,776	6.9	-5.0	08	3.9
600	30	4,430	3.1	-11.0	08	4.0
550	30	5,129	-1.0	-15.0	08	4.1
500	30	5,884	-5.3	-20.0	07	4.0
450	30	6,704	-9.8	-25.8	07	4.3
400	30	7,603	-15.6	-3[illegible].4	07	3.8
350	30	8,600	-22.3	-36.6	05	4.0
300	30	9,711	-30.7	-44.3	04	4.8
250	30	10,979	-40.9		03	4.4
200	30	12,456	-53.5		03	4.6
175	30	13,302	-60.2		04	5.0
150	30	14,246	-67.5		03	6.1
125	30	15,326	-74.2		04	7.4
100	27	16,612	-77.5		06	10.0
80	26	17,896	-74.3		08	10.8
70	26	18,682	-70.4		08	11.4
60	26	19,606	-66.9		09	11.4
50	26	20,719	-62.6		09	11.4
40	26	22,110	-58.7		09	11.6
30	26	23,941	-53.0		09	11.1
25	25	25,124	-51.0		09	12.1
20	25	26,566	-48.3		09	13.6
15	24	28,492	-45.9		08	18.3
10	14	31,217	-42.1		09	25.0
7						

HILO, HAWAII 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	20.9	19.0	24	1.5
1000	30	161	21.3	17.2	26	.6
950	30	604	17.8	15.8	08	2.1
900	30	1,066	14.7	12.8	09	3.4
850	30	1,547	11.5	9.5	08	3.9
800	30	2,053	10.7	.0	08	4.8
750	30	2,593	11.8	-8.6	09	5.9
700	30	3,168	9.7	-12.5	09	6.1
650	30	3,779	6.5	-15.0	10	5.7
600	30	4,431	2.6	-18.2	10	5.0
550	30	5,129	-1.8	-22.1	10	4.8
500	30	5,879	-7.0	-26.2	10	3.6
450	30	6,692	-12.7	-30.4	10	2.5
400	30	7,579	-19.5	-35.8	10	1.1
350	30	8,560	-27.0	-41.5	28	.3
300	30	9,649	-35.7	-48.9	27	2.5
250	30	10,891	-45.3		28	6.7
200	30	12,344	-56.4		27	11.3
175	30	13,180	-62.2		27	12.9
150	30	14,120	-67.4		27	11.6
125	30	15,211	-69.9		27	7.3
100	30	16,535	-71.1		28	.9
80	30	17,854	-70.9		09	4.2
70	30	18,650	-68.6		09	7.9
60	30	19,580	-66.0		09	9.8
50	30	20,696	-62.3		09	11.8
40	27	22,087	-58.5		09	14.1
30	27	23,917	-53.7		09	14.6
25	27	25,095	-51.9		09	15.6
20	25	26,549	-49.2		09	16.6
15	24	28,448	-46.3		09	18.2
10	17	31,166	-41.6		09	20.5
7						

HUNTINGTON W. VA. 987 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	18.0	16.6	18	1.0
1000						
950	30	576	20.7	14.2	23	3.9
900	30	1,042	18.2	12.5	25	5.7
850	30	1,530	14.8	9.3	26	6.4
800	30	2,041	11.6	4.6	26	7.4
750	30	2,578	8.6	-.8	26	7.9
700	30	3,146	5.5	-6.1	26	7.3
650	30	3,748	2.3	-12.1	26	7.0
600	30	4,391	-1.2	-15.2	26	7.4
550	30	5,079	-5.3	-19.4	26	7.8
500	30	5,821	-9.7	-23.7	26	9.0
450	30	6,627	-15.2	-29.7	26	9.7
400	30	7,506	-21.6	-35.4	26	10.7
350	30	8,479	-28.6	-41.1	27	11.8
300	30	9,561	-37.0	-47.4	27	13.9
250	30	10,797	-46.6		27	15.8
200	30	12,244	-56.4		27	15.9
175	30	13,085	-59.5		27	14.1
150	30	14,048	-59.7		27	11.5
125	30	15,185	-61.1		27	9.3
100	30	16,564	-63.6		28	5.2
80	30	17,935	-62.1		33	2.1
70	30	18,764	-60.4		03	1.8
60	30	19,728	-58.9		07	3.4
50	30	20,878	-57.0		08	4.9
40	29	22,300	-54.0		09	6.2
30	29	24,164	-50.0		08	6.6
25	28	25,360	-48.4		08	6.6
20	22	26,832	-46.7		08	8.0
15	19	28,754	-43.0		09	9.4
10	6	31,498	-38.0			
7						

• INTERNATIONAL FALLS, MINN. 966 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	359	12.9	8.7	13	.7
1000						
950	30	502	13.3	8.3	22	.9
900	30	957	12.1	6.2	24	4.2
850	30	1,435	10.1	3.7	26	5.4
800	30	1,937	7.1	.8	26	5.9
750	30	2,465	3.7	-2.2	26	7.0
700	30	3,022	.5	-6.9	27	7.7
650	30	3,614	-2.7	-10.7	27	8.9
600	30	4,245	-5.8	-15.7	27	10.1
550	30	4,922	-9.8	-20.2	27	11.2
500	30	5,652	-14.3	-25.7	27	12.0
450	30	6,442	-19.9	-31.1	27	13.0
400	30	7,305	-26.4	-37.1	27	14.5
350	30	8,259	-33.6	-43.6	27	16.2
300	30	9,320	-41.2	-47.8	27	16.8
250	30	10,539	-48.1		27	17.4
200	30	11,995	-52.0		27	16.2
175	30	12,859	-52.3		28	15.8
150	30	13,858	-51.9		28	12.5
125	29	15,029	-53.9		28	9.4
100	28	16,455	-55.5		28	6.1
80	28	17,874	-56.1		29	3.6
70	28	18,724	-55.9		29	2.5
60	28	19,707	-55.0		33	1.4
50	26	20,877	-53.5		05	2.2
40	26	22,320	-51.6		07	3.1
30	26	24,197	-49.0		08	5.3
25	2[illegible]	25,399	-48.0		08	6.7
20	2[illegible]	26,878	-45.9		09	7.4
15	21	28,806	-42.7		09	8.3
10	18	31,572	-37.5		09	11.5
7	13	34,036	-32.3			

JACKSON, MISS. 1004 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	100	21.8	19.9	17	.9
1000	2[illegible]	140	22.0	20.3	19	1.1
950	30	555	22.5	17.9	24	2.8
900	30	1,055	20.2	13.7	24	3.5
850	30	1,547	17.0	10.2	23	3.5
800	30	2,062	13.9	6.7	23	3.2
750	30	2,604	10.6	2.3	24	3.1
700	30	3,176	6.9	-1.6	24	3.1
650	30	3,781	3.1	-4.9	25	3.4
600	30	4,425	-.9	-11.3	26	4.0
550	30	5,115	-4.9	-15.2	26	4.6
500	30	5,859	-9.0	-20.5	27	4.4
450	30	6,668	-14.0	-25.0	27	5.2
400	30	7,551	-20.0	-31.6	26	5.5
350	30	8,531	-26.7	-38.3	26	7.4
300	29	9,623	-35.3	-45.3	27	8.[illegible]
250	29	10,967	-45.3		26	12.3
200	29	12,319	-56.4		27	15.1
175	29	13,158	-60.9		28	12.8
150	29	14,109	-63.8		28	9.5
125	29	15,225	-64.8		28	6.4
100	29	16,576	-67.8		29	2.6
80	29	17,922	-66.3		06	2.7
70	29	18,735	-64.6		08	4.2
60	2[illegible]	19,664	-61.8		08	6.4
50	2[illegible]	20,820	-59.0		09	8.0
40	2[illegible]	22,230	-55.6		08	7.6
30	2[illegible]	24,071	-52.4		09	10.[illegible]
25	2[illegible]	25,257	-49.7		09	10.0
20	24	26,729	-47.0		09	10.6
15	17	28,634	-44.5		08	10.2
10	[illegible]	31,348	-41.8			
7						

JOHN F. KENNEDY INT. AP NY 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	19.8	15.7	25	.8
1000	30	138	19.4	15.7	27	2.0
950	30	579	18.6	12.8	28	4.4
900	30	1,043	16.4	9.5	27	4.3
850	30	1,528	13.8	5.3	27	5.5
800	30	2,037	11.1	1.8	27	6.8
750	30	2,573	8.3	-1.8	27	9.4
700	30	3,140	5.1	-7.2	27	10.8
650	30	3,742	2.1	-10.4	26	11.3
600	30	4,364	-1.3	-14.2	26	11.9
550	30	5,073	-5.5	-18.3	27	12.4
500	30	5,814	-10.1	-22.2	27	13.2
450	30	6,618	-15.2	-27.8	27	13.5
400	30	7,498	-21.2	-34.4	27	14.0
350	30	8,473	-28.3	-40.6	26	14.2
300	30	9,556	-36.7	-48.0	26	14.9
250	30	10,792	-46.9		26	16.1
200	30	12,234	-57.6		27	17.0
175	30	13,071	-60.4		27	14.5
150	30	14,032	-60.5		27	12.9
125	30	15,168	-60.8		27	10.6
100	29	16,553	-61.5		28	7.6
80	28	17,938	-59.9		31	1.6
70	28	18,775	-58.4		04	1.0
60	27	19,748	-56.9		05	2.8
50	26	20,905	-55.3		09	4.0
40	26	22,337	-53.0		09	5.7
30	25	24,207	-49.8		09	6.7
25	23	25,413	-47.5		09	6.5
20	23	26,897	-45.0		09	7.3
15	19	28,830	-41.7		09	10.4
10	7	31,645	-37.9			
7						

JOHNSTON IS., PACIFIC AREA 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	25.6	21.2	09	7.0
1000	30	133	24.2	20.5	09	7.7
950	30	581	20.4	18.2	09	9.1
900	30	1,046	17.2	14.2	09	9.1
850	30	1,533	13.9	10.2	08	8.1
800	30	2,044	13.3	1.3	09	6.5
750	30	2,566	12.1	-7.0	09	4.8
700	30	3,161	9.4	-11.1	09	4.0
650	30	3,771	6.1	-14.5	10	3.3
600	30	4,422	2.2	-17.5	11	3.1
550	30	5,119	-2.4	-20.2	12	3.0
500	30	5,867	-7.7	-23.6	14	2.8
450	30	6,679	-12.8	-28.7	18	2.0
400	30	7,567	-19.0	-31.9	22	2.8
350	30	8,550	-26.2	-37.3	24	3.9
300	30	9,644	-34.4	-46.1	25	6.5
250	30	10,893	-44.4		25	9.8
200	29	12,349	-56.0		25	13.4
175	29	13,187	-62.1		25	15.0
150	29	14,127	-67.8		26	12.8
125	27	15,213	-71.7		26	6.7
100	27	16,530	-71.2		21	.3
80	27	17,848	-71.3		08	5.1
70	26	18,642	-69.4		09	8.0
60	26	19,569	-66.4		09	10.6
50	25	20,683	-62.6		09	11.6
40	25	22,072	-59.1		09	12.3
30	25	23,896	-54.5		09	14.2
25	25	25,071	-51.6		09	15.6
20	24	26,527	-48.9		09	17.5
15	22	28,430	-45.7		09	19.9
10	16	31,150	-42.1		09	23.1
7	7	33,566	-39.4			

KEY WEST, FLA. 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	26.7	22.7	11	1.5
1000	30	132	25.9	22.1	12	2.1
950	30	583	22.6	20.3	13	2.8
900	30	1,054	19.6	15.5	14	2.6
850	30	1,545	16.7	11.9	14	1.9
800	30	2,060	13.9	7.8	15	1.4
750	30	2,602	11.0	2.1	16	.8
700	30	3,175	7.7	-1.5	21	.7
650	30	3,763	4.4	-6.5	20	.6
600	30	4,430	.8	-10.8	24	.5
550	30	5,125	-3.2	-14.7	27	.4
500	30	5,873	-7.7	-20.1	31	1.0
450	30	6,685	-12.8	-23.6	33	1.5
400	30	7,574	-18.7	-29.9	33	1.6
350	30	8,559	-25.6	-37.1	33	1.9
300	30	9,655	-34.2	-45.7	28	2.3
250	30	10,904	-44.3		29	5.4
200	30	12,361	-56.1		30	7.8
175	30	13,199	-61.9		30	8.3
150	30	14,140	-67.2		30	8.7
125	30	15,233	-69.8		32	6.0
100	30	16,558	-70.7		01	3.7
80	30	17,888	-68.3		06	5.8
70	29	18,692	-66.4		07	7.7
60	29	19,632	-63.2		08	9.9
50	29	20,762	-60.1		08	12.4
40	29	22,166	-56.9		09	13.4
30	28	24,006	-52.5		10	13.6
25	27	25,197	-49.5		09	13.9
20	26	26,668	-47.1		09	15.2
15	24	28,583	-44.1		08	18.0
10	7	31,310	-41.2			
7						

• KOROR, CAROLINE IS. 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	30	28.3	24.9	11	2.3
1000	30	87	27.1	25.1	11	2.7
950	30	541	23.9	22.6	10	4.4
900	30	1,014	21.3	19.0	11	4.9
850	30	1,508	18.4	15.7	10	5.2
800	30	2,028	16.0	12.6	10	4.8
750	30	2,576	13.2	9.1	10	5.2
700	30	3,154	9.8	5.6	10	5.7
650	30	3,767	6.6	2.4	10	6.2
600	30	4,421	2.9	-.6	10	6.2
550	30	5,122	-1.0	-4.7	10	5.8
500	30	5,878	-5.1	-9.7	10	5.2
450	30	6,700	-9.8	-15.6	09	4.7
400	30	7,600	-15.2	-22.0	09	5.1
350	30	8,600	-21.7	-31.2	09	5.6
300	30	9,714	-30.1	-40.4	08	4.8
250	30	10,984	-40.5	-47.0	08	4.4
200	30	12,464	-52.9		07	4.4
175	30	13,312	-59.8		06	4.5
150	29	14,258	-67.3		05	5.7
125	29	15,338	-74.3		06	6.8
100	29	16,620	-78.4		07	7.5
80	29	17,901	-74.7		08	8.5
70	29	18,687	-70.4		08	7.1
60	29	19,614	-65.9		08	4.5
50	29	20,731	-61.8		08	3.6
40	29	22,124	-58.2		08	3.1
30	29	23,956	-53.4		07	2.4
25	29	25,136	-51.3		10	2.4
20	29	26,593	-48.8		10	5.1
15	28	28,489	-47.0		10	10.4
10	17	31,200	-43.2		10	18.4
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JUNE 1973

KWAJALEIN, MARSHALL IS. [illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	[illegible]	27.1	[illegible]	[illegible]	6.2
1000	[illegible]	[illegible]	26.4	23.6	[illegible]	7.4
950	[illegible]	[illegible]	[illegible]	21.2	[illegible]	9.8
900	[illegible]	[illegible]	[illegible]	17.3	[illegible]	10.2
850	[illegible]	[illegible]	17.7	[illegible]	[illegible]	9.5
800	[illegible]	[illegible]	15.6	[illegible]	[illegible]	8.5
750	[illegible]	[illegible]	13.0	[illegible]	[illegible]	7.8
700	[illegible]	[illegible]	10.0	[illegible]	[illegible]	6.7
650	[illegible]	[illegible]	6.5	[illegible]	[illegible]	[illegible]
600	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.2
550	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.3
500	[illegible]	5,874	[illegible]	[illegible]	[illegible]	[illegible]
450	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
400	[illegible]	7,590	[illegible]	[illegible]	[illegible]	.9
350	[illegible]	[illegible]	[illegible]	[illegible]	29	2.3
300	[illegible]	[illegible]	[illegible]	[illegible]	29	3.8
250	[illegible]	10,957	[illegible]	-53.4	27	6.7
200	[illegible]	12,428	-54.2	[illegible]	[illegible]	8.7
175	[illegible]	13,271	-61.2		[illegible]	9.3
150	[illegible]	[illegible]	-68.9		[illegible]	[illegible]
125	[illegible]	15,278	-76.0		27	10.8
100	[illegible]	[illegible]	-78.1		28	4.1
80	2	17,841	-73.7		[illegible]	2.4
70	2	[illegible]	-70.2		[illegible]	5.4
60	[illegible]	19,555	[illegible]		[illegible]	5.6
50	[illegible]	[illegible]	[illegible]		[illegible]	4.5
40	[illegible]	22,059	[illegible]		[illegible]	[illegible]
30	[illegible]	23,885	[illegible]		[illegible]	6.6
25	[illegible]	25,058	-51.9		[illegible]	7.7
20	[illegible]	26,513	-49.2		09	[illegible]
15	[illegible]	[illegible]	-47.3		09	[illegible]
10	[illegible]	[illegible]	-45.3		[illegible]	22.3
7	[illegible]	33,537	[illegible]			

LAKE CHARLES, LA. [illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	5	[illegible]	[illegible]	[illegible]	.8
1000	30	131	[illegible]	[illegible]	[illegible]	1.6
950	30	[illegible]	[illegible]	17.2	19	4.5
900	30	1,049	[illegible]	13.0	19	5.2
850	30	1,540	16.8	6.6	19	5.8
800	30	2,054	[illegible]	1.7	19	5.3
750	30	2,596	[illegible]	-2.3	20	4.5
700	30	3,167	[illegible]	-5.5	21	3.7
650	30	3,773	3.4	-8.2	21	3.4
600	30	4,418	-.6	-11.8	27	3.1
550	30	5,108	[illegible]	-16.8	22	2.3
500	30	5,853	[illegible]	-21.7	23	2.7
450	30	6,662	-13.6	-25.1	26	3.5
400	30	[illegible]	[illegible]	-31.6	27	5.3
350	30	[illegible]	-26.5	-38.2	26	6.8
300	30	9,620	-34.9	-44.4	26	7.9
250	30	[illegible]	-44.9		26	9.1
200	30	12,323	-55.5		27	12.3
175	30	13,164	[illegible]		28	12.5
150	30	[illegible]	[illegible]		28	10.3
125	[illegible]	15,234	-65.7		29	6.5
100	[illegible]	[illegible]	-68.4		33	2.6
80	[illegible]	17,920	-67.7		07	3.4
70	[illegible]	[illegible]	-65.3		08	5.8
60	[illegible]	19,673	-62.8		09	7.3
50	[illegible]	[illegible]	-59.4		[illegible]	8.8
40	27	22,214	-55.9		09	9.6
30	27	[illegible]	-51.4		09	10.9
25	[illegible]	25,253	-49.7		09	10.7
20	24	26,723	-47.3		09	12.0
15	19	28,631	-44.8		08	17.3
10	5	31,372	-41.7			

LANDER, WYO. [illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,697	11.4	.1	23	1.5
1000						
950						
900						
850						
800	30	1,996	13.8	-1.3	29	2.0
750	30	2,537	10.6	-3.8	29	3.5
700	30	3,108	6.7	-7.1	28	5.7
650	30	3,712	2.0	-9.8	29	8.0
600	30	4,352	-2.8	-13.8	28	9.9
550	30	5,039	-8.0	-18.4	27	11.1
500	30	5,768	-13.3	-23.1	27	11.1
450	30	[illegible]	-18.4	-28.9	27	12.8
400	30	7,431	-24.6	-35.7	27	13.5
350	30	8,392	-31.8	-40.9	27	15.1
300	30	9,460	-40.1	-46.9	27	16.4
250	30	10,682	-48.6		27	17.2
200	28	12,141	-56.2		27	18.5
175	29	12,986	-57.7		27	18.8
150	28	13,959	-57.6		27	16.6
125	28	15,107	-58.8		27	10.9
100	28	16,501	-60.9		27	5.8
80	28	17,893	-59.7		29	2.0
70	27	18,726	-58.9		09	.6
60	26	19,703	-57.7		09	1.7
50	26	20,858	-56.3		08	3.4
40	27	22,273	-54.6		09	4.9
30	27	24,132	-51.4		09	6.3
25	[illegible]	25,323	-49.2		08	7.6
20	18	26,801	-46.6		09	8.5
15	14	28,703	-43.8		09	10.2
10	11	31,448	-38.6			

*** LIHUE KAUAI, HAWAII** 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	36	23.5	19.7	06	4.8
1000	30	171	22.2	18.7	07	6.0
950	30	615	18.4	16.8	08	7.7
900	30	1,078	15.3	13.0	08	7.9
850	30	1,561	12.3	6.6	08	7.8
800	30	2,070	12.4	-3.7	09	8.5
750	30	2,612	12.7	-9.3	09	8.2
700	30	3,188	10.4	-12.0	09	6.6
650	30	3,801	7.0	-14.5	10	5.3
600	30	4,454	2.8	-17.9	10	4.1
550	30	5,151	-2.0	-20.9	11	3.2
500	30	5,901	-7.3	-26.3	11	3.7
450	30	6,713	-13.2	-29.9	11	3.5
400	30	7,599	-19.8	-33.5	13	1.9
350	30	8,579	-27.0	-41.1	14	1.9
300	30	9,668	-35.6	-48.5	21	.9
250	30	10,910	-45.6		28	3.1
200	30	12,361	-56.5		27	7.6
175	30	13,198	-62.1		28	8.5
150	30	14,139	-67.0		28	5.5
125	30	15,233	-69.3		28	7.0
100	30	16,563	-69.8		08	1.3
80	24	17,892	-69.3		08	5.8
70	26	18,692	-67.2		09	7.7
60	26	19,627	-64.1		09	8.9
50	26	20,751	-61.4		09	10.9
40	25	22,146	-58.0		09	13.0
30	24	23,981	-53.1		09	14.9
25	24	25,167	-51.0		09	16.2
20	24	26,623	-48.5		09	17.2
15	22	28,528	-45.7		09	17.9
10	14	31,253	-40.9		09	18.6
7	9	33,709	-36.1			

LITTLE ROCK, ARK. 1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	20.7	18.2	24	1.2
1000	30	129	22.2	19.1	24	1.4
950	30	577	22.6	15.5	24	4.6
900	30	1,047	20.1	11.9	23	5.4
850	30	1,538	16.6	8.4	23	5.6
800	30	2,052	13.4	3.9	23	5.8
750	30	2,593	10.0	-.2	24	5.1
700	30	3,163	6.2	-4.3	25	4.5
650	30	3,767	2.6	-8.2	24	4.9
600	30	4,410	-1.2	-12.3	25	4.8
550	30	5,099	-5.4	-17.0	25	5.4
500	30	5,841	-9.8	-22.2	25	6.9
450	29	6,645	-14.9	-27.3	25	7.0
400	29	7,526	-21.1	-32.9	26	7.7
350	29	8,501	-28.3	-39.3	27	8.3
300	29	9,585	-36.5	-46.9	27	9.2
250	29	10,823	-46.0		27	13.4
200	29	12,272	-56.5		27	13.5
175	29	13,112	-60.0		28	13.0
150	29	14,071	-61.2		27	11.0
125	29	15,197	-63.2		28	7.7
100	29	16,562	-65.5		27	2.7
80	29	17,918	-65.0		07	1.1
70	29	18,735	-63.3		09	3.3
60	29	19,689	-60.7		08	4.9
50	28	20,829	-57.7		09	6.7
40	28	22,244	-55.4		09	7.6
30	27	24,096	-51.3		09	8.8
25	25	25,282	-49.5		08	8.7
20	25	26,753	-46.6		08	9.0
15	24	28,675	-44.1		09	9.3
10	14	31,416	-40.5		10	11.9

MCGRATH, ALASKA [illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	[illegible]	[illegible]	[illegible]	31	.7
1000	[illegible]	126	[illegible]	4.5	[illegible]	.9
950	30	513	[illegible]	2.8	33	2.5
900	[illegible]	[illegible]	[illegible]	1.1	34	1.6
850	[illegible]	[illegible]	3.9	-1.0	36	.8
800	[illegible]	[illegible]	.7	-3.9	[illegible]	.4
750	[illegible]	[illegible]	-2.7	-6.7	[illegible]	.6
700	[illegible]	[illegible]	-6.3	-10.2	[illegible]	1.3
650	[illegible]	[illegible]	-9.7	-15.2	[illegible]	1.9
600	[illegible]	[illegible]	[illegible]	-21.1	[illegible]	[illegible]
550	[illegible]	[illegible]	-17.6	-24.7	09	2.9
500	[illegible]	5,533	-22.3	-30.8	09	2.9
450	[illegible]	6,299	-27.8	-35.8	08	2.6
400	[illegible]	7,134	-34.2	-41.2	[illegible]	3.2
350	[illegible]	8,058	-41.1	-44.3	[illegible]	4.5
300	[illegible]	[illegible]	-49.7		[illegible]	4.3
250	[illegible]	10,221	-52.6		[illegible]	3.3
200	[illegible]	[illegible]	-46.9		[illegible]	2.9
175	[illegible]	12,571	-46.1		[illegible]	[illegible]
150	[illegible]	[illegible]	-46.1		[illegible]	[illegible]
125	[illegible]	[illegible]	-46.7		[illegible]	[illegible]
100	[illegible]	[illegible]	-47.4		[illegible]	[illegible]
80	[illegible]	17,762	-47.7		[illegible]	3.7
70	[illegible]	18,644	-47.9		[illegible]	3.8
60	[illegible]	[illegible]	-48.3		[illegible]	4.1
50	[illegible]	[illegible]	-48.2		[illegible]	4.3
40	[illegible]	[illegible]	-47.8		[illegible]	5.2
30	[illegible]	[illegible]	-46.1		[illegible]	6.2
25	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
20	[illegible]	[illegible]	-43.2		[illegible]	7.4
15	[illegible]	[illegible]	[illegible]		[illegible]	7.9
10						
7						
5						

*** MAJURO, MARSHALL IS.** 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	[illegible]	24.2	07	4.7
1000	30	96	26.6	22.7	08	5.9
950	30	548	23.2	21.2	08	8.3
900	30	1,020	20.6	[illegible]	09	9.3
850	30	1,513	18.1	13.2	09	9.3
800	30	2,031	15.8	9.7	09	8.7
750	30	2,578	13.4	5.7	10	7.3
700	30	3,156	[illegible]	[illegible]	10	6.0
650	30	3,770	6.7	[illegible]	10	5.3
600	30	4,423	2.9	-5.3	10	4.7
550	30	5,123	-.6	-9.8	09	4.1
500	30	5,879	-5.1	-15.4	09	3.5
450	30	6,700	-9.9	-21.7	08	3.5
400	30	7,600	-15.5	-27.4	07	1.5
350	30	8,599	-22.0	-33.9	33	1.1
300	30	9,711	-30.3	-42.2	29	3.0
250	30	10,981	-40.6	-51.7	29	4.5
200	30	12,460	-53.1		27	6.7
175	30	13,307	-60.2		27	8.7
150	30	14,250	-68.0		27	10.7
125	30	15,328	-74.3		27	11.3
100	29	16,612	-78.4		29	6.1
80	29	17,900	-73.1		07	1.8
70	29	18,669	-69.7		09	3.1
60	29	19,619	-65.2		12	2.0
50	28	20,742	-61.1		17	1.1
40	28	22,141	-57.2		[illegible]	1.1
30	26	23,982	-52.4		11	.9
25	25	25,165	-50.8		12	1.6
20	[illegible]	[illegible]	-49.0		[illegible]	3.9
15	17	28,527	-45.7		09	8.3
10	[illegible]	[illegible]	-39.7			

*** MEDFORD, OREG.** 971 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	401	12.2	5.5	32	[illegible]
1000						
950	30	581	13.9	6.3	31	1.0
900	30	1,037	12.3	4.2	31	1.2
850	30	1,514	10.0	1.7	28	1.3
800	30	2,016	7.8	-2.8	27	2.8
750	30	2,547	5.7	-7.8	27	5.1
700	30	[illegible]	2.9	-12.7	26	7.0
650	30	3,704	-.3	-15.8	25	8.1
600	30	4,340	-4.1	-19.7	26	9.5
550	30	5,022	-8.1	-23.5	26	12.0
500	30	5,755	-13.0	-27.2	26	13.4
450	30	6,551	-18.2	-30.6	26	15.8
400	30	7,420	-24.2	-35.8	26	17.3
350	30	8,363	-31.3	-42.6	27	18.9
300	30	9,453	-39.8	-47.4	27	20.0
250	30	10,674	-48.9		27	20.1
200	29	12,111	-56.9		27	21.8
175	29	12,956	-57.4		26	20.6
150	29	13,928	-58.4		26	18.9
125	29	15,076	-58.5		26	14.7
100	29	16,474	-59.7		26	9.5
80	28	17,869	-59.0		25	4.1
70	28	18,709	-58.2		24	1.9
60	28	19,682	-57.3		14	.8
50	28	20,837	-56.6		10	1.9
40	28	22,259	-54.6		09	3.9
30	26	24,117	-51.4		09	5.6
25	26	25,308	-49.3		09	6.5
20	[illegible]	26,779	-47.0		09	7.0
15	23	28,694	-43.7		09	9.0
10	13	31,440	-38.4		09	10.1
7	14	33,913	-33.4		09	10.4
5	[illegible]	36,295	-28.6			

MERIDA, MEXICO 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	11	23.3	22.6	09	.9
1000	30	117	24.5	23.6	11	3.9
950	30	566	23.3	20.6	12	8.0
900	30	1,040	21.2	15.1	12	7.8
850	30	1,534	18.5	11.8	11	7.0
800	30	2,052	15.8	6.6	11	5.7
750	30	2,598	12.5	3.9	11	5.1
700	30	3,174	8.9	.3	11	4.3
650	30	3,784	5.2	-3.0	12	3.5
600	30	4,433	1.4	-5.9	11	2.7
550	30	5,130	-2.3	-11.3	11	1.8
500	30	5,881	-6.8	-16.9	05	1.3
450	30	6,696	-11.7	-23.6	03	1.6
400	30	7,590	-17.1	-30.1	34	1.7
350	30	8,581	-24.0	-36.0	31	2.1
300	30	9,685	-32.1	-43.8	30	4.9
250	30	10,946	-42.1		29	6.6
200	30	12,418	-53.7		28	10.5
175	30	13,265	-59.9		28	11.3
150	30	14,212	-66.8		28	12.2
125	30	15,301	-71.5		30	9.6
100	30	16,611	-73.1		33	5.6
80	29	17,926	-69.5		04	3.6
70	29	18,727	-67.2		07	5.5
60	29	19,664	-64.3		07	6.8
50	29	20,790	-60.5		08	7.9
40	25	22,194	-57.0		08	9.2
30	21	24,036	-52.3		08	10.2
25	20	25,224	-49.4		08	10.9
20	18	26,695	-46.0		09	12.0
15	12	28,626	-43.7		08	15.8
10	5	31,406	-38.6			

MIAMI, FLA. 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	25.0	22.5	09	.8
1000	30	141	25.2	22.0	12	1.6
950	30	592	22.3	19.4	14	2.6
900	30	1,061	19.3	16.0	15	2.1
850	30	1,552	16.3	12.0	16	1.4
800	30	2,066	13.8	6.8	18	.9
750	30	2,608	10.9	3.2	18	.9
700	30	3,182	7.8	-2.0	18	.8
650	30	3,790	4.5	-5.1	20	1.1
600	30	4,438	.6	-9.1	22	1.0
550	30	5,132	-3.3	-12.9	26	.8
500	30	5,879	-7.8	-17.7	26	.9
450	30	6,692	-12.7	-22.6	31	1.4
400	30	7,581	-18.7	-29.6	31	1.2
350	30	8,565	-25.6	-36.4	30	1.5
300	30	9,661	-34.2	-45.4	29	2.3
250	30	10,910	-44.4		30	3.8
200	30	12,368	-56.1		31	7.0
175	30	13,205	-62.1		31	7.2
150	30	14,146	-66.9		31	7.4
125	30	15,242	-68.6		33	5.5
100	30	16,577	-69.7		02	4.4
80	28	17,912	-67.4		06	5.7
70	29	18,722	-65.3		07	6.9
60	28	19,666	-62.3		08	9.6
50	27	20,803	-59.5		09	11.9
40	26	22,213	-55.8		09	13.2
30	24	24,064	-51.3		10	13.4
25	24	25,255	-48.9		09	14.0
20	22	26,729	-46.1		09	14.7
15	19	28,639	-43.9		08	16.6
10	8	[illegible]	-39.6			

MIDLAND, TEXAS [illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	[illegible]	18.2	[illegible]	16	[illegible]
1000						
950						
900	[illegible]	1,013	[illegible]	13.2	[illegible]	3.5
850	[illegible]	1,506	[illegible]	7.6	[illegible]	5.1
800	[illegible]	2,027	[illegible]	2.6	[illegible]	1.4
750	[illegible]	2,575	[illegible]	-.6	36	.5
700	[illegible]	3,152	[illegible]	-4.3	[illegible]	2.0
650	[illegible]	3,763	5.4	-7.4	36	2.7
600	[illegible]	4,412	[illegible]	-11.4	35	[illegible]
550	[illegible]	5,105	[illegible]	[illegible]	31	[illegible]
500	[illegible]	5,850	[illegible]	-22.6	[illegible]	3.4
450	[illegible]	[illegible]	[illegible]	-28.1	[illegible]	[illegible]
400	[illegible]	[illegible]	[illegible]	-33.9	[illegible]	[illegible]
350	[illegible]	[illegible]	-28.0	-40.9	[illegible]	[illegible]
300	[illegible]	[illegible]	-36.1	-48.6	[illegible]	[illegible]
250	[illegible]	[illegible]	-45.5		[illegible]	[illegible]
200	[illegible]	12,296	-55.1		[illegible]	[illegible]
175	[illegible]	13,141	-59.1		[illegible]	[illegible]
150	[illegible]	[illegible]	-61.9		28	12.6
125	[illegible]	15,217	-64.6		[illegible]	[illegible]
100	[illegible]	16,570	-67.3		[illegible]	4.0
80	[illegible]	17,914	-66.7		[illegible]	2.5
70	[illegible]	18,726	-64.2		[illegible]	4.7
60	[illegible]	19,675	-61.9		[illegible]	[illegible]
50	[illegible]	20,810	[illegible]		[illegible]	[illegible]
40	[illegible]	22,221	-56.1		[illegible]	9.2
30	[illegible]	24,064	-51.9		[illegible]	9.8
25	[illegible]	25,250	-49.8		09	9.8
20	[illegible]	26,716	-47.1		[illegible]	9.8
15	[illegible]	[illegible]	-43.9		[illegible]	8.0
10	[illegible]	31,353	-39.1			

MONTERREY, MEXICO 962 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	27	423	21.0	[illegible]	13	1.6
1000						
950	27	555	21.3	19.4	13	2.3
900	27	1,023	18.5	[illegible]	14	4.7
850	27	1,514	17.6	13.3	14	5.9
800	27	2,033	16.3	[illegible]	14	4.4
750	27	2,580	13.9	2.9	15	1.0
700	27	3,158	[illegible]	[illegible]	33	1.1
650	27	3,771	[illegible]	-5.5	31	2.8
600	27	4,423	[illegible]	-10.2	31	3.9
550	27	5,118	[illegible]	-14.6	31	4.2
500	27	[illegible]	-7.8	-20.7	31	3.5
450	27	6,678	-12.9	[illegible]	30	4.7
400	27	7,567	-18.7	[illegible]	[illegible]	6.0
350	27	8,553	-25.5	-38.5	[illegible]	9.1
300	[illegible]	9,647	-34.2	[illegible]	28	10.9
250	[illegible]	10,896	-43.9		28	12.0
200	[illegible]	12,359	-54.8		28	12.8
175	[illegible]	13,202	-60.2		27	14.5
150	25	14,159	-64.9		28	12.9
125	[illegible]	15,262	-68.2		[illegible]	8.2
100	[illegible]	[illegible]	-71.8		[illegible]	2.7
80	[illegible]	[illegible]	[illegible]		[illegible]	5.0
70	[illegible]	18,712	-66.3		[illegible]	8.0
60	25	19,653	-63.8		09	9.6
50	25	[illegible]	-60.3		09	11.0
40	[illegible]	22,183	-57.5		09	11.1
30	[illegible]	[illegible]	-52.6		08	12.6
25	[illegible]	[illegible]	[illegible]		[illegible]	12.5
20	[illegible]	26,675	-48.0		08	13.4
15	[illegible]	28,585	-45.0		08	14.2
10	7	31,310	-40.3			

MONETT, MO. 964 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	438	17.7	15.7	18	2.2
1000						
950	[illegible]	564	19.9	15.5	21	4.0
900	30	1,032	19.5	11.0	23	8.8
850	30	1,522	16.5	7.7	24	7.5
800	30	2,036	13.6	3.5	25	5.3
750	30	2,577	10.3	-.5	26	4.8
700	30	3,148	6.1	-4.3	27	5.0
650	30	3,751	2.0	-8.0	28	5.2
600	30	4,393	-1.5	-14.5	28	5.0
550	30	5,080	-5.9	-18.3	28	5.6
500	30	5,820	-10.7	-25.2	27	6.3
450	30	6,623	-15.9	-30.4	27	7.2
400	30	7,500	-22.2	-34.7	[illegible]	8.6
350	[illegible]	8,475	-28.8	-40.8	26	10.5
300	29	9,557	-37.2	-46.4	26	12.2
250	28	10,794	-46.8		26	14.6
200	29	12,241	-56.3		27	16.7
175	[illegible]	13,082	-59.5		28	15.3
150	28	14,044	-60.6		29	10.7
125	28	15,175	-62.4		28	8.4
100	28	16,547	-64.0		29	4.5
80	28	17,909	-64.2		31	1.3
70	28	18,731	-62.0		08	2.2
60	29	19,689	-60.3		08	3.6
50	28	20,833	-57.6		08	5.1
40	27	22,249	-55.4		08	6.4
30	27	24,100	-51.6		09	7.3
25	26	25,290	-49.6		09	7.4
20	[illegible]	26,766	-46.9		08	8.0
15	23	28,665	-44.6		08	9.4
10	16	31,416	-39.4		09	11.1

MONTGOMERY, ALA. 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	57	21.5	18.7	34	.2
1000	28	145	21.4	19.0	29	.1
950	28	592	21.7	16.3	28	1.2
900	28	1,060	19.0	13.6	27	1.9
850	28	1,549	15.7	9.9	27	2.6
800	28	2,062	12.7	6.7	27	3.1
750	28	2,602	9.5	2.7	27	3.3
700	28	3,172	6.2	-1.6	29	3.5
650	28	3,776	2.8	-5.4	29	4.0
600	28	4,420	-1.0	-9.7	28	4.5
550	27	5,110	-4.9	-15.0	27	4.2
500	27	5,853	-9.1	-20.6	27	4.2
450	27	6,661	-14.2	-27.0	27	4.9
400	27	7,545	-20.0	-32.2	26	6.1
350	27	8,525	-26.9	-37.5	27	7.2
300	27	9,614	-35.4	-46.6	26	8.9
250	27	10,857	-45.6		27	10.7
200	27	12,307	-56.8		27	13.2
175	27	13,143	-61.5		28	11.8
150	27	14,092	-63.9		28	9.5
125	27	15,206	-65.5		28	5.0
100	27	16,554	-68.3		30	1.4
80	27	17,897	-66.5		06	2.6
70	27	18,711	-63.9		08	3.6
60	27	19,661	-61.8		08	6.6
50	27	20,798	-59.0		09	7.8
40	25	22,206	-55.8		09	8.1
30	25	24,054	-52.0		09	9.2
25	24	25,242	-49.0		09	9.9
20	22	26,714	-46.3		09	9.6
15	21	28,633	-44.1		09	10.0
10	14	31,377	-39.7			

NASHVILLE, TENN. 995 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	180	19.8	18.5	17	1.2
1000						
950	30	[illegible]	21.3	15.8	23	4.4
900	30	1,050	18.8	13.4	25	4.9
850	30	1,538	15.4	9.2	26	4.8
800	30	2,051	12.0	7.1	26	5.4
750	30	2,589	8.9	.9	26	5.7
700	30	3,157	5.7	-4.2	26	5.8
650	30	3,760	2.2	-8.4	26	5.8
600	30	4,402	-1.5	-13.0	26	6.0
550	30	5,090	-5.2	-18.7	26	5.9
500	30	5,833	-9.6	-22.9	26	6.1
450	30	6,639	-14.8	-28.6	26	6.8
400	30	7,520	-20.9	-33.9	26	8.4
350	30	8,496	-28.1	-39.9	27	9.4
300	30	9,580	-36.7	-47.0	26	10.4
250	30	10,817	-46.4		27	12.1
200	30	12,263	-56.9		27	14.7
175	30	13,102	-60.1		27	13.0
150	30	14,060	-61.2		28	11.7
125	30	15,190	-62.4		27	8.1
100	30	16,560	-64.8		29	5.0
80	30	17,921	-64.3		35	1.7
70	30	18,741	-62.8		06	2.3
60	30	19,696	-60.5		07	4.1
50	30	20,839	-57.8		09	6.3
40	29	22,259	-54.7		09	6.7
30	28	24,116	-51.1		08	7.4
25	27	25,308	-49.0		08	8.2
20	25	26,779	-46.6		08	8.6
15	16	28,689	-44.0		09	8.6
10	12	31,433	-39.5			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

• NOME, ALASKA 1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	5	4.2	2.1	30	2.0
1000	30	100	5.8	2.2	30	1.9
950	30	520	5.3	.1	30	1.4
900	30	961	3.9	-2.4	27	1.0
850	30	1,424	2.1	-5.7	24	.7
800	30	1,912	-.3	-7.6	28	.4
750	30	2,426	-3.2	-10.2	16	.6
700	30	2,968	-6.4	-12.7	19	.6
650	30	3,544	-9.8	-17.8	21	1.2
600	30	4,158	-13.8	-21.2	18	.7
550	30	4,813	-18.2	-26.5	18	1.5
500	30	5,519	[illegible]	-30.9	22	1.1
450	30	6,282	-28.3	-37.2	21	1.6
400	30	7,117	-34.2	-42.3	22	2.3
350	30	8,041	-40.9	-45.0	21	2.9
300	30	9,070	-48.5		22	4.0
250	30	10,255	-52.3		23	2.3
200	30	11,707	-49.1		28	.4
175	30	12,588	-47.2		11	.8
150	30	13,609	-47.0		11	1.1
125	30	14,815	-47.6		11	2.2
100	29	16,285	-47.8		11	2.6
80	29	17,758	-47.8		10	2.7
70	29	18,640	-47.8		10	3.8
60	28	19,663	-47.7		11	3.4
50	28	20,867	-47.6		10	4.3
40	28	22,343	-47.0		10	4.8
30	27	24,257	-45.2		09	5.8
25	25	25,473	-44.0		09	6.6
20	25	26,977	-42.4		09	7.3
15	24	28,946	-39.0		09	7.8
10	20	31,756	-33.6		09	9.6
7						

NORTH PLATTE, NEBR. 916 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	847	12.0	7.9	29	.3
1000						
950						
900	30	993	17.0	7.9	26	1.9
850	30	1,482	17.5	3.3	26	4.4
800	30	1,998	15.0	.0	27	5.0
750	30	2,541	11.4	-2.9	28	5.6
700	30	3,112	7.1	-4.8	29	6.4
650	30	3,717	2.5	-8.6	29	7.3
600	30	4,359	-2.2	-13.5	29	8.1
550	30	5,044	-6.5	-20.1	28	8.7
500	30	5,782	-11.5	-25.3	27	9.9
450	30	6,582	-16.8	-30.5	27	10.5
400	30	7,456	-22.8	-36.7	27	11.6
350	30	8,424	-30.2	-43.4	28	12.1
300	30	9,499	-38.9	-48.0	27	12.1
250	30	10,725	-48.0		27	12.7
200	29	12,178	-55.7		28	14.4
175	29	13,024	-57.7		28	14.7
150	29	13,995	-58.4		28	13.2
125	29	15,142	-59.1		28	10.0
100	29	16,536	-60.9		28	5.4
80	29	17,924	-60.4		28	1.7
70	29	18,756	-59.7		36	.8
60	29	19,725	-58.1		07	2.3
50	28	20,879	-55.9		07	3.7
40	27	22,309	-53.8		09	5.3
30	26	24,169	-50.6		09	7.2
25	24	25,364	-48.9		09	7.6
20	22	26,845	-46.3		09	8.9
15	21	28,773	-43.4		09	9.8
10	7	31,487	-38.5			
7						

[illegible]

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	6	13.5	[illegible]	27	1.5
1000	30	119	14.1	[illegible]	28	1.9
950	30	[illegible]	16.4	[illegible]	30	3.0
900	30	1,016	18.9	[illegible]	[illegible]	4.1
850	30	1,505	17.6	[illegible]	31	[illegible]
800	30	[illegible]	14.6	-6.4	[illegible]	3.4
750	30	2,562	11.6	[illegible]	28	3.6
700	30	3,135	7.9	[illegible]	28	4.4
650	30	3,741	4.0	[illegible]	28	4.7
600	30	4,386	-.5	[illegible]	27	5.9
550	30	5,075	-5.2	-22.6	27	7.2
500	30	5,817	-10.1	-26.7	27	7.9
450	30	6,620	-16.0	[illegible]	27	8.3
400	30	7,497	-22.3	-36.6	27	9.4
350	30	8,466	-29.8	[illegible]	27	10.1
300	30	9,542	-38.5	[illegible]	27	11.2
250	30	10,769	-48.3		27	13.8
200	30	12,209	-56.8		27	15.5
175	30	13,050	-59.3		27	16.4
150	29	14,008	-60.6		26	15.2
125	29	15,140	-62.1		26	13.3
100	29	16,515	-64.0		26	8.5
80	29	17,883	-62.9		25	2.9
70	29	18,709	-61.3		21	.9
60	29	19,669	-60.0		[illegible]	1.9
50	29	20,813	-58.2		[illegible]	3.9
40	26	22,228	-55.5		09	5.1
30	24	24,073	-52.2		08	6.4
25	22	25,257	-50.2		08	7.3
20	21	26,723	-47.9		09	7.1
15	19	28,627	-44.5		09	7.7
10	12	31,359	-39.7			
7						

[illegible]

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	[illegible]	[illegible]	17.6	13.1	[illegible]	1.5
1000						
950	[illegible]	[illegible]	19.6	11.6	[illegible]	2.9
900	30	[illegible]	18.6	8.6	[illegible]	6.4
850	30	[illegible]	16.3	[illegible]	[illegible]	6.9
800	30	[illegible]	[illegible]	[illegible]	[illegible]	6.7
750	30	[illegible]	9.5	-2.8	27	6.9
700	30	[illegible]	5.9	-6.8	[illegible]	7.3
650	30	[illegible]	1.7	-10.0	[illegible]	8.5
600	[illegible]	[illegible]	-2.0	-15.0	[illegible]	9.5
550	[illegible]	[illegible]	-6.6	-18.5	[illegible]	10.4
500	30	[illegible]	-11.4	-24.9	[illegible]	11.4
450	30	[illegible]	-16.7	-30.0	[illegible]	11.6
400	[illegible]	[illegible]	-22.9	-35.4	[illegible]	12.8
350	[illegible]	[illegible]	-30.1	-42.9	[illegible]	13.0
300	[illegible]	[illegible]	-38.6	-48.8	[illegible]	13.4
250	[illegible]	[illegible]	-47.6		28	16.4
200	[illegible]	[illegible]	-55.2		[illegible]	18.4
175	[illegible]	[illegible]	-57.1		[illegible]	16.9
150	[illegible]	[illegible]	-57.6		[illegible]	13.9
125	[illegible]	[illegible]	-58.9		[illegible]	[illegible]
100	[illegible]	[illegible]	-60.8		[illegible]	6.4
80	[illegible]	[illegible]	-60.8		[illegible]	2.3
70	[illegible]	[illegible]	-59.6		[illegible]	1.0
60	[illegible]	[illegible]	-57.9		[illegible]	2.4
50	[illegible]	[illegible]	-56.0		[illegible]	3.8
40	[illegible]	[illegible]	-54.2		[illegible]	5.3
30	[illegible]	[illegible]	-50.7		[illegible]	7.0
25	26	[illegible]	-49.1		[illegible]	7.7
20	[illegible]	[illegible]	-46.4		09	8.3
15	20	[illegible]	-43.3		[illegible]	9.8
10	[illegible]	[illegible]	-38.6		[illegible]	11.4
7						

• [illegible]

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	[illegible]	[illegible]	23.8	[illegible]	[illegible]
1000	30	[illegible]	26.6	20.5	[illegible]	[illegible]
950	[illegible]	567	23.1	17.7	[illegible]	[illegible]
900	30	1,036	19.6	14.1	09	[illegible]
850	[illegible]	1,527	16.4	10.2	09	[illegible]
800	30	2,042	14.7	5.6	09	[illegible]
750	30	2,587	12.6	-.9	[illegible]	[illegible]
700	[illegible]	3,163	[illegible]	[illegible]	[illegible]	[illegible]
650	[illegible]	3,776	6.7	-9.1	[illegible]	[illegible]
600	[illegible]	4,429	3.3	-12.8	[illegible]	[illegible]
550	[illegible]	[illegible]	-1.0	-18.0	[illegible]	[illegible]
500	[illegible]	5,883	-5.9	[illegible]	[illegible]	[illegible]
450	[illegible]	[illegible]	[illegible]	-27.9	[illegible]	[illegible]
400	29	7,595	[illegible]	-33.3	[illegible]	[illegible]
350	[illegible]	8,587	-23.7	-39.5	[illegible]	[illegible]
300	[illegible]	9,691	-32.3	-47.2	[illegible]	[illegible]
250	27	[illegible]	-42.1		[illegible]	[illegible]
200	[illegible]	12,423	-53.9		[illegible]	[illegible]
175	26	13,269	[illegible]		[illegible]	[illegible]
150	[illegible]	[illegible]	-57.2		[illegible]	[illegible]
125	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
100	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
80	[illegible]	17,872	[illegible]		[illegible]	[illegible]
70	[illegible]	18,656	[illegible]		[illegible]	[illegible]
60	[illegible]	19,583	[illegible]		[illegible]	[illegible]
50	[illegible]	20,706	-60.7		[illegible]	[illegible]
40	[illegible]	[illegible]	-57.5		[illegible]	[illegible]
30	[illegible]	[illegible]	-52.3		[illegible]	[illegible]
25	23	25,132	[illegible]		[illegible]	[illegible]
20	[illegible]	26,602	[illegible]		[illegible]	[illegible]
15	21	28,524	[illegible]		[illegible]	[illegible]
10	16	31,281	[illegible]		09	[illegible]
7	[illegible]	[illegible]	-35.8			

• PEORIA, ILL. 990 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	28	200	17.4	13.9	20	1.3
1000						
950	28	552	19.9	11.4	24	5.4
900	28	1,017	17.4	9.9	26	6.8
850	28	1,503	14.7	5.9	26	6.7
800	28	2,014	11.8	1.7	26	7.3
750	28	2,551	8.4	-2.6	26	7.6
700	28	3,117	4.5	-6.1	26	8.6
650	28	3,717	1.1	-12.0	27	9.0
600	27	4,358	-2.5	-17.1	27	9.6
550	27	5,043	-6.7	-20.9	27	10.3
500	27	5,781	-11.2	-27.6	27	11.3
450	27	6,581	-16.5	-31.1	27	12.3
400	27	7,456	-22.7	-35.7	26	13.2
350	27	8,425	-29.6	-42.1	26	14.2
300	27	9,503	-37.9	-49.4	26	15.5
250	27	10,734	-47.2		27	17.0
200	27	12,182	-55.4		27	17.9
175	27	13,029	-57.6		27	16.2
150	27	14,002	-58.0		27	13.1
125	27	15,145	-60.0		27	10.1
100	27	16,533	-61.8		26	6.3
80	27	17,915	-61.4		27	2.5
70	27	18,746	-60.5		05	.5
60	27	19,711	-58.6		06	2.6
50	27	20,863	-56.1		07	4.3
40	27	22,290	-53.8		08	5.2
30	27	24,152	-50.5		09	6.8
25	26	25,349	-48.8		09	6.8
20	24	26,825	-46.8		08	8.1
15	21	28,743	-43.6		09	9.4
10	18	31,513	-37.9		09	12.1
7	11	34,024	-32.8			
5						

• PITTSBURGH, PA. 974 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	359	17.3	14.6	27	1.5
1000						
950	30	571	18.5	14.2	24	3.8
900	30	1,035	16.7	11.4	26	6.3
850	30	1,520	13.5	8.4	26	6.7
800	30	2,029	10.4	4.4	26	7.7
750	30	2,564	7.3	-1.0	26	8.4
700	30	3,129	4.3	-7.9	26	8.8
650	30	3,729	1.0	-11.2	26	9.6
600	30	4,369	-2.3	-16.2	26	9.5
550	30	5,055	-6.0	-21.1	26	11.3
500	30	5,795	-10.7	-25.6	26	12.2
450	30	6,597	-16.1	-30.3	26	11.9
400	30	7,472	-22.6	-36.3	26	12.5
350	30	8,441	-30.0	-41.9	26	12.4
300	30	9,517	-38.5	-48.0	26	12.7
250	30	10,745	-47.9		26	15.9
200	29	12,184	-56.3		27	16.7
175	29	13,029	-58.3		27	15.0
150	28	13,999	-59.1		27	12.8
125	28	15,139	-60.9		27	10.2
100	28	16,521	-62.1		28	6.7
80	28	17,903	-61.1		32	2.8
70	28	18,736	-59.3		03	2.1
60	26	19,709	-57.9		08	3.0
50	26	20,865	-55.7		09	3.6
40	25	22,246	-53.2		09	5.6
30	25	24,163	-50.0		08	6.4
25	21	25,359	-48.4		08	7.7
20	18	26,830	-45.9		08	7.8
15	14	28,735	-43.4		09	9.4
10	11	31,496	-37.0			
7	5	33,994	-32.4			
5						

• PONAPE, CAROLINE IS. 1005 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	39	28.3	24.6	08	3.5
1000	30	82	27.1	23.6	08	4.0
950	30	535	23.7	22.0	09	7.0
900	30	1,008	20.7	18.5	09	8.1
850	30	1,501	17.6	15.0	09	8.1
800	29	2,019	15.5	10.8	09	8.0
750	29	2,566	13.2	6.8	09	7.1
700	29	3,143	9.9	2.7	09	7.0
650	29	3,757	6.6	-.3	09	7.2
600	29	4,410	2.6	-3.8	09	6.6
550	29	5,110	-.8	-9.2	09	5.1
500	29	5,865	-5.4	-12.9	09	4.1
450	29	6,686	-10.0	-17.9	10	3.5
400	29	7,585	-15.4	-25.5	09	2.2
350	29	8,584	-22.1	-34.1	09	.8
300	29	9,696	-30.4	-43.3	28	1.1
250	29	10,966	-40.6	-49.9	26	3.4
200	29	12,445	-52.9		25	4.3
175	29	13,293	-59.8		25	4.5
150	29	14,240	-67.5		25	6.0
125	29	15,319	-74.5		26	7.2
100	28	16,600	-78.7		27	3.3
80	28	17,884	-73.4		07	2.7
70	28	18,673	-69.8		09	2.9
60	26	19,603	-65.8		10	1.6
50	26	20,721	-62.0		11	1.7
40	26	22,115	-58.0		13	1.7
30	24	23,955	-53.5		14	1.4
25	23	25,131	-51.6		09	2.5
20	22	26,590	-48.3		10	3.9
15	15	28,466	-47.2		10	8.6
10						
7						
5						

PORTLAND, MAINE [illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	20	15.4	12.7	27	.9
1000	30	138	15.6	11.8	29	2.0
950	30	575	15.9	9.6	29	3.5
900	30	1,033	13.7	6.2	29	4.5
850	30	1,513	11.2	2.5	28	6.0
800	30	2,018	8.4	-3.0	28	6.7
750	30	2,549	5.5	-5.9	29	8.7
700	30	3,109	2.2	-9.4	28	10.2
650	30	3,705	-.7	-14.4	29	11.8
600	30	4,340	-4.1	-19.1	27	13.6
550	30	5,022	-8.0	-22.0	28	14.9
500	30	5,756	-12.3	-26.5	27	16.5
450	30	6,554	-17.4	-30.3	27	17.5
400	30	7,427	-23.2	-33.9	27	19.6
350	30	8,394	-30.1	-39.3	27	21.4
300	30	9,471	-38.1	-46.6	27	22.7
250	30	10,701	-47.4		27	23.4
200	30	12,145	-56.7		27	22.9
175	30	12,987	-58.8		26	19.5
150	30	13,955	-58.6		27	14.6
125	30	15,101	-59.0		28	12.1
100	30	16,498	-59.4		29	6.2
80	28	17,894	-58.5		29	3.4
70	29	18,736	-57.4		34	1.2
60	27	19,712	-55.9		07	1.7
50	27	20,875	-54.9		09	2.4
40	27	22,309	-53.0		09	4.9
30	25	24,174	-49.9		09	6.4
25	23	25,375	-48.3		09	6.9
20	21	26,856	-46.1		08	8.0
15	17	28,793	-42.9		09	10.2
10	7	31,650	-34.9			
7						
5						

• [illegible]

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	[illegible]	[illegible]	8.0	[illegible]	[illegible]
1000	29	147	[illegible]	[illegible]	[illegible]	[illegible]
950	30	570	[illegible]	[illegible]	[illegible]	[illegible]
900	30	1,016	[illegible]	[illegible]	[illegible]	[illegible]
850	30	1,464	4.8	[illegible]	[illegible]	[illegible]
800	30	1,976	2.5	[illegible]	[illegible]	[illegible]
750	30	2,496	[illegible]	[illegible]	[illegible]	[illegible]
700	30	3,046	-2.7	[illegible]	[illegible]	[illegible]
650	30	3,631	-5.7	[illegible]	[illegible]	[illegible]
600	30	4,254	-9.6	[illegible]	[illegible]	[illegible]
550	30	4,921	-13.7	[illegible]	[illegible]	[illegible]
500	30	5,639	[illegible]	[illegible]	[illegible]	[illegible]
450	30	6,418	-23.3	[illegible]	[illegible]	[illegible]
400	30	7,270	-29.1	[illegible]	[illegible]	[illegible]
350	30	8,215	-35.3	[illegible]	[illegible]	[illegible]
300	[illegible]	9,271	-42.1	[illegible]	[illegible]	[illegible]
250	[illegible]	10,485	-49.0		[illegible]	[illegible]
200	29	[illegible]	-53.2		[illegible]	[illegible]
175	[illegible]	12,787	-52.8		[illegible]	[illegible]
150	[illegible]	13,790	-52.5		[illegible]	[illegible]
125	27	[illegible]	-53.1		[illegible]	[illegible]
100	27	16,403	[illegible]		[illegible]	[illegible]
80	27	17,833	-54.6		[illegible]	[illegible]
70	27	18,688	-54.7		[illegible]	[illegible]
60	27	19,674	-55.1		[illegible]	[illegible]
50	27	20,840	-54.4		[illegible]	[illegible]
40	25	22,280	-53.2		09	[illegible]
30	[illegible]	24,141	-50.2		[illegible]	[illegible]
25	22	25,347	-48.3		[illegible]	[illegible]
20	22	26,824	-46.2		[illegible]	[illegible]
15	[illegible]	[illegible]	-43.4		[illegible]	[illegible]
10	[illegible]	[illegible]	-38.0		09	[illegible]
7	19	33,994	-33.1		[illegible]	[illegible]
5	5	36,314	-28.5			

RAPID CITY, S. DAK. 902 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	966	12.8	6.4	31	1.7
1000						
950						
900	19	1,018	14.9	5.7	29	2.0
850	30	1,471	15.5	2.4	28	4.7
800	30	1,983	13.0	.7	29	6.4
750	30	2,523	9.7	-1.9	29	7.3
700	30	3,092	5.6	-6.2	29	8.4
650	30	3,693	1.3	-9.4	28	10.0
600	30	4,333	-2.9	-14.4	28	10.9
550	30	5,016	-7.8	-18.9	28	11.2
500	30	5,750	-13.0	-24.1	28	12.4
450	30	6,545	-18.3	-28.6	27	13.7
400	30	7,414	-24.3	-36.2	27	15.3
350	30	8,377	-31.1	-42.8	27	16.3
300	30	9,449	-39.3	-48.7	28	17.0
250	30	10,673	-48.2		27	17.5
200	29	12,116	-54.9		28	18.7
175	28	12,974	-56.5		28	17.1
150	28	13,952	-56.6		28	13.7
125	27	15,103	-56.9		27	10.2
100	27	16,506	-59.2		28	5.7
80	27	17,906	-58.7		30	2.0
70	26	18,745	-58.7		30	.5
60	25	19,716	-57.6		09	.9
50	25	20,872	-55.9		07	2.4
40	25	22,298	-54.2		08	4.2
30	25	24,159	-50.3		08	6.4
25	23	25,353	-48.6		09	6.8
20	21	26,827	-46.5		08	8.5
15	19	28,748	-43.6		09	10.0
10	[illegible]	31,491	-38.5			

ST CLOUD, MINN. 974 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	316	13.5	11.2	25	.3
1000						
950	30	524	16.5	9.6	25	2.0
900	30	984	15.1	6.2	26	4.6
850	30	1,406	12.3	3.9	27	5.4
800	30	1,973	9.8	.1	27	6.7
750	30	2,506	6.3	-2.7	28	7.4
700	30	3,069	3.1	-8.2	28	9.3
650	30	3,666	-.1	-12.5	28	10.4
600	30	4,303	-3.9	-17.1	28	11.3
550	30	4,984	-8.2	-21.8	28	12.9
500	30	5,717	-12.9	-26.9	27	13.2
450	30	6,513	-18.3	-32.1	27	13.4
400	30	7,381	-24.6	-38.4	28	14.2
350	30	8,341	-32.1	-44.5	27	14.1
300	30	9,408	-40.4	-49.2	28	16.0
250	30	10,628	-48.9		28	19.0
200	30	12,073	-53.7		27	18.5
175	30	12,929	-54.4		27	16.7
150	30	13,915	-54.9		27	13.5
125	30	15,079	-55.9		28	10.3
100	30	16,492	-57.9		28	6.8
80	30	17,896	-58.3		29	3.3
70	30	18,737	-58.0		30	2.0
60	30	19,711	-56.9		35	1.0
50	30	20,871	-55.0		06	1.6
40	30	22,303	-53.1		08	3.6
30	28	24,169	-50.5		08	5.2
25	27	25,357	-48.6		09	6.3
20	25	26,827	-46.5		08	7.8
15	21	28,756	-42.9		09	8.8
10	9	31,539	-38.0			

• ST PAUL IS., ALASKA 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	10	2.9	2.0	34	.4
1000	25	125	2.5	1.6	32	1.2
950	30	529	1.6	-1.4	[illegible]	.4
900	30	964	.6	-5.1	[illegible]	1.4
850	30	1,423	-.4	-9.8	[illegible]	2.1
800	30	[illegible]	-2.3	-11.7	[illegible]	2.9
750	30	2,417	-4.6	-14.2	[illegible]	2.9
700	30	2,957	-7.1	-17.6	[illegible]	3.1
650	30	3,532	-10.1	[illegible]	[illegible]	3.1
600	30	4,145	-13.8	-24.2	[illegible]	2.9
550	30	4,801	-17.8	-27.6	[illegible]	2.7
500	30	[illegible]	-22.5	-33.2	[illegible]	2.9
450	30	6,273	-27.8	-37.8	[illegible]	2.9
400	30	7,109	-33.8	[illegible]	[illegible]	3.4
350	30	8,035	-40.5	-45.3	[illegible]	3.8
300	30	9,066	-47.7		[illegible]	[illegible]
250	30	10,255	-52.6		[illegible]	[illegible]
200	30	11,703	-50.1		[illegible]	[illegible]
175	30	[illegible]	-48.4		21	1.3
150	[illegible]	13,599	-48.3		[illegible]	[illegible]
125	29	14,799	-48.8		[illegible]	1.2
100	[illegible]	16,264	-49.1		[illegible]	1.3
80	[illegible]	17,729	-49.0		[illegible]	2.4
70	[illegible]	[illegible]	-48.9		[illegible]	2.9
60	28	19,616	-48.8		[illegible]	[illegible]
50	28	20,814	-49.1		[illegible]	3.6
40	[illegible]	22,260	-48.5		[illegible]	[illegible]
30	28	24,177	-47.5		[illegible]	[illegible]
25	27	25,385	-46.2		[illegible]	[illegible]
20	26	26,872	-44.7		09	[illegible]
15	26	28,809	-41.8		09	8.3
10	[illegible]	[illegible]	-37.1		[illegible]	9.9

SALEM, ILL. 993 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	174	16.5	17.1	[illegible]	1.2
1000						
950	30	561	21.3	12.9	24	[illegible]
900	30	1,028	18.8	9.3	[illegible]	[illegible]
850	30	1,517	15.6	5.8	[illegible]	6.9
800	30	2,029	12.6	1.0	25	[illegible]
750	30	2,568	9.1	-2.4	26	[illegible]
700	30	3,136	5.5	-6.1	26	[illegible]
650	30	3,738	[illegible]	[illegible]	[illegible]	[illegible]
600	30	4,379	[illegible]	-13.7	[illegible]	9.7
550	30	5,066	-5.8	-19.7	26	[illegible]
500	30	5,806	[illegible]	-25.0	[illegible]	10.0
450	30	6,608	[illegible]	-30.3	[illegible]	[illegible]
400	30	7,486	[illegible]	-34.7	26	[illegible]
350	30	8,457	[illegible]	-41.1	26	11.3
300	30	9,537	[illegible]	-48.2	27	[illegible]
250	30	10,769	[illegible]		27	[illegible]
200	30	12,213	[illegible]		27	[illegible]
175	30	13,057	[illegible]		27	[illegible]
150	30	14,025	[illegible]		27	[illegible]
125	30	15,163	[illegible]		27	9.6
100	[illegible]	16,543	[illegible]		27	[illegible]
80	30	17,915	[illegible]		[illegible]	[illegible]
70	30	18,742	[illegible]		[illegible]	1.4
60	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
50	29	20,849	[illegible]		08	[illegible]
40	27	22,269	-54.6		[illegible]	[illegible]
30	[illegible]	24,127	[illegible]		08	[illegible]
25	[illegible]	25,318	[illegible]		09	[illegible]
20	[illegible]	26,787	[illegible]		08	[illegible]
15	[illegible]	28,705	[illegible]		08	[illegible]
10	[illegible]	31,460	[illegible]		09	11.2

[illegible] 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.h.
SURFACE	30	[illegible]	10.9	5.6	22	.7
1000	30	[illegible]	12.4	8.3	[illegible]	.5
950	[illegible]	[illegible]	[illegible]	6.9	[illegible]	[illegible]
900	[illegible]	[illegible]	[illegible]	3.4	24	[illegible]
850	[illegible]	[illegible]	7.3	-1.8	[illegible]	4.3
800	30	[illegible]	5.1	-7.2	[illegible]	5.3
750	30	[illegible]	3.0	-10.4	26	7.3
700	30	[illegible]	.5	-13.0	26	8.4
650	[illegible]	[illegible]	[illegible]	-15.9	26	10.2
600	30	[illegible]	-6.3	[illegible]	26	[illegible]
550	30	[illegible]	-10.6	[illegible]	[illegible]	13.6
500	30	[illegible]	-15.2	-25.9	26	16.1
450	[illegible]	[illegible]	-20.1	-30.5	26	[illegible]
400	[illegible]	[illegible]	-25.9	-35.5	26	[illegible]
350	[illegible]	[illegible]	[illegible]	-40.6	26	22.3
300	[illegible]	9,376	-40.6	-44.6	26	24.0
250	30	10,594	[illegible]		27	26.7
200	29	[illegible]	-55.1		26	[illegible]
175	29	[illegible]	-55.6		[illegible]	[illegible]
150	29	[illegible]	-55.0		26	19.7
125	29	[illegible]	[illegible]		[illegible]	14.5
100	[illegible]	[illegible]	-57.0		[illegible]	9.8
80	[illegible]	[illegible]	-56.4		23	4.3
70	[illegible]	[illegible]	-56.5		[illegible]	2.3
60	[illegible]	[illegible]	-55.7		[illegible]	1.1
50	28	[illegible]	-55.3		11	2.6
40	[illegible]	[illegible]	[illegible]		[illegible]	4.3
30	28	[illegible]	-50.2		[illegible]	6.3
25	29	[illegible]	-48.6		09	6.6
20	[illegible]	[illegible]	-46.1		[illegible]	8.5
15	[illegible]	[illegible]	-43.2		09	9.2
10	[illegible]	[illegible]	-37.9			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JUNE 1974

SALT LAKE CITY, UTAH
871 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	1,288	15.2	4.3	15	3.4
1000						
950						
900						
850	29	1,494	18.3	1.4	16	3.8
800	29	2,011	16.2	-2.6	19	3.4
750	29	2,556	12.2	-4.8	23	2.9
700	29	3,129	7.5	-7.2	26	4.1
650	29	3,734	2.8	-10.0	27	5.9
600	29	4,376	-2.1	-13.3	27	7.8
550	29	5,061	-7.2	-18.7	26	9.4
500	29	5,797	-12.3	-24.5	26	10.4
450	29	6,595	-17.1	-29.7	26	11.3
400	29	7,467	-23.5	-35.3	26	12.4
350	29	8,433	-30.5	-41.4	26	13.2
300	29	9,506	-39.5	-46.8	27	14.9
250	29	10,729	-48.8		27	16.7
200	29	12,168	-56.4		26	17.1
175	29	13,013	-57.8		27	16.5
150	29	13,983	-58.8		27	14.8
125	29	15,124	-60.1		27	11.0
100	29	16,511	-61.5		27	5.7
80	29	17,895	-60.7		27	1.9
70	29	18,729	-59.7		18	.3
60	29	19,696	-58.4		10	1.8
50	29	20,846	-57.2		09	3.5
40	29	22,265	-54.9		09	5.1
30	29	24,119	-51.8		09	6.1
25	28	25,311	-49.6		09	7.1
20	27	26,786	-46.8		08	8.3
15	27	28,704	-44.0		09	9.5
10	18	31,440	-39.2		09	9.4
7						
5						

SAN DIEGO, CALIF.
998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	124	16.1	13.5	30	.4
1000						
950	30	541	17.3	9.1	33	.7
900	30	1,006	20.4	2.3	33	1.7
850	30	1,499	20.2	-2.2	31	2.7
800	30	2,020	18.3	-5.2	28	2.6
750	30	2,569	14.9	-7.3	25	2.4
700	30	3,148	10.7	-11.0	22	3.2
650	30	3,760	6.3	-13.4	23	3.8
600	30	4,410	1.3	-17.1	23	4.3
550	30	5,103	-3.6	-22.4	25	4.3
500	30	5,849	-9.0	-27.3	26	5.6
450	30	6,655	-14.7	-31.2	26	6.3
400	29	7,536	-21.3	-36.6	27	6.8
350	29	8,509	-28.8	-42.4	26	8.0
300	29	9,591	-37.3	-48.4	26	10.5
250	28	10,827	-46.2		27	13.5
200	27	12,280	-55.0		28	15.1
175	26	13,125	-58.3		27	16.3
150	26	14,089	-60.7		27	14.8
125	26	15,215	-64.0		27	11.2
100	26	16,568	-67.8		27	5.0
80	26	17,912	-66.9		07	1.6
70	26	18,723	-64.2		08	3.4
60	26	19,672	-61.9		09	4.8
50	26	20,808	-59.2		09	6.8
40	26	22,219	-55.9		09	7.9
30	25	24,069	-52.0		09	10.0
25	24	25,256	-49.8		09	10.5
20	24	26,723	-47.4		09	10.5
15	23	28,634	-44.6		08	9.6
10	20	31,378	-39.9		09	10.6
7	13	33,845	-35.5		09	15.0
5						

SAN JUAN, P. R.
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	6	26.4	22.0	12	1.9
1000	30	143	25.2	21.9	10	4.0
950	30	593	22.4	19.4	10	7.0
900	30	1,063	19.5	15.8	11	7.0
850	30	1,553	16.2	12.2	11	6.7
800	30	2,068	14.1	6.9	11	5.7
750	30	2,611	11.7	1.7	11	4.8
700	30	3,186	8.7	-3.1	11	3.5
650	30	3,795	4.9	-5.9	11	3.1
600	30	4,443	.8	-9.2	13	1.5
550	30	5,137	-3.4	-13.8	15	.5
500	30	5,885	-8.1	-17.0	23	1.5
450	30	6,696	-13.1	-23.9	25	3.0
400	29	7,583	-19.0	-30.6	26	4.0
350	29	8,567	-25.9	-37.0	26	5.5
300	29	9,661	-34.5	-45.3	27	7.2
250	29	10,910	-44.4		27	9.9
200	29	12,367	-56.1		27	12.3
175	29	13,203	-62.2		27	13.6
150	29	14,143	-67.5		27	14.2
125	29	15,231	-70.7		27	10.7
100	29	16,552	-71.2		28	4.3
80	28	17,879	-68.2		07	3.6
70	27	18,685	-66.3		08	7.2
60	27	19,627	-63.5		08	10.2
50	26	20,757	-60.2		09	12.0
40	24	22,159	-57.2		09	13.7
30	23	23,996	-53.2		09	14.3
25	21	25,172	-50.4		09	16.2
20	20	26,634	-47.5		09	15.9
15	16	28,546	-44.0		09	19.6
10	8	31,277	-41.1			
7						
5						

• SAULT STE MARIE, MICH.
985 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	221	11.8	10.5	12	1.2
1000						
950	30	526	12.9	8.6	20	1.9
900	30	981	12.7	6.8	23	4.0
850	30	1,400	10.6	4.0	25	5.7
800	30	1,964	7.9	.1	26	7.1
750	30	2,494	5.2	-4.5	25	8.2
700	30	3,054	2.0	-7.3	26	9.6
650	30	3,649	-1.2	-11.2	26	10.7
600	30	4,284	-4.7	-14.9	27	11.2
550	30	4,963	-8.8	-19.5	27	12.7
500	30	5,695	-13.7	-25.9	27	13.6
450	30	6,467	-19.1	-31.1	27	14.9
400	30	7,353	-25.3	-37.4	27	15.7
350	30	8,312	-32.3	-42.2	27	17.5
300	30	9,379	-40.2	-48.3	27	20.4
250	30	10,601	-48.0		27	20.7
200	30	12,052	-53.7		27	21.2
175	29	12,912	-54.6		27	18.6
150	29	13,898	-54.8		27	14.8
125	29	15,062	-56.0		27	11.8
100	29	16,476	-57.4		28	7.1
80	29	17,887	-57.1		28	4.3
70	29	18,734	-56.5		30	2.3
60	29	19,715	-55.4		35	1.2
50	29	20,881	-54.2		05	1.7
40	29	22,319	-52.2		08	4.3
30	[illegible]	24,195	-49.2		09	6.2
25	27	25,396	-47.9		08	7.2
20	27	26,875	-45.7		09	8.7
15	26	28,813	-41.5		09	10.5
10	[illegible]	31,595	-35.8		09	10.5
7	17	34,067	-31.1		09	11.4
5	7	36,498	-25.5			

• SHREVEPORT, LA.
1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	21.1	19.2	21	.5
1000	30	130	22.4	19.1	22	.8
950	30	577	21.7	15.8	22	4.2
900	30	1,046	19.7	11.1	22	4.8
850	30	1,536	16.9	7.7	22	5.1
800	30	2,051	14.0	4.5	21	5.4
750	30	2,593	10.6	.3	21	5.2
700	30	3,164	7.1	-3.9	21	4.6
650	30	3,770	3.5	-7.0	22	3.9
600	30	4,416	-.1	-11.7	22	3.4
550	30	5,107	-4.3	-17.2	23	3.3
500	30	5,852	-9.2	-21.6	24	4.1
450	30	6,660	-14.1	-27.7	25	5.2
400	30	7,544	-19.9	-33.9	26	6.4
350	30	8,524	-26.9	-38.7	26	8.1
300	30	9,615	-35.3	-45.5	26	11.0
250	30	10,859	-45.2		26	12.3
200	30	12,312	-55.9		27	13.9
175	30	13,153	-60.2		27	14.1
150	30	14,110	-62.4		27	10.2
125	29	15,230	-64.3		28	7.4
100	29	16,565	-67.4		30	2.9
80	28	17,931	-66.3		06	1.9
70	28	18,744	-64.2		08	4.0
60	28	19,695	-61.4		08	6.2
50	28	20,833	-59.0		09	7.5
40	27	22,245	-55.9		09	7.9
30	27	24,094	-51.8		08	9.6
25	27	25,262	-49.5		09	9.4
20	25	26,758	-46.6		09	10.0
15	23	28,666	-44.6		08	11.2
10	19	31,424	-39.7		08	12.6
7	16	33,898	-34.5		10	12.6
5						

SPOKANE, WASH.
930 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	720	10.9	3.8	20	3.0
1000						
950						
900	30	999	13.1	.5	22	4.5
850	30	1,478	11.1	-3.1	24	5.5
800	30	1,981	7.4	-4.4	25	6.2
750	30	2,509	3.5	-6.3	25	7.0
700	30	3,065	.0	-11.4	25	8.1
650	30	3,655	-3.8	-14.6	25	9.7
600	30	4,282	-7.6	-17.9	26	12.0
550	30	4,954	-12.0	-22.1	25	13.1
500	30	5,677	-16.5	-26.6	25	14.4
450	30	6,462	-21.4	-31.0	25	15.4
400	30	7,320	-27.7	-36.6	25	17.1
350	30	8,270	-34.3	-40.6	25	20.1
300	30	9,330	-41.5	-45.1	25	22.8
250	30	10,547	-48.8		25	21.9
200	29	11,992	-53.7		25	23.4
175	29	12,852	-52.8		25	19.7
150	29	13,848	-52.6		25	15.5
125	28	15,025	-53.9		25	12.0
100	28	16,454	-55.4		24	7.6
80	28	17,877	-55.4		24	3.7
70	28	18,728	-55.5		22	1.9
60	28	19,712	-55.1		18	.9
50	28	20,879	-54.1		10	1.8
40	27	22,319	-52.5		09	4.0
30	27	24,191	-49.7		08	5.8
25	27	25,390	-47.9		08	6.4
20	26	26,868	-45.9		08	8.8
15	23	28,810	-42.7		09	9.7
10	18	31,569	-38.3		09	12.7
7						

• SWAN ISLAND, W. I.
1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	26.7	23.8	10	4.0
1000	30	110	26.5	23.2	10	5.0
950	30	562	23.0	20.4	10	6.9
900	30	1,032	20.2	16.4	11	7.1
850	30	1,525	17.1	12.5	11	7.1
800	30	2,041	14.7	7.3	11	6.9
750	30	2,585	12.0	1.8	11	6.8
700	30	3,160	8.8	-2.0	11	6.1
650	30	3,770	5.3	-4.6	12	5.9
600	30	4,420	1.6	-8.4	12	4.8
550	30	5,116	-2.2	-13.5	12	3.3
500	30	5,868	-6.4	-18.2	12	1.9
450	30	6,685	-11.1	-23.4	09	1.2
400	30	7,579	-17.2	-26.7	32	.9
350	30	8,570	-24.0	-34.2	29	2.6
300	29	9,674	-32.0	-43.7	29	5.3
250	29	10,936	-42.0		29	7.8
200	29	12,408	-53.9		29	11.3
175	28	13,251	-60.5		30	12.8
150	28	14,196	-67.1		30	11.4
125	27	15,280	-72.5		31	8.0
100	27	16,584	-73.4		01	4.6
80	26	17,897	-70.3		08	6.7
70	26	18,698	-67.1		08	8.1
60	25	19,634	-64.4		08	9.8
50	24	20,756	-60.8		08	12.1
40	24	22,156	-57.5		09	13.7
30	23	23,991	-53.0		10	14.9
25	23	25,175	-50.3		09	15.3
20	23	26,642	-46.9		09	17.2
15	19	28,565	-43.6		09	18.7
10	13	31,334	-40.1		09	22.2
7	10	33,776	-36.2			

TAMPA, FLA.
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	23.6	21.2	10	.9
1000	30	145	24.4	21.3	14	1.1
950	30	594	22.0	18.5	20	1.5
900	30	1,063	19.1	13.8	22	1.6
850	30	1,553	16.2	10.3	22	1.3
800	30	2,067	13.5	4.4	21	1.0
750	30	2,608	10.6	.1	23	1.0
700	30	3,179	7.3	-4.6	25	1.7
650	30	3,786	4.0	-7.6	26	1.4
600	30	4,433	.6	-11.5	27	1.7
550	30	5,126	-3.3	-16.9	29	1.9
500	30	5,874	-7.8	-20.0	29	2.1
450	30	6,686	-13.0	-24.9	29	2.7
400	30	7,573	-19.2	-30.1	28	2.6
350	30	8,556	-26.2	-37.2	27	3.2
300	30	9,649	-34.7	-44.2	29	3.1
250	30	10,895	-44.8		29	4.1
200	30	12,348	-56.6		30	6.6
175	30	13,185	-62.0		31	7.4
150	30	14,128	-65.9		31	6.6
125	30	15,229	-67.5		33	5.0
100	30	16,567	-69.3		02	2.7
80	30	17,905	-67.0		06	5.6
70	30	18,715	-65.2		07	6.5
60	30	19,662	-62.3		07	8.5
50	30	20,796	-59.2		09	10.7
40	30	22,207	-55.9		09	11.1
30	30	24,055	-51.8		09	12.2
25	29	25,242	-49.4		09	12.2
20	27	26,718	-46.7		09	13.7
15	25	28,635	-43.5		08	14.7
10	17	31,391	-39.3		09	16.4
7						

TOPEKA, KANS.
981 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	268	18.7	15.7	20	2.1
1000						
950	30	547	20.9	12.7	23	6.4
900	30	1,015	19.7	8.9	24	8.0
850	30	1,505	17.1	5.6	25	6.7
800	30	2,020	13.7	2.6	26	5.4
750	30	2,561	10.1	-1.4	26	5.4
700	30	3,130	6.0	-4.0	27	6.1
650	30	3,734	2.1	-7.7	27	7.2
600	30	4,375	-2.0	-13.4	28	7.5
550	30	5,062	-6.3	-18.1	27	7.2
500	30	5,801	-11.1	-23.1	28	7.5
450	30	6,602	-16.2	-30.4	28	9.5
400	30	7,477	-22.5	-37.1	28	9.9
350	29	8,446	-29.7	-43.3	28	11.1
300	29	9,523	-38.1	-48.3	27	12.0
250	28	10,757	-47.3		27	14.1
200	28	12,213	-55.9		28	15.3
175	28	13,047	-58.2		29	14.0
150	28	14,015	-58.8		29	11.9
125	28	15,156	-60.7		28	9.2
100	28	16,538	-62.2		28	5.5
80	28	17,915	-62.5		31	1.9
70	28	18,742	-60.9		02	1.3
60	27	19,706	-59.3		08	2.4
50	27	20,855	-56.9		08	4.5
40	27	22,276	-54.5		08	5.6
30	27	24,132	-51.3		09	6.7
25	26	25,320	-49.4		09	6.9
20	24	26,805	-46.5		08	8.4
15	23	28,728	-43.7		09	8.7
10	11	31,451	-38.8		08	11.6
7						

• TRUK, CAROLINE IS.
1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	2	28.7	25.0	06	3.6
1000	30	97	27.5	24.7	07	4.3
950	30	551	24.2	22.1	08	6.4
900	30	1,025	21.2	18.9	09	7.3
850	30	1,519	18.2	15.3	09	7.2
800	30	2,038	15.9	12.9	09	7.3
750	30	2,586	13.3	8.7	09	7.2
700	30	3,164	10.2	4.7	09	7.0
650	30	3,779	7.0	1.0	09	6.8
600	30	4,434	3.3	-1.7	08	6.0
550	30	5,135	-.8	-6.5	08	5.5
500	30	5,890	-5.1	-10.8	09	3.9
450	30	6,712	-9.6	-17.5	09	2.5
400	30	7,613	-15.1	-24.9	09	1.5
350	30	8,612	-21.7	-32.8	02	.7
300	30	9,727	-29.6	-41.4	24	.3
250	30	10,999	-40.2	-50.0	23	2.1
200	30	12,480	-52.8		23	3.5
175	30	13,329	-59.7		24	3.6
150	30	14,275	-67.3		23	4.2
125	29	15,357	-74.1		26	4.6
100	29	16,640	-77.9		29	1.5
80	29	17,927	-73.3		09	4.4
70	28	18,716	-69.1		09	5.3
60	28	19,645	-65.6		10	3.4
50	27	20,763	-61.9		09	2.5
40	26	22,159	-57.9		11	1.9
30	23	23,995	-53.3		09	2.3
25	22	25,174	-51.2		09	3.6
20	19	26,633	-48.3		10	4.6
15	15	28,545	-45.9		10	9.6
10	8	31,269	-42.3			
7						

• TUCSON, ARIZ.
922 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	789	20.7	4.2	14	2.8
1000						
950						
900	30	999	24.7	4.3	14	2.7
850	30	1,498	22.7	1.9	17	1.7
800	30	2,022	19.1	-1.9	20	.7
750	30	2,571	15.0	-5.3	30	.4
700	30	3,150	10.5	-9.9	24	1.1
650	30	3,763	6.4	-12.1	25	1.5
600	30	4,413	1.5	-15.1	26	2.8
550	30	5,107	-3.8	-18.0	26	3.5
500	30	5,851	-9.5	-23.9	26	3.6
450	30	6,657	-14.9	-30.8	26	4.5
400	30	7,537	-21.2	-36.6	26	5.2
350	30	8,512	-28.4	-42.7	28	7.0
300	30	9,595	-36.8	-49.9	27	9.5
250	30	10,832	-46.3		27	13.0
200	30	12,284	-55.3		27	16.4
175	30	13,129	-58.8		27	16.5
150	30	14,088	-62.1		27	14.4
125	30	15,207	-65.5		28	10.8
100	30	16,553	-68.4		28	5.5
80	30	17,892	-67.3		03	.8
70	30	18,703	-64.6		08	3.5
60	30	19,651	-62.2		09	5.4
50	30	20,765	-59.6		08	6.9
40	30	22,193	-56.3		09	8.4
30	30	24,035	-52.8		09	10.2
25	29	25,216	-50.4		09	10.4
20	29	26,681	-47.6		09	10.1
15	29	28,592	-45.1		08	10.7
10	27	31,329	-40.2		09	11.2
7	18	33,800	-35.1		09	14.0
5						

• VANDENBERG AFB, CALIF.
1002 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	100	12.1	10.0	33	1.1
1000	26	119	12.2	9.9	34	1.5
950	30	550	17.3	7.7	01	4.2
900	30	1,016	20.7	2.0	01	3.8
850	30	1,508	19.0	-.9	36	3.2
800	30	2,026	16.5	-4.6	33	2.9
750	30	2,572	13.4	-7.7	31	2.9
700	30	3,148	9.4	-10.9	29	2.9
650	30	3,758	5.7	-14.4	28	3.3
600	30	4,407	1.2	-18.2	27	3.9
550	30	5,100	-3.9	-22.3	27	4.6
500	30	5,845	-9.2	-26.1	27	5.2
450	30	6,651	-15.1	-30.1	27	6.2
400	30	7,530	-21.5	-36.3	27	7.5
350	30	8,503	-29.0	-42.4	28	9.2
300	30	9,583	-37.4	-48.4	27	11.4
250	30	10,817	-46.7		27	14.9
200	30	12,265	-55.9		27	16.2
175	30	13,109	-59.0		27	16.4
150	30	14,070	-61.4		27	14.8
125	30	15,195	-63.7		26	12.7
100	30	16,555	-66.3		26	7.2
80	29	17,904	-65.4		24	1.2
70	29	18,720	-63.9		12	1.4
60	29	19,669	-61.9		10	3.1
50	29	20,804	-59.5		09	4.7
40	29	22,211	-56.6		09	5.7
30	29	24,053	-52.8		08	7.6
25	28	25,233	-50.8		09	8.3
20	27	26,695	-48.1		09	8.4
15	26	28,604	-45.4		09	8.7
10	23	31,340	-40.8		09	9.9
7	18	33,812	-35.1		09	11.5
5	5	36,153	-29.4			

VICTORIA, TEXAS
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	33	22.8	21.6	14	1.9
1000	30	113	24.2	22.8	15	3.3
950	30	562	21.9	19.2	17	7.8
900	30	1,032	19.5	14.8	17	8.7
850	30	1,523	17.1	9.0	18	8.8
800	30	2,039	14.5	4.1	18	8.[illegible]
750	30	2,581	11.4	.3	20	6.5
700	30	3,155	8.3	-4.0	20	4.0
650	30	3,763	4.3	-6.5	20	2.5
600	30	4,410	1.1	-11.2	23	1.5
550	30	5,105	-3.6	-15.1	25	2.2
500	30	5,851	-8.3	-19.5	26	3.2
450	30	6,662	-13.2	-25.1	26	4.2
400	29	7,547	-19.5	-32.5	27	5.4
350	28	8,526	-26.6	-38.3	27	6.4
300	28	9,620	-34.9	-45.6	27	8.6
250	28	10,866	-45.1		27	10.9
200	28	12,322	-55.2		27	13.8
175	28	13,165	-59.9		27	13.5
150	28	14,118	-64.1		28	12.6
125	28	15,228	-66.6		28	7.5
100	28	16,566	-69.3		32	3.1
80	28	17,899	-68.6		07	4.3
70	28	18,706	-65.4		08	6.6
60	28	19,651	-62.6		09	7.8
50	28	20,784	-59.8		09	9.1
40	26	22,187	-56.6		09	9.5
30	26	24,032	-52.1		09	11.3
25	26	25,219	-49.8		09	11.5
20	23	26,693	-47.2		09	12.7
15	20	28,614	-44.8		09	13.5
10	10	31,336	-40.2			
7						
5						

• WAKE IS., PACIFIC AREA
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	26.8	22.7	08	5.3
1000	30	139	25.5	21.3	09	6.4
950	30	559	21.6	19.6	10	7.5
900	30	1,057	18.7	15.6	10	7.2
850	30	1,546	15.6	11.3	10	7.3
800	30	2,060	13.9	4.4	10	7.0
750	30	2,603	11.9	-2.2	09	7.1
700	30	3,177	8.9	-7.1	09	7.2
650	30	3,787	5.8	-10.4	09	6.8
600	30	4,438	2.6	-14.0	08	6.2
550	30	5,137	-1.3	-18.0	07	5.8
500	30	5,890	-5.7	-23.2	08	5.9
450	30	6,708	-11.1	-26.9	08	6.2
400	30	7,602	-17.2	-32.5	08	6.5
350	30	8,591	-24.6	-39.2	07	5.9
300	30	9,691	-33.4	-46.7	07	5.3
250	30	10,945	-43.4		05	4.3
200	30	12,4[illegible]7	-55.5		01	4.3
175	30	13,246	-61.8		36	4.3
150	30	14,166	-67.7		36	5.2
125	29	15,269	-7[illegible].4		02	4.9
100	29	16,575	-73.5		06	5.7
80	29	17,886	-71.3		08	7.5
70	28	18,679	-68.9		08	9.1
60	27	19,611	-65.1		09	11.3
50	27	20,732	-61.6		09	12.6
40	27	22,128	-57.9		09	13.4
30	26	23,962	-53.0		09	16.1
25	26	25,145	-50.4		09	16.6
20	25	26,610	-47.7		09	18.1
15	24	28,519	-45.2		09	18.9
10	21	31,253	-39.3		09	23.7
7	12	33,700	-37.0			
5	8	35,965	-35.6			

• WALLOPS IS., VA. NASA
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	21.4	18.8	19	1.3
1000	30	142	21.0	18.6	23	2.6
950	30	587	19.4	15.6	25	4.0
900	30	1,053	17.4	12.7	23	3.7
850	30	1,539	14.3	9.6	25	4.4
800	30	2,049	11.4	4.7	25	5.1
750	30	2,586	8.6	-1.0	25	6.1
700	30	3,154	5.5	-6.3	25	6.6
650	30	3,757	2.5	-10.7	25	7.7
600	30	4,400	-.9	-13.8	25	8.2
550	30	5,090	-5.0	-18.8	26	8.3
500	30	5,832	-9.9	-24.0	25	9.1
450	30	6,637	-15.2	-27.3	25	9.8
400	30	7,517	-21.4	-33.7	25	10.3
350	30	8,491	-28.6	-40.7	25	10.5
300	30	9,573	-37.2	-46.9	26	11.9
250	30	10,807	-47.2		26	13.0
200	30	12,248	[illegible]		27	13.3
175	29	13,062	-62.[illegible]		26	11.8
150	29	14,031	-63.0		27	9.4
125	29	15,152	-63.7		28	7.2
100	29	16,518	-64.2		30	4.9
80	29	17,885	-63.3		34	2.0
70	29	18,710	-61.4		05	2.4
60	29	19,669	-59.6		07	2.9
50	29	20,814	-57.8		09	5.2
40	28	22,231	-55.1		09	6.4
30	28	24,086	-50.9		09	7.4
25	28	25,280	-48.6		09	6.7
20	27	26,756	-45.8		08	7.3
15	25	28,679	-43.7		09	8.9
10	22	31,439	-39.3		10	10.2
7	14	33,895	-35.0		09	11.2
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	WASHINGTON DULLES INT. AP 1006 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	55	18.5	17.3	26	.3
1000	27	147	19.2	16.9	26	.8
950	30	565	19.9	14.3	25	2.6
900	30	1,049	17.7	11.5	28	3.3
850	30	1,536	14.9	7.8	27	4.4
800	30	2,047	11.8	3.7	26	5.2
750	30	2,584	8.6	-.2	26	6.0
700	30	3,152	5.4	-5.9	26	7.0
650	30	3,755	2.4	-10.8	25	7.5
600	30	4,397	-1.[illegible]	-14.1	26	8.6
550	30	5,087	-5.[illegible]	-19.3	26	9.9
500	30	5,827	-9.9	-24.4	26	10.6
450	30	6,634	-15.4	-29.3	26	10.8
400	30	7,512	-21.5	-35.2	25	11.3
350	30	8,486	-28.4	-42.0	25	12.6
300	30	9,570	-36.8	-47.9	25	13.5
250	30	10,806	-46.6		25	15.1
200	30	12,250	-57.2		26	14.9
175	30	13,088	-60.3		26	13.5
150	30	14,047	-61.2		27	10.4
125	30	15,177	-62.1		27	8.4
100	30	16,553	-63.1		29	6.1
80	30	17,927	-62.2		34	[illegible]
70	30	18,755	-60.4		04	2.4
60	30	19,721	-58.8		07	2.5
50	29	20,871	-56.6		09	4.3
40	29	22,294	-54.2		09	5.6
30	27	24,156	-50.4		08	6.9
25	26	25,349	-48.3		09	6.7
20	26	26,827	-45.9		08	7.0
15	23	28,750	-43.5		09	8.7
10	14	31,514	-38.8		10	11.5

Standard pressure surface (mb)	WAYCROSS, GA. 1011 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	44	21.5	20.8	21	.5
1000	30	127	22.4	20.5	20	1.3
950	30	565	21.6	17.6	22	2.4
900	31	1,054	19.2	14.0	22	1.9
850	30	1,543	16.1	10.3	24	1.5
800	31	2,057	13.2	7.1	25	1.4
750	31	2,598	10.0	3.4	25	2.0
700	31	3,159	6.8	-1.6	24	2.1
650	31	3,775	3.7	-7.3	25	2.6
600	31	4,421	.0	-9.3	25	2.8
550	31	5,113	-3.8	-14.4	25	3.3
500	31	5,860	-8.3	-21.3	26	4.3
450	30	6,671	-13.3	-26.1	26	4.5
400	30	7,557	-19.3	-32.8	26	4.3
350	29	8,539	-26.3	-38.7	27	5.4
300	29	9,631	-34.9	-46.8	27	6.2
250	29	10,976	-45.3		27	7.2
200	29	12,328	-56.5		28	8.3
175	29	13,166	-61.3		28	8.5
150	29	14,114	-64.1		30	7.9
125	29	15,228	-65.3		32	4.4
100	29	16,562	-67.2		36	2.5
80	28	17,928	-66.1		04	4.6
70	27	18,741	-63.5		07	4.7
60	27	19,653	-61.2		07	6.4
50	26	20,834	-59.0		08	8.9
40	26	22,248	-55.5		09	9.4
30	26	24,099	-51.5		09	10.1
25	25	25,268	-49.0		09	10.2
20	25	26,761	-46.8		08	11.0
15	23	28,694	-44.2		09	11.4
10	13	31,426	-40.4		09	15.2

Standard pressure surface (mb)	WINNEMUCCA, NEV. 870 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,312	10.6	1.2	17	.5
1000						
950						
900						
850	30	1,512	16.5	.2	30	.5
800	30	2,026	13.6	-1.9	28	2.1
750	30	2,566	9.7	-4.1	27	3.3
700	30	3,133	5.4	-7.4	25	5.2
650	30	3,735	1.2	-10.7	25	7.5
600	30	4,374	-3.1	-15.6	25	9.1
550	30	5,057	-7.4	-19.1	25	10.7
500	30	5,792	-12.5	-24.6	26	11.2
450	29	6,588	-17.9	-30.1	26	12.2
400	29	7,458	-24.3	-34.3	27	13.5
350	29	8,420	-31.5	-40.8	27	14.3
300	29	9,459	-40.1	-46.8	26	13.3
250	29	10,769	-49.3		27	13.6
200	28	12,155	-57.3		27	15.5
175	28	12,997	-58.6		27	17.2
150	28	13,964	-59.1		27	15.3
125	28	15,104	-60.0		26	12.5
100	27	16,465	-61.4		26	7.4
80	27	17,871	-60.5		24	3.0
70	27	18,705	-59.6		20	.8
60	27	19,671	-58.8		12	1.5
50	26	20,818	-57.4		09	3.1
40	26	22,236	-55.1		09	4.0
30	26	24,069	-51.5		09	6.4
25	24	25,272	-49.9		09	6.0
20	22	26,735	-47.2		04	6.8
15	15	28,649	-44.3		08	8.8
10	6	31,393	-37.9			

Standard pressure surface (mb)	WINSLOW, ARIZ. 852 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,487	12.1	.0	21	1.0
1000						
950						
900						
850	20	1,526	15.3	-1.5	23	.8
800	30	2,026	17.7	-.7	27	2.4
750	30	2,574	14.3	-3.8	28	3.0
700	30	3,152	9.6	-6.8	27	3.5
650	30	3,763	5.3	-8.7	27	4.1
600	30	4,411	.5	-12.7	27	4.5
550	30	5,102	-5.2	-16.4	26	5.5
500	30	5,843	-10.1	-24.2	26	6.1
450	30	6,647	-15.6	[illegible]	26	7.0
400	30	7,525	-22.0	-36.1	27	7.8
350	30	8,496	-29.4	-43.3	27	9.2
300	30	9,575	-37.9	-49.7	28	10.1
250	30	10,805	-47.4		27	11.8
200	30	12,251	-55.9		27	16.0
175	30	13,095	-58.8		27	14.9
150	30	14,058	-61.3		27	13.7
125	28	15,176	-64.2		27	11.1
100	27	16,530	-65.8		28	6.1
80	26	17,884	-65.1		30	1.2
70	26	18,703	-62.8		07	2.2
60	26	19,658	-61.0		09	3.5
50	26	20,797	-59.0		09	5.2
40	26	22,207	-55.5		09	6.6
30	26	24,057	-52.1		09	8.4
25	26	25,245	-49.5		09	8.3
20	24	26,714	-47.3		09	8.0
15	19	28,618	-44.2		09	8.5
10	5	31,323	-40.8			

Standard pressure surface (mb)	YAKUTAT, ALASKA 1012 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	12	6.9	5.7	11	.7
1000	30	107	7.9	5.8	12	1.0
950	30	529	6.0	2.8	14	2.2
900	30	970	3.5	-.2	14	3.3
850	30	1,432	.7	-2.6	13	3.8
800	30	1,917	-1.6	-5.5	13	3.9
750	30	2,429	-4.3	-9.4	13	4.2
700	30	2,970	-7.5	-12.3	13	4.7
650	30	3,543	-10.8	-15.3	13	5.1
600	30	4,155	-14.4	-19.7	13	5.1
550	30	4,809	-18.6	-25.4	13	6.3
500	30	5,513	-23.4	-31.7	13	6.7
450	29	6,278	-28.9	-36.1	13	8.2
400	29	7,110	-35.2	-42.6	13	9.2
350	28	8,033	-41.8	-43.1	13	10.8
300	28	9,058	-49.0		12	10.4
250	28	10,246	-51.1		12	6.2
200	27	11,712	-46.1		14	4.8
175	27	12,601	-45.6		14	4.2
150	27	13,628	-46.1		15	4.5
125	27	14,838	-46.9		15	3.6
100	27	16,314	-47.8		14	3.3
80	23	17,798	-48.7		14	3.0
70	23	18,676	-49.1		13	2.9
60	23	19,668	-49.2		12	3.4
50	23	20,863	-49.4		10	3.6
40	23	22,349	-48.4		10	4.0
30	23	24,250	-47.0		09	5.8
25	23	25,461	-45.7		09	6.6
20	23	26,954	-44.1		09	7.7
15	19	28,913	-40.6		09	9.2
10	12	31,697	-36.4			

Standard pressure surface (mb)	+ YAP, CAROLINE IS. 1008 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	14	26.4	24.9	10	3.2
1000	30	88	27.0	24.2	10	4.1
950	30	541	23.9	21.9	10	6.4
900	30	1,014	21.3	18.4	10	6.5
850	30	1,509	18.6	14.5	10	6.2
800	30	2,029	16.2	11.4	09	6.1
750	30	2,576	13.6	7.9	10	6.5
700	30	3,155	10.1	4.7	10	5.9
650	30	3,769	6.7	2.1	10	6.4
600	30	4,423	3.0	-2.2	09	6.4
550	30	5,124	-.9	-7.0	09	5.2
500	30	5,879	-5.2	-11.1	09	5.0
450	30	6,701	-9.7	-17.6	09	4.5
400	30	7,601	-15.2	-25.6	09	3.9
350	30	8,601	-21.7	-32.5	08	4.2
300	30	9,715	-30.2	-41.6	07	4.1
250	30	10,965	-40.5	-50.2	07	3.8
200	30	12,466	-52.7		06	4.0
175	30	13,315	-59.6		05	5.0
150	30	14,262	-67.0		05	6.7
125	30	15,344	-74.3		05	8.0
100	30	16,628	-77.8		07	8.5
80	30	17,912	-74.4		08	10.1
70	30	18,698	-70.1		08	9.5
60	30	19,623	-66.5		08	7.5
50	30	20,739	-62.4		08	7.5
40	30	22,129	-58.5		09	6.4
30	29	23,960	-53.0		08	6.3
25	28	25,141	-51.0		09	6.8
20	27	26,600	-48.6		10	9.2
15	23	28,504	-46.1		10	14.0
10	16	31,226	-42.2		10	18.7

Standard pressure surface (mb)	YUCCA FLAT, NEV. 880 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,198	13.6	-3.0	31	.2
1000						
950						
900						
850	30	1,494	21.1	-.5	30	.4
800	30	2,016	18.2	-3.0	21	2.4
750	30	2,565	14.2	-5.8	22	3.6
700	30	3,141	9.8	-8.8	22	4.2
650	30	3,751	4.8	-11.1	23	3.7
600	30	4,398	-.3	-14.7	23	3.8
550	30	5,067	-5.1	-19.7	25	5.0
500	30	5,829	-10.1	-25.3	26	6.2
450	30	6,633	-15.8	-30.7	26	8.2
400	30	7,509	-22.5	-36.4	27	9.5
350	30	8,478	-30.0	-43.1	26	10.5
300	30	9,554	-38.1	-49.4	26	12.3
250	29	10,779	-47.8		26	14.2
200	29	12,223	-56.1		27	15.6
175	29	13,067	-58.5		27	15.5
150	29	14,032	-60.3		27	13.1
125	29	15,164	-62.3		27	11.6
100	28	16,529	-64.1		27	7.6
80	28	17,896	-63.7		26	3.0
70	27	18,720	-62.2		14	.7
60	27	19,676	-60.8		09	2.3
50	27	20,815	-58.9		10	4.2
40	26	22,221	-56.3		09	5.2
30	26	24,063	-52.9		08	6.7
25	23	25,237	-50.8		08	6.8
20	23	26,699	-48.3		09	7.5
15	17	28,620	-45.3		09	8.6
10	14	31,367	-41.4			

Note: All observations scheduled at 1200 G.c.t. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 5° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes, dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G.c.t.

† Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the surface and higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun. JUNE 1973

ALBUQUERQUE, N. MEX.

Date	Sun's zenith distance								
	A.M.				•	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.19	3.35	2.51	1.67	•	1.67	2.51	3.35	4.19
June									
1-----	(0.86)	(0.97)	----	----	----	----	----	----	----
2-----	----	----	----	----	----	(1.14)	----	----	----
3-----	80	88	98	1.11	1.33	----	1.00	0.87	0.78
4-----	85	.92	----	1.18	----	----	----	----	----
5-----	89	97	1.08	1.21	1.41	1.19	1.06	96	.89
6-----	.91	97	1.08	1.22	1.41	1.19	----	----	----
7-----	86	92	1.03	1.17	1.33	1.15	1.02	.89	.82
8-----	86	93	1.05	1.18	1.35	----	----	----	----
9-----	.79	86	99	1.15	1.32	----	----	----	----
10----	79	84	98	1.12	1.32	----	----	----	----
11----	68	----	88	1.02	1.24	1.04	89	.77	.72
12----	----	81	95	1.12	1.32	----	----	----	----
14----	72	79	(.93)	1.11	1.33	1.09	.97	84	.76
15----	83	90	1.02	1.17	1.37	1.17	1.02	90	86
16----	82	92	1.06	1.18	1.39	1.21	1.07	95	89
17----	89	97	1.09	1.27	1.40	1.24	1.10	.98	.92
18----	94	1.01	1.12	1.23	1.39	----	----	.83	.75
19----	97	1.03	1.15	1.25	1.43	1.27	1.14	1.02	.93
20----	86	93	1.02	1.17	1.36	1.20	1.04	92	.82
21----	84	92	1.03	1.17	1.36	----	----	----	----
22----	82	89	1.01	1.15	1.35	1.09	97	81	.77
23----	77	85	97	1.12	1.33	(1.02)	(.87)	----	.75
24----	81	89	1.01	1.14	1.33	1.12	95	.82	.77
25----	78	86	1.00	(1.11	(1.29)	----	----	.85	.75
26----	79	86	99	1.13	1.28	1.08	.90	.77	.91
27----	74	82	96	1.12	1.30	1.05	----	----	----
28----	(75)	----	(.94)	----	1.30	----	----	----	----
29----	76	85	98	1.13	----	1.10	.91	.78	.71
30----	73	81	96	1.12	(1.19)	----	(83)	(69)	----
Averages	.82	0.90	1.02	1.16	1.35	1.15	1.00	0.87	0.81

OMAHA, NEBR

Date	Air mass								
	4.78	3.82	2.87	1.91	•	1.91	2.87	3.82	4.78
	NO DATA RECEIVED								

TUCSON, ARIZ.

Date	Sun's zenith distance								
	A.M.				•	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.56	3.65	2.74	1.83	•	1.83	2.74	3.65	4.56
June									
1-----	0.78	0.92	1.08	1.22	1.43	1.17	1.03	0.91	0.81
2-----	.82	92	1.05	1.21	1.40	----	1.08	.96	.86
3-----	69	.81	.96	1.14	1.37	1.22	1.06	.96	.86
4-----	.83	.93	1.03	1.20	1.43	1.23	1.07	97	.85
5-----	78	.89	1.02	1.15	1.36	----	----	----	----
6-----	.72	.83	.96	1.13	----	----	----	----	----
7-----	----	----	----	----	1.36	1.18	1.00	.91	83
8-----	.79	.90	1.03	1.16	1.37	1.16	1.03	.89	.78
9-----	.65	.76	.91	1.08	1.32	1.08	.87	76	59
10----	.51	.62	78	98	1.21	1.02	83	.72	64
11----	56	.67	.76	.93	1.18	----	----	----	----
14----	.91	1.01	1.11	1.26	1.43	1.23	1.07	.94	84
15----	94	1.03	1.13	1.28	1.46	1.24	1.06	94	.85
16----	.87	.96	1.09	1.26	1.45	1.27	1.11	1.01	92
17----	.85	96	1.06	1.22	1.40	1.24	1.11	1.03	95
18----	.87	96	1.07	1.24	1.40	1.26	1.09	99	89
19----	82	92	1.04	1.18	1.43	1.25	1.13	1.04	96
20----	89	98	1.08	1.22	1.35	----	----	----	----
21----	.61	69	84	1.06	1.37	1.15	98	87	.77
22----	89	98	1.10	1.25	1.42	1.16	1.00	87	79
23----	88	99	1.09	1.23	1.42	1.23	1.10	99	90
24----	82	.93	1.05	1.20	1.41	1.19	1.03	92	82
25----	----	.76	91	1.07	1.34	97	80	65	54
26----	----	----	.85	1.04	1.30	1.06	82	70	.60
27----	64	.76	.87	1.06	1.31	1.01	80	72	63
28----	----	.59	.71	.90	1.18	96	.76	66	53
29----	50	64	.77	96	1.21	93	.72	----	.46
Averages	0.77	0.86	0.97	1.14	1.36	1.15	0.98	0.88	0.77

MADISON, WIS

Date	Air mass								
	4.69	3.75	2.81	1.88	•	1.88	2.81	3.75	4.69
June									
2-----	----	----	----	H 0.72	----	----	----	----	----
6-----	----	----	----	1.06	----	----	----	----	----
9-----	0.76	0.87	0.94	1.14	1.31	S 1.09	S 0.88	----	----
10----	56	68	82	1.03	H 1.20	S 1.00	M .75	----	----
11----	S .59	S 67	S .80	M .92	M 1.15	----	----	----	----
13----	S .81	S 90	S 1.02	S 1.16	1.32	1.15	1.00	----	----
14----	----	----	----	----	----	1.02	82	----	----
21----	----	M .67	M .79	M .96	----	----	----	----	----
24----	----	----	----	----	S 1.19	----	----	----	----
Averages	0.68	0.76	0.87	1.00	0.97	1.07	0.86	----	----

( )	Cloud Present
•	Values corresponding to true solar noon
BD	Blowing Dust
BN	Blowing Sand
D	Dust
DI	Intense Dust
DM	Moderate Dust
DS	Slight Dust
F	Fog
GF	Ground Fog
H	Haze
HI	Intense Haze
HM	Moderate Haze
HS	Slight
I	Intense Haze-indeterminable
K	Smoke
KI	Intense Smoke
KM	Moderate Smoke
KS	Slight Smoke
M	Moderate Haze-indeterminable
N	Sand
S	Slight Haze-indeterminable

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

NET RADIATION

Net radiation in langleys per day (8 a m to 8 a m) at Palmer Alaska

JUNE 1973

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	141	129	256	241	247	198	272	120	173	116	298	171	223	176	104	200	217	105	126	191	284	140	141	130	212	189	232	280	289	298		197

The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp Station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (< 3900 A) at Ames Iowa

Date . . .	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .												14 62	23 77	17 18	13 65	15 23	24 25	11 82	24 25	17 30	18 18	20 72	[illegible]	23 28	12 19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

These data are from an -- Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder. This instrument has not been checked by the NOAA National Weather Service.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code [illegible] defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA"

Units Milli-atmo cms

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
														NO DATA RECEIVED																		

[illegible]

SOLAR RADIATION INTENSITIES– LATE REPORTS

Tabulated in langleys per minute on a surface normal to the direction of the sun.

Date	Sun's zenith distance								
	A M				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	MAUNA LOA OBSERVATORY, HAWAII								
	Air mass								
1973	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Jan.									
10-----	1.29	1.36	1.46	1.56	1.64	1.54	1.44	1.34	1.24
11-----	1.29	1.36	1.45	1.57	1.65	1.57	1.47	1.38	1.30
12-----	1.24	1.31	1.40	1.51	1.61	----	----	----	----
13-----	1.26	1.32	1.40	1.52	1.61	1.50	1.40	1.30	1.23
14-----	1.21	1.28	1.37	1.49	1.60	1.46	1.35	1.23	1.17
15-----	1.26	1.33	1.42	1.53	1.62	1.49	1.39	1.29	1.23
16-----	1.28	1.35	1.45	1.56	1.64	1.54	1.44	1.35	1.29
17-----	1.24	1.38	1.47	1.57	1.65	----	----	----	----
18-----	1.27	1.36	1.45	1.55	1.64	1.53	----	----	----
19-----	1.30	1.37	1.46	1.57	1.65	1.48	1.44	1.37	1.28
20-----	1.28	1.34	1.45	1.55	1.63	----	----	----	----
22-----	1.30	1.38	1.47	1.57	1.67	1.52	1.41	1.32	1.24
23-----	1.29	1.32	1.45	1.56	1.66	1.56	1.44	1.35	1.17
24-----	1.28	1.36	1.44	1.56	1.65	1.54	1.43	1.33	1.25
25-----	1.27	1.35	1.45	1.56	1.65	----	----	----	----
26-----	1.29	1.36	1.45	1.55	1.65	1.51	1.41	1.34	1.27
27-----	1.29	1.36	1.44	1.56	1.64	1.50	1.42	1.33	1.24
28-----	1.26	1.35	1.44	1.55	1.65	1.52	1.40	1.33	1.25
30-----	1.30	1.41	----	----	----	----	----	----	----
31-----	1.35	1.42	1.50	1.60	1.67	1.56	1.40	1.32	1.24
Averages	1.28	1.35	1.44	1.55	1.64	1.52	1.42	1.33	1.24

Date	Sun's zenith distance								
	A M				*	P M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	MAUNA LOA OBSERVATORY, HAWAII								
	Air mass								
1973	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Feb.									
4-----	1.32	1.39	1.48	1.57	1.65	----	----	----	----
5-----	1.27	1.35	1.45	1.56	1.65	1.52	1.42	1.35	1.27
6-----	1.28	1.36	1.46	1.56	1.64	1.50	1.39	1.31	1.16
7-----	1.31	1.37	1.47	1.56	1.62	----	----	----	----
8-----	1.24	1.31	1.41	1.54	1.64	1.50	1.41	1.32	1.25
10----	----	----	----	----	----	1.52	1.39	1.28	1.16
12----	1.25	1.35	1.44	1.55	1.65	----	----	----	----
13----	1.22	1.31	1.42	1.54	1.65	1.53	1.45	1.38	1.30
14----	1.24	1.33	1.43	1.55	1.65	----	----	----	----
15----	1.24	1.33	1.43	1.54	1.64	1.50	1.41	1.28	1.21
16----	1.23	1.34	1.44	1.53	1.62	1.49	1.43	1.29	1.22
17----	1.24	1.31	1.41	1.54	1.65	1.48	1.34	1.24	1.14
18----	1.25	1.32	1.43	1.55	1.63	1.49	1.36	1.26	1.18
21----	1.21	1.28	1.40	1.51	1.64	----	----	----	----
26----	1.20	1.29	1.39	1.54	1.63	----	----	----	----
27----	1.21	1.29	1.37	1.50	1.60	1.50	1.38	1.28	1.20
28----	1.21	1.29	1.39	1.51	1.63	1.50	1.38	1.31	1.24
Averages	1.25	1.33	1.43	1.54	1.64	1.50	1.40	1.30	1.21

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

FLOOD STAGE DATA –LATE REPORTS

River and Station	Flood Stage Ft.	Above Flood Stages dates From	To	Crest Stage Ft.	Crest Date
Ohio:					
Golconda, Ill.	40	Mar 21 May 3	Apr 5 May 10	45.7 42.6	Mar 27 May 6
Paducah, Ky.	39	Mar 18 Apr 23	Apr 20 May 15	47.49 43.97	Mar 27 May 8
Brookport, Ill. (Dam 52)	37	Mar 14	May 20	49.5	Mar 26
Grand Chain, Ill. (Dam 53)	42	Mar 12	May 22	55.4	Mar 26, Apr 1
Cairo, Ill.	40	Mar 11	Jun 15	55.8	Apr 2

STORM SUMMARY—LATE REPORTS

JUNE 1972	
Puerto Rico	TORNADOES: Number - 1; Days - 1 Damage - 4
FEBRUARY 1973	
Virginia	None Reported
West Virginia	None Reported
MARCH 1973	
Colorado	HEAVY SNOWSTORMS AND BLIZZARDS: Property - 3; Crops - 7
Virginia	None Reported
West Virginia	None Reported
APRIL 1973	
California	WINDSTORMS: Deaths - 2, Injuries - 5; Property - [illegible] Crops - [illegible].
Massachusetts	ALL OTHERS: Property - 3
New Hampshire	ALL OTHERS: Deaths - 1; Property - 6
New York (Coastal)	None Reported.
New York (Western)	WINDSTORMS: Property - [illegible]; LIGHTNING: Property - [illegible]. ALL OTHERS: Property - [illegible].
North Carolina	TORNADOES: Number - 2, Days - 1, Deaths - 1; Injuries - 1 Damage - 4
Ohio	WINDSTORMS: Property - 4 LIGHINING: Property - 1 HEAVY SNOWSTORMS AND BLIZZARDS Property - 3 ALL OTHERS: Property - 7; Crops - 4.
Pennsylvania	HAILSTORMS: Property - 1 LIGHTNING: Property - 2 ALL OTHERS: Property - 2
South Carolina	TORNADOES: Number - 1; Days - 1; Damage - 5 WINDSTORMS: Property - 3; Crops - 3 LIGHTNING: Property - 2 ALL OTHERS: Crops - 6.
Vermont	None Reported
Virginia	TORNADOES: Number - 1; Days - 1; Injuries - 37; Damage - 7.
West Virginia	None Reported

CORRECTIONS

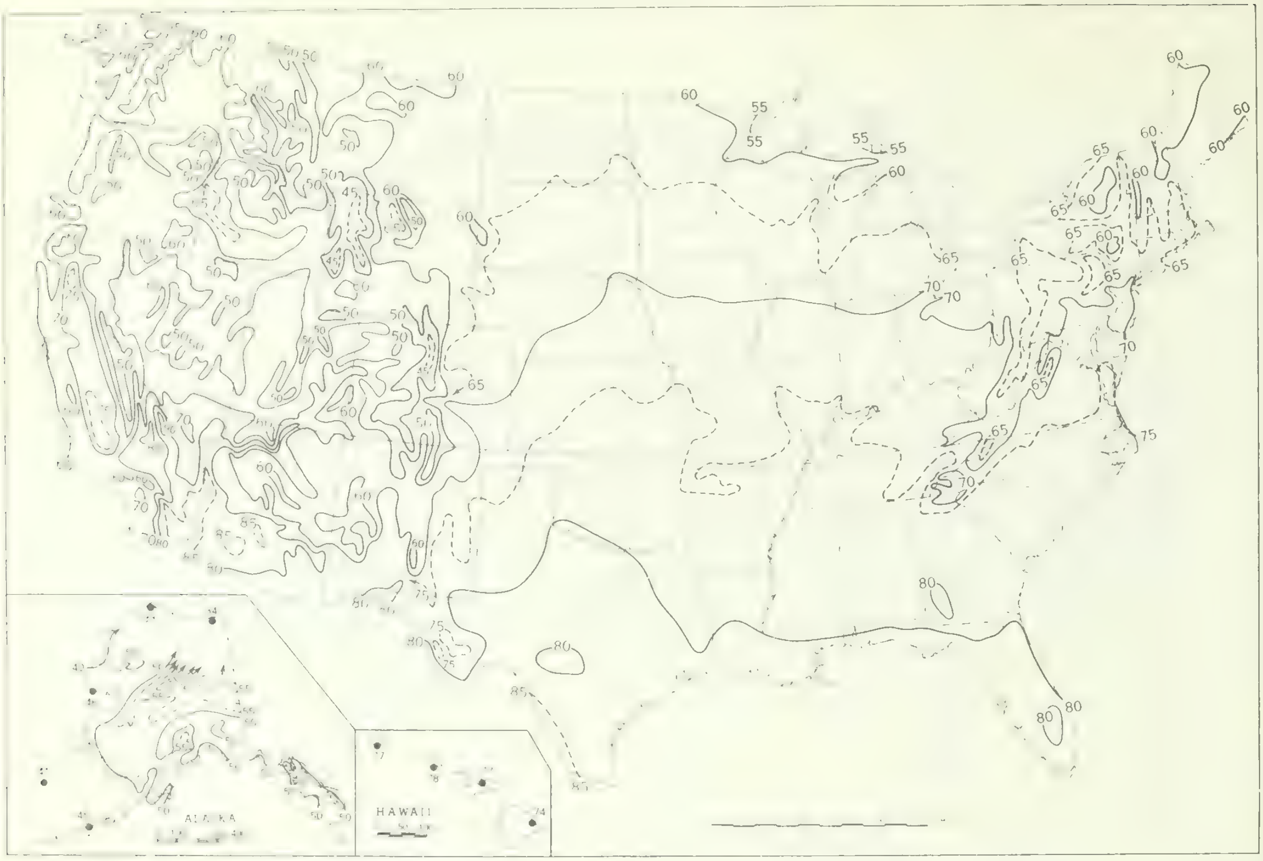
DATE	TABLE	STATE	CORRECTION
FEBRUARY 1972	STORM SUMMARY	FLORIDA	TORNADOES: Number of tornadoes should be 5.
FEBRUARY 1973	STORM SUMMARY	DELAWARE	DELETE ASTERISK (*) INSERT: NO STORM DATA REPORT RECEIVED FOR THIS STATE
FEBRUARY 1973	STORM SUMMARY	MARYLAND	DELETE ASTERISK * INSERT: NO STORM DATA REPORT RECEIVED FOR THIS STATE
FEBRUARY 1973	STORM SUMMARY	VIRGINIA	DELETE ASTERISK (*) INSERT: NO STORM DATA REPORT RECEIVED FOR THIS STATE
FEBRUARY 1973	STORM SUMMARY	WEST VIRGINIA	DELETE ASTERISK (*) INSERT NO STORM DATA REPORT RECEIVED FOR THIS STATE
MARCH 1973	STORM SUMMARY	COLORADO	DELETE ASTERISK (*) INSERT: NO STORM DATA REPORT RECEIVED FOR THIS STATE
MARCH 1973	STORM SUMMARY	DELAWARE	DELETE ASTERISK (*) INSERT NO STORM DATA REPORT RECEIVED FOR THIS STATE
MARCH 1973	STORM SUMMARY	MARYLAND	DELETE ASTERISK (*) INSERT NO STORM DATA REPORT RECEIVED FOR THIS STATE
MARCH 1973	STORM SUMMARY	VIRGINIA	DELETE ASTERISK (*) INSERT: NO STORM DATA REPORT RECEIVED FOR THIS STATE
MARCH 1973	STORM SUMMARY	WEST VIRGINIA	DELETE ASTERISK (*) INSERT: NO STORM DATA REPORT RECEIVED FOR THIS STATE
MAY 1973	STORM SUMMARY	NORTH CAROLINA	TORNADOES: Deaths - 0, ALL OTHERS. Deaths 13

HEATING DEGREE DAYS

NEBRASKA

Lincoln	Total for July, August, and September 1972 was published as 131 - should be 116.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), June.


60
55
65
70
75
80
85
50
45
ALASKA
HAWAII

B. Temperature Departure from 30 - Year Mean (°F 1931-60), June 1973

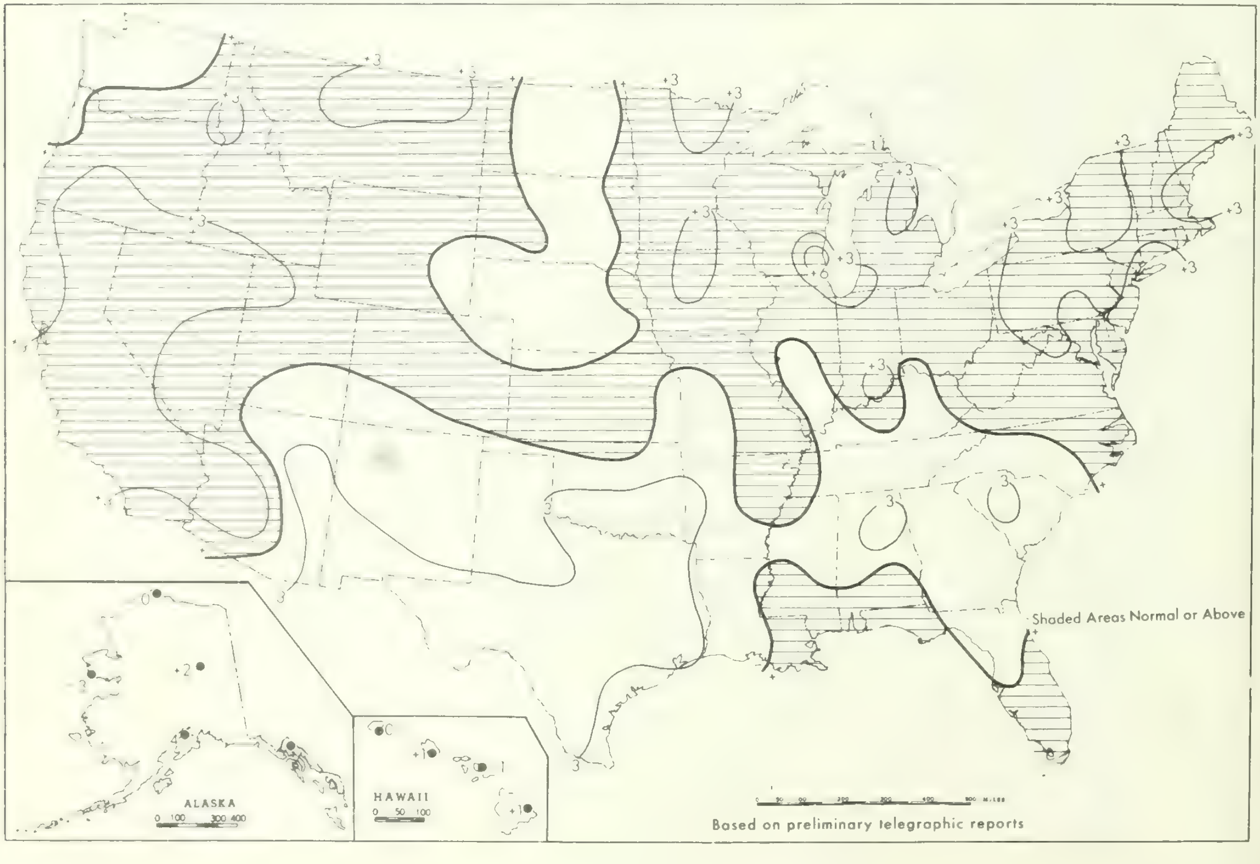
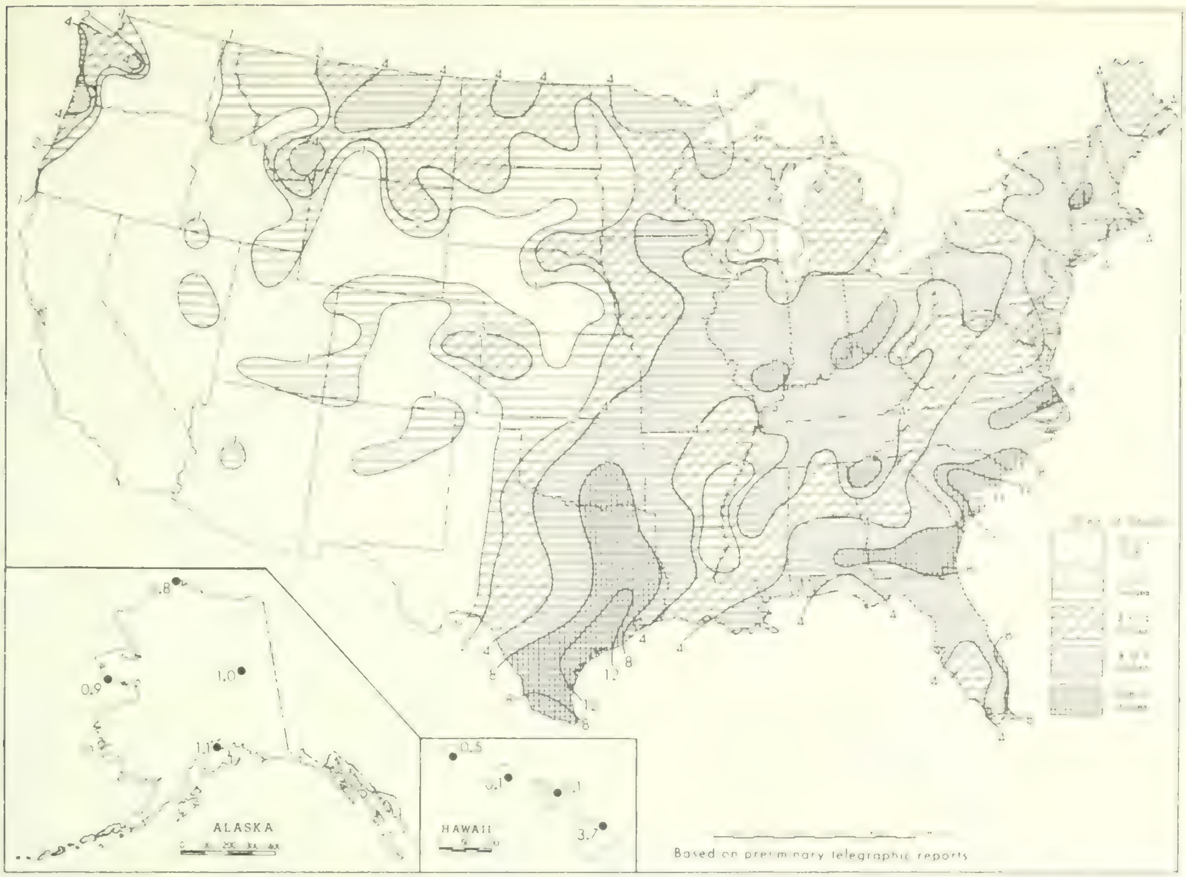
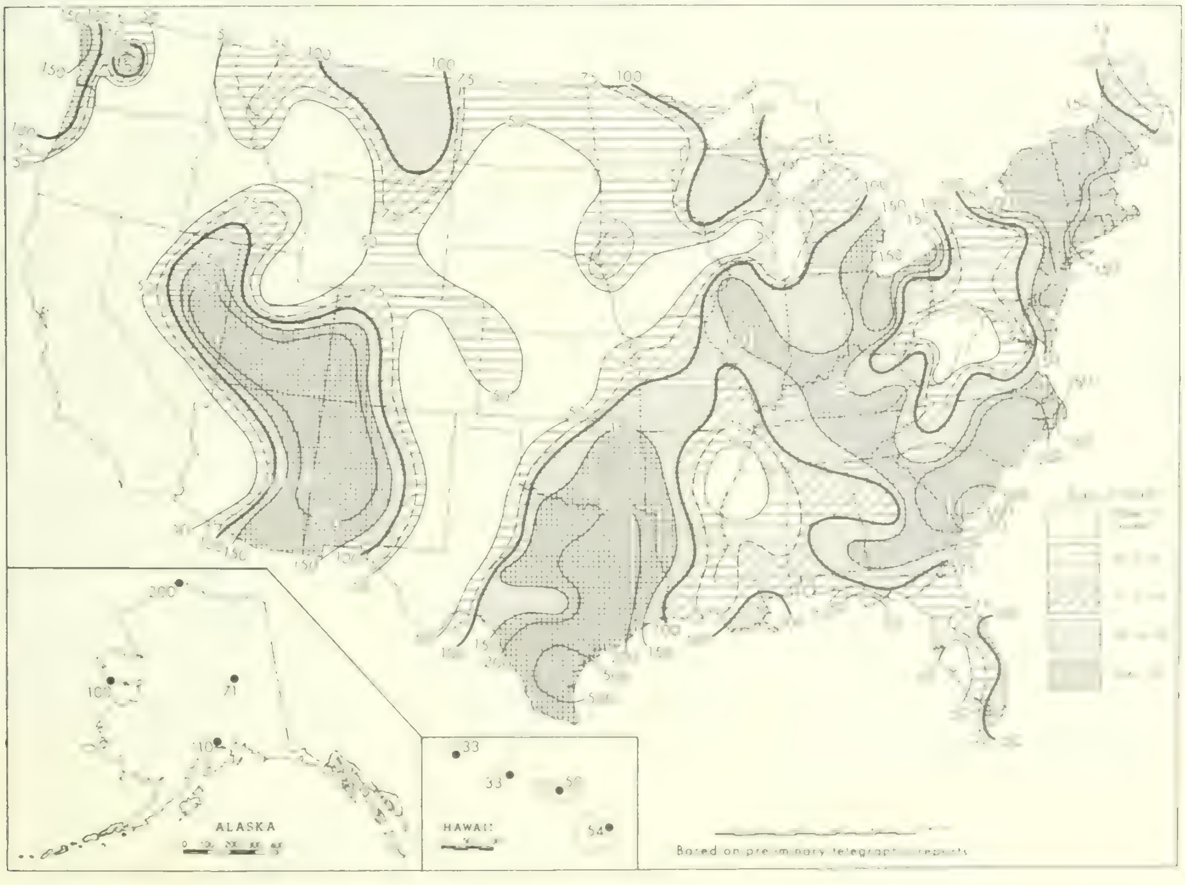

+3
+6
3
Shaded Areas Normal or Above
ALASKA
0 100 300 400
HAWAII
0 50 100
+2
+1
Based on preliminary telegraphic reports

Chart II. A. Total Precipitation (Inches), June 1973



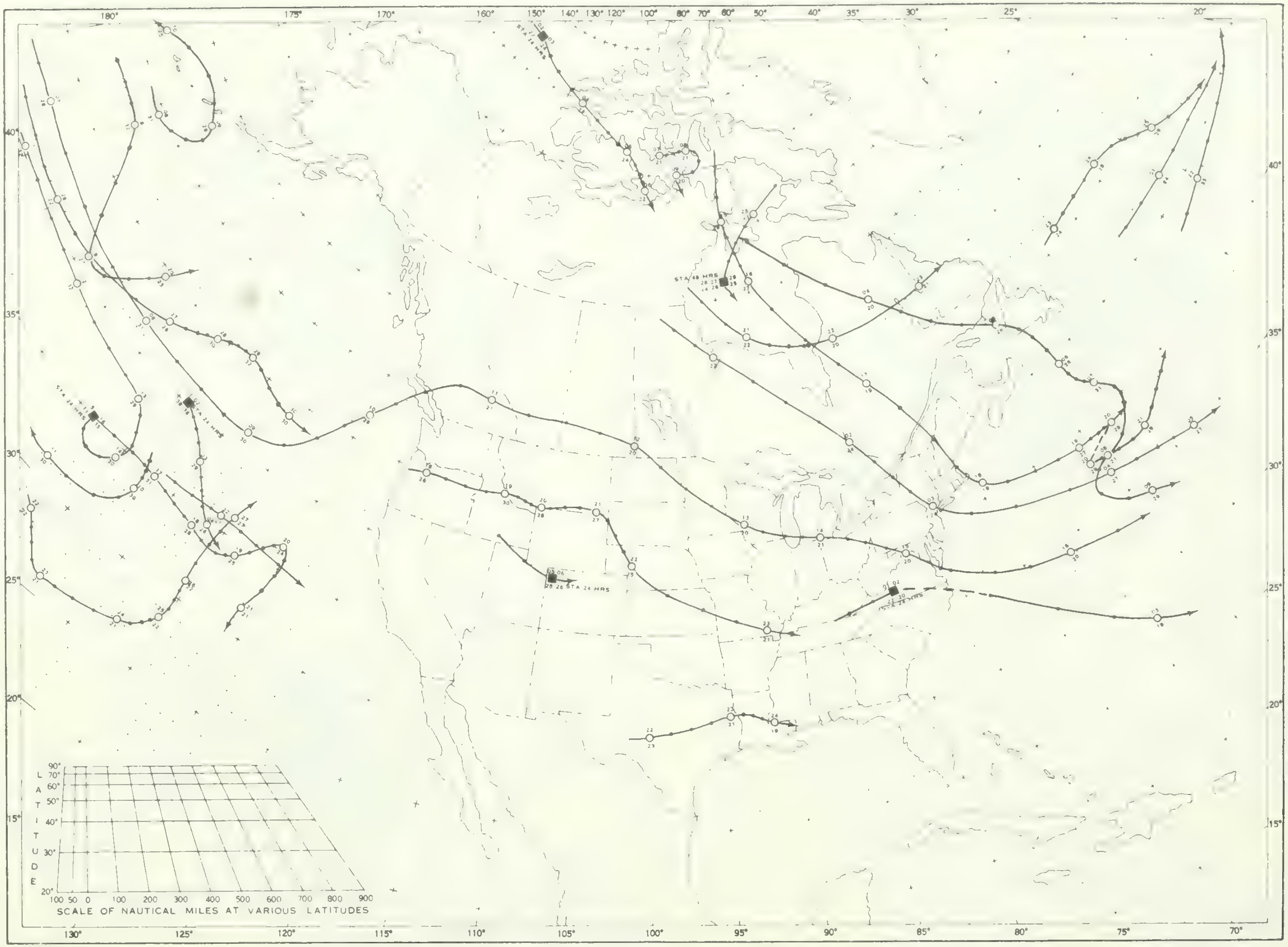
.8
1.0
0.9
1.1
ALASKA
0.5
0.1
.1
3.7
HAWAII
4
8
12
Based on preliminary telegraphic reports

B. Percentage of Normal Precipitation, June 1973



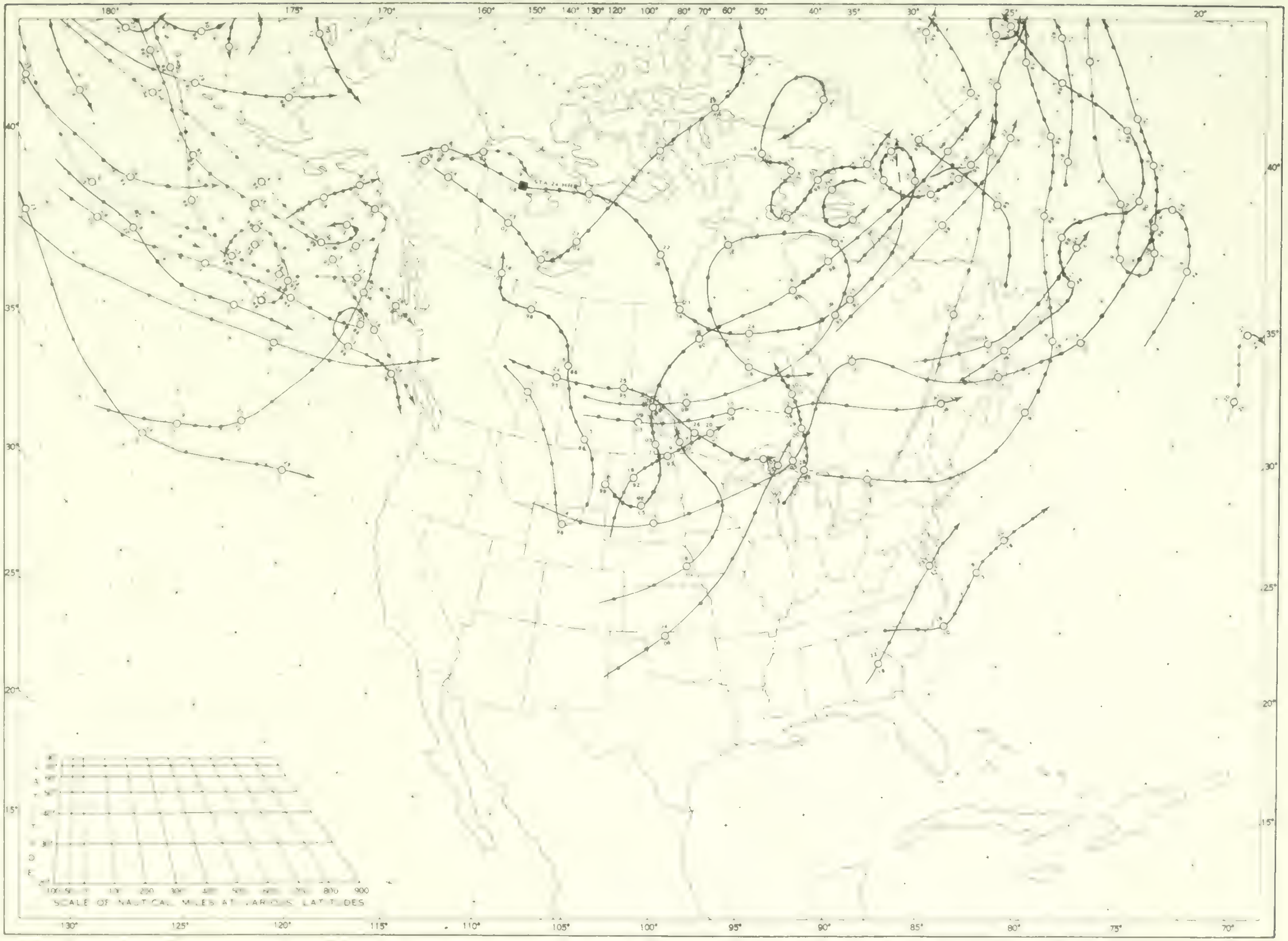
150
100
75
50
200
100
71
ALASKA
33
33
50
54
HAWAII
Based on preliminary telegraphic reports

Chart III. Tracks of Centers of Anticyclones at Sea Level, June 1973


STA 48 HRS
STA 24 HRS
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES
LATITUDE
100 50 0 100 200 300 400 500 600 700 800 900
180° 175° 170° 160° 150° 140° 130° 120° 100° 80° 70° 60° 50° 40° 35° 30° 25° 20°
130° 125° 120° 115° 110° 105° 100° 95° 90° 85° 80° 75° 70°
40° 35° 30° 25° 20° 15°

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation **at new position**. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, June 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
40°
35°
30°
25°
20°
15°
STA 24 HRS
100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

MAY 15 1974

JULY
1973
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No. 7
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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

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I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina 28801.

William H. Haggard
Director, National Climatic Center

CLIMATOLOGICAL DATA

NATIONAL SUMMARY
JULY 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

Dr. Richard E. Felch, Climatologist

HIGHLIGHTS:

1. July was cooler than normal in the Midsection, and generally warmer than usual in the East and West.

2. Precipitation was mostly above normal between the Rockies and the Appalachians, with the West almost completely dry.

TEMPERATURE--Temperatures over the Nation as a whole were about normal in July, with cooler than normal conditions in the Nation's midsection and above normal temperatures to the east and to the west. The month began with a traditionally hot week of the Fourth. Independence Day itself was hot and clear in most parts of the Nation, except where thunderstorm activity occurred locally. Temperatures for the week averaged 3° to 6° above normal over much of the Nation. The remainder of the month was generally below normal over the Rockies and Great Plains, with above normal temperatures confined to the West and eastern parts of the Country. Several record highs and lows were recorded as large variations in temperature occurred. On the 10th the Atlantic City Airport recorded a record 92°, and Great Falls, Mont., hit 105°. Just two days later record lows were observed in these same areas as a large high brought cool air to the Nation's midsection. Record lows on the 12th included Bradford, Pa., 33°, Baltimore, Md., 54°, El Paso, Tex., 59°, and Cleveland, Ohio, 48°. The same distribution of temperatures occurred through mid-July. Temperatures averaged 6° to 9° below normal over a six-state area during the week ending the 22d. Above-normal temperatures continued to plague the droughty Northwest, which received virtually no July rainfall.

PRECIPITATION--Precipitation was generally above normal from the Rockies to the Applachians, with virtually no precipitation to the West and generally below normal precipitation along the eastern seaboard. Actual totals ranged from nothing over much of the western third to over 8 inches in parts of Iowa, Missouri, and Kansas. The first week of July was on the dry side, but heavy thunderstorms in some areas produced heavy rains and violent weather. On the 2d, 16 tornadoes struck South Dakota, Minnesota, and Nebraska. Hailstones 1 inch in diameter and winds up to 100 m.p.h. also struck Nebraska. The heaviest rains of the month came at midmonth. Along the Kansas-Nebraska border 6 inches or more fell, with an area stretching from Wyoming to the Appalachians receiving 2 inches or more. This heavy moisture was triggered by thunderstorm activity along a cold front extending from a low located over the Hudson Bay. Thunderstorm activity continued to be the major source of rainfall as the month ended. Scattered but intense thundershowers struck from the Rockies to the East Coast. Heavy rains struck Appalachia and the Deep South on the 26th. Millington, Tenn., received 2.01 inches in an hour, Chattanooga had 1.99 inches of rain, while Macomb, Miss., got 1.44 inches. The Pacific Northwest continued to be very dry. Rainfall has been below normal for well over a year in many areas.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

JULY 1973

STATE	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Enterprise	102	17	Waterloo	52	12	Gorgas	11.67	Wadley	.76
Alaska	2 Stations	87	22+	Anaktuvuk Pass	20	22	Mac Leod Harbor	11.91	Eklutna Lake	.03
Arizona	Willow Beach	123	10+	Fort Valley	27	22	Palisade R S	7.46	13 Stations	.00
Arkansas	Newport	104	4	2 Stations	53	14+	Malvern	12.20	Clarksville	.17
California	Death Valley	124	6	Termo	23	1	Mount Hebron R S	1.06	417 Stations	.00
Colorado	3 Stations	109	7+	Hermit 7 ESE	23	23	Karval	8.53	Uravan	.34
Connecticut	Hartford WSO AP	96	14	Falls Village	41	13	Stamford 5 N	7.29	Hartford WSO AP	1.77
Delaware	Milford 2 WSW	96	9	2 Stations	53	13+	Middletown 1 WSW	6.14	Milford 2 WSW	1.38
Florida	3 Stations	99	15+	2 Stations	61	5+	Myakka River St Park	19.34	Miami Beach	1.31
Georgia	Colquitt 2 E	100	19+	Blairsville Exp Sta	55	30	La Grange	10.03	Carnesville 3 N	1.16
Hawaii	Keawakapu Beach 260.2,Maui	94	2	Mauna Loa Slope Obs, Hawaii	34	10	Mount Waialeale 1047,Kauai	20.01	20 Stations	.00
Idaho	Bruneau	111	10	Elk City	23	2	Henry	3.71	7 Stations	.00
Illinois	Harrisburg	99	3	2 Stations	48	16	Decatur	11.37	Mount Vernon	.99
Indiana	2 Stations	98	13+	Culver Experiment Farm	44	16	Bowling Green 3 NE	11.27	Vincennes 1 NW	1.30
Iowa	Fort Madison	100	10	Vinton	48	16	Carroll 2 SSW	14.31	Dorchester	.90
Kansas	2 Stations	111	6+	Syracuse 2 W	46	15	Hiawatha	14.64	Norwich	1.28
Kentucky	Gilbertsville Ky Dam	98	22+	Vanceburg	47	13	Bernheim Forest	12.14	Hopkinsville	1.58
Louisiana	2 Stations	101	21+	Chatham	57	13	Greenwood Fire Tower	11.87	Oak Grove	.46
Maine	Saco	98	8	2 Stations	40	23+	Bridgewater	9.21	Portland WSO AP	1.70
Maryland	Boonsboro 1 NE	104	9	Oakland 1 SE	42	12	Rockville 3 NE	7.60	Hancock Fruit Lab	1.00
Massachusetts	Chester 2	99	9+	Chester 2	34	13	Chatham WSMO	9.05	Petersham 3 N	1.86
Michigan	Marquette WSO CI	98	7	2 Stations	34	16	Ypsilanti East Mich U	7.90	Caro	.75
Minnesota	2 Stations	99	13+	Tower 3 S	32	15	Walker AH Gwah Ching	7.72	Halstad	1.29
Mississippi	3 Stations	99	31+	University	54	12	Philadelphia 1 WSW	11.67	Canton	1.20
Missouri	3 Stations	102	21+	2 Stations	51	17+	Fairfax	11.92	Qulin	1.21
Montana	Hardin	106	11	2 Stations	25	29+	Westby	2.85	7 Stations	.00
Nebraska	Beaver City	112	6	3 Stations	40	16+	Harlan County Lake	9.67	Whitman 24 N	1.08
Nevada	Sunrise Manr Las Vegas	118	5	3 Stations	30	2	Knoll Creek Field Sta	3.37	11 Stations	.00
New Hampshire	Conway 1 N	97	8	Mount Washington	31	12	Wonalancet	7.58	Concord WSO AP	1.05
New Jersey	3 Stations	98	10+	Charlotteburg	48	13	Long Valley	6.74	Millville FAA AP	1.48
New Mexico	2 Stations	108	1	Sandia Crest	21	26	Gage 4 ESE	8.19	Alcalde	.46
New York	2 Stations	99	9+	2 Stations	36	12	Greenport Power House	7.89	Watertown FAA AP	.46
North Carolina	4 Stations	97	23+	Grandfather Mountain	43	1	Wilmington 7 N	12.96	Wilbar 2 NW	.52
North Dakota	2 Stations	111	12+	Edmore 1 N	37	15	Abercrombie	4.71	Beach	.17
Ohio	Columbus Sullivant Ave	99	14	Dorset	41	12	Milford Water Works	9.07	Dorset	1.15
Oklahoma	Wichita Mt WL Ref	109	5	Kenton	49	14	Smithville 1 W	10.38	Eufaula	.17
Oregon	Ontario KSRV	110	10	2 Stations	21	1	Pine Mtn Observatory	1.21	30 Stations	.00
Pennsylvania	2 Stations	98	9+	Bradford FAA AP	33	12	Bradford FAA AP	6.45	Everett 1 SW	.68
Puerto Rico	2 Stations	96	14+	Adjuntas Substation, P.R.	56	25	San Sebastian 2 WNW, P.R.	12.71	Ensenada, P.R.	.37
Rhode Island	Providence WSO AP	94	9+	Kingston	46	13	Newport	6.47	North Scituate 4 W	2.62
South Carolina	Columbia WSO AP	99	30	2 Stations	57	19+	Marion	8.77	Camden 2 WSW	.45
South Dakota	Delrichs	114	6	Pactola Dam	35	14	Wewela	4.67	Selby	.20
Tennessee	Waynesboro	101	25	Mountain City No 2	44	13	Livingston Radio WLIV	11.78	Milan	1.20
Texas	Ysleta	111	1	Dalhart FAA AP	52	15	Spring Branch	12.31	Point Comfort	.00
Utah	2 Stations	110	11+	Hardware Ranch	31	[illegible]	Ferron	3.47	2 Stations	.00
Vermont	Saint Johnsbury	97	8	Mount Mansfield	38	12	Mount Mansfield	6.94	Manchester Center	1.71
Virginia	2 Stations	98	23+	2 Stations	44	12	Abingdon 3 S	10.83	Tangier Island	1.09
Washington	Lower Granite Dam Near	110	30	Satus Pass 2 SSW	27	1	Quinault Ranger Sta	2.21	23 Stations	.00
West Virginia	Martinsburg FAA AP	98	13	Seneca State Forest	39	12	Spencer	8.85	Berkeley Springs	1.00
Wisconsin	Crivitz High Falls	100	8	Drummond 6 W	35	15	Winter 6 NNW	7.76	Germantown	.69
Wyoming	Yoder	109	6	2 Stations	23	2	Phillips	6.42	Dixon	.42

+ And also on an earlier date or dates.

NOTE: Dates in the above table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA
METRIC UNITS

JULY 1973

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Ice pellets				Fastest mile (1 6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32 2 °C or above	Min 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
ALABAMA	M.	Mb	Mb	C.	C	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
BIRMINGHAM	189	994.2	1016.4	31.4	21.2	26.3	- 1.2	34.4	23	16.7	12	10	0	21.7	80	212	81	35	18	20	0	0	0.4	6	14.8	NE	4	1	14	16	7.2	61
HUNTSVILLE	190	993.6	1016.3	31.0	21.7	26.3	- 0.9	33.3	23	17.2	12	12	0	22.2	81	240	132	40	17	14	0	0	0.7	15	13.4	22	1	6	14	11	6.2	
MOBILE	64	1008.1	1015.9	33.9	23.9	28.9	1.4	36.1	17+	22.2	4+	27	0	22.8	75	158	- 87	39	16	21	0	0	0.1	22	13.0	1	10	5	14	12	6.6	
MONTGOMERY	56	1008.8	1016.1	33.6	22.6	28.1	0.4	35.0	29+	20.6	8	28	0	21.7	74	200	63	99	11	11	0	0	0.2	28	15.2	SW	6	3	19	9	6.2	52
ALASKA												8															8					
ANCHORAGE	35	1010.5	1015.3	18.1	10.5	14.3	- 0.2	21.7	20+	7.8	16	4	0	9.4	73	15	- 32	10	8	0	0	0	1.4	20	10.3	14	16	5	9	17	7.4	55
ANNETTE	34	1015.6	1019.5	16.1	9.0	12.6	- 1.5	23.3	17	4.4	6	3	0	7.8	76	139	- 14	35	18	0	[illegible]	0	1.3	16	8.9	16	13	2	8	21	8.1	
BARROW	9	1008.5	1009.2	8.1	0.4	4.3	0.3	18.3	26	- 2.2	8	0	18	2.2	98	27	7	6	18	0	28	T	1.7	22	14.8	19	26	4	5	22	7.9	
BARTER ISLAND	12	1008.8	1010.7	8.9	0.9	4.9	- 0.3	19.4	24	- 4.4	22	0	14	3.3	90	10	- 12	6	9	0	T	T	0.8	6	15.6	27	20	0	9	22	8.1	
BETHEL	38	1008.5	1014.2	16.2	7.5	11.8	- 0.8	21.1	16	4.4	20	1	0	7.2	75	26	- 25	11	9	0	0	0	1.7	24	16.1	19	25	1	9	21	8.3	
BETTLES	196			18.9	8.3	13.6		26.1	1	1.1	20	10	0			30		19	9	1	0	0			12.5	24	11	2	11	18	7.6	
BIG DELTA	386			20.6	10.3	15.4		27.8	25	8.3	31+	14	0			90			17	1	0											
COLD BAY	29	1010.8	1014.4	10.8	6.4	8.6	- 1.2	13.3	14	2.2	19	0	0	7.2	94	33	- 13	12	15	0	0	0	1.2	20	23.7	15	25	0	0	31	9.9	
FAIRBANKS	133	995.3	1012.0	21.4	11.9	16.7	1.3	28.9	25	9.4	22+	19	0	9.4	67	49	2	18	14	5	0	0	1.6	24	9.4	28	14	3	3	25	8.1	
GULKANA	479			20.1	7.6	13.9		26.1	24+	3.9	6	11	0			42		23	10	1	0	0			11.6	18	11					
HOMER	20			15.5	7.1	11.3		18.9	9	4.4	31+	0	0			8	- 37	3	7	0	0	0			7.6	15	26+	4	9	18	7.2	
JUNEAU	4	1017.6	1018.3	15.8	8.3	12.1	- 0.9	20.6	27+	5.0	17	0	0	8.9	85	93	- 21	24	22	0	0	0	0.9	9	10.3	12	12	0	2	29	9.5	16
KING SALMON	15	1011.9	1014.0	17.2	9.0	13.1	0.4	22.8	24	3.9	9	3	0	7.8	73	62	9	23	14	1	0	0	1.3	18	16.5	17	25	0	4	27	9.1	
KODIAK	34	1011.2	1015.4	12.5	7.9	10.2	- 2.1	21.1	7	3.3	3+	1	0	7.8	88	154	64	40	20	0	0	0	2.1	6	11.6	5	12	2	7	22	8.2	
KOTZEBUE	3			12.5	6.6	9.6	- 1.9	17.2	22	2.2	12	0	0			44	7	12	10	0	0	0			15.6	16	26+					
MC GRATH	105	1000.7	1013.1	19.6	8.9	14.3	- 0.6	26.7	21	4.4	30+	14	0	7.2	67	25	- 37	6	14	5	0	0	1.1	23	11.2	21	25	1	2	28	9.2	
NOME	4	1010.8	1011.7	10.3	4.6	7.5	- 2.2	19.4	3	- 0.6	28+	0	2	5.6	85	53	- 5	25	11	0	0	0	2.7	24	15.6	24	26	3	6	22	9.1	43
ST. PAUL ISLAND	7	1013.5	1014.4	8.9	4.7	6.8	- 0.7	12.8	23	1.7	27	0	0	5.6	93	30	- 27	12	10	0	0	0	1.1	24	17.4	18	[illegible]	0	4	27	9.3	
SUMMIT	732			14.6	6.7	10.7		20.0	24	4.4	13+	0	0			37		10	16	0	0	0			12.5	23	11	0	5	26	8.9	
TALKEETNA	105			19.6	8.7	14.2	- 0.2	23.3	24+	3.9	16	12	0			40	- 41	11	11	3	0	0			8.9	15	19+					
UNALAKLEET	5			14.4	7.8	11.1		21.7	10	2.2	[illegible]														16.5	24	26					
YAKUTAT	9	1016.9	1018.0	14.0	8.3	11.2	- 1.1	18.3	27	3.3	16	0	0	9.4	87	187	- 27	33	21	0	0	0	0.8	12	9.4	11	12	0	2	29	9.5	
ARIZONA																																
FLAGSTAFF	2135	791.4	1015.4	28.1	9.3	18.7	0.1	36.1	5	3.9	23+	4	0	7.2	55	47	- 10	19	13	16	0	0	0.9	22	10.3	NW	27	12	16	3	4.1	72
PHOENIX	340	970.9	1008.4	41.4	26.9	34.2	2.1	46.1	2	20.6	22	31	0	12.2	29	33	13	32	3	5	0	0	0.3	24	[illegible]	SW	12	19	8	4	3.0	[illegible]
TUCSON	788	923.5	1009.6	36.3	21.8	29.1	- 1.1	41.7	5+	17.2	22	26	0	12.8	42	44	- 8	14	10	12	0	0	1.3	20	17.0	SW	11	14	8	9	4.5	[illegible]
WINSLOW	1492	852.7	1012.6	33.9	14.8	24.3	- 2.4	39.4	5	8.9	25	26	0	7.8	41	10	- 16	5	5	4	0	0	1.2	23	13.0	25	12	16	10	5	4.0	
YUMA	59	1001.0	1008.1	41.2	26.2	33.7	- 0.1	45.0	10	21.1	21	31	0	13.9	33	T	- 6	T	0	0	0	0	2.8	17	14.3	E	27	24	6	1	3.0	89
ARKANSAS																																
FORT SMITH	136	998.6	1014.8	32.3	21.1	26.7	- 1.6	34.4	27+	16.1	13	18	0	20.6	73	39	- 32	14	9	8	0	0	0.2	14	11.2	N	4	5	17	9	5.6	71
LITTLE ROCK	78	1005.8	1015.1	32.3	22.2	27.3	- 0.4	35.0	28+	15.6	13	19	0	21.7	74	167	83	70	13	9	0	[illegible]	1.2	21	16.5	SW	4	4	15	12	6.3	[illegible]
CALIFORNIA																																
BAKERSFIELD	145	994.2	1011.5	37.4	21.4	29.4	0.4	42.8	26	15.0	21	29	0	11.1	35	0	0	0	0	0	0	0	2.1	33	8.9	33	6	30	1	0	0.4	
BISHOP	1252	873.0		36.8	13.4	25.1	0.3	41.1	4	9.4	3+	31	0			0	- 3	0	0		0	0										
BLUE CANYON	1609	841.9		26.3	15.8	21.1	1.1	31.1	26	11.1	22	0	0			1	- 1	1	1		0	0	1.6	23	7.6	21	6	31	0	0	0.7	
EUREKA U	13			15.4	10.7	13.1	- 0.4	17.8	8	7.8	1	0	0			T	- 3	T	0		0	0			11.6	N	10	11	8	12	5.7	53
FRESNO	100	999.7	1011.2	36.3	17.4	26.9	- 0.5	41.1	26	13.3	24+	29	0	12.8	45	0	0	0	0	0	0	0	1.9	29	8.9	NW	30	30	1	0	0.5	99
LONG BEACH	8	1012.2	1013.7	27.2	18.3	22.8	0.8	32.8	2	16.7	21+	3	0	13.9	63	T	0	T	0	0	0	0	1.3	20	7.2	20	15	11	18	2	4.0	
LOS ANGELES	30	1009.5	1013.2	23.5	16.4	20.0	- 0.6	30.6	3	14.4	24+	0	0	15.6	79	0	[illegible]	0	0	0	0	0	2.5	24	10.3Y	SW	[illegible]	8	16	7	5.1	
LOS ANGELES U	82			27.6	17.3	22.4	- 0.3	37.8	3	15.0	21	4	0			0	0	0	0		0	0			6.7	SW	13	18	13	0	3.0	90
MT SHASTA R	1080			31.5	11.9	21.7	1.7	36.1	27+	2.8	1	15	0			1	- 7	1	2		0	0										
OAKLAND	2	1014.9	1015.1	21.9	13.4	17.7	- 0.3	33.3	25	11.1	1	1	0	12.8	79	T	0	T	0	0	0	0	3.6	29	11.3	32	13	25	5	1	2.1	
RED BLUFF	104	999.0	1011.2	37.3	18.9	28.1	- 0.7	43.9	25	12.8	20	30	0	10.6	37	0	- 1	0	0	1	0	0	1.0	16	9.8	NW	4	29	2	0	0.7	98
SACRAMENTO	5	1010.8	1011.8	34.9	14.8	24.9	0.8	41.7	4	11.1	1	23	0	10.6	48	0	0	0	0	0	0	0	3.2	20	8.9	SW	30+	28	3	0	0.5	100
SANDBERG R	1377	864.2		29.3	17.0	23.2	- 0.4	36.7	25	10.0	21	7	0	5.6	36	0	- 1	0	0		0	0	2.3	31	13.9	33	24+	29	2	0	0.6	
SAN DIEGO	4	1012.5	1013.5	23.5	17.7	20.6	- 0.6	26.7	3	16.7	26+	0	0	14.4	73	T	0	T	0	0	0	0	2.0	26	8.0	W	2	8	14	9	5.7	54
SAN FRANCISCO	2	1014.6	1015.1	21.6	11.8	16.7	- 0.3	32.8	25	10.0	4+	1	0	10.6	74	T	[illegible]	T	0	0	0	0	4.7	29	13.4	27	5	25	3	3	1.8	
SAN FRANCISCO U	16			17.9	11.6	14.8	- 0.1	27.8	26+	10.0	10+	0	0			0	[illegible]	0	0		0	0										66
SANTA MARIA	72			22.3	10.8	16.6	- 0.2	30.6	25	7.2	9	0	0			T	- 1	T	0		0	0						19	12	0	3.3	
STOCKTON	7	1011.2	1012.1	34.3	15.4	24.9	- 0.8	41.1	26	12.2	21+	22	0	11.1	48	0	0	0	0	0	0	0	3.5	[illegible]	10.3	26	6	30	1	0	0.4	
COLORADO																																
ALAMOSA	2297	776.5		26.7	8.2	17.4	- 0.8	32.2	2	2.8	23	1	0			28	1	11	12		0	0						9	16	6	4.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

JULY 1973

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile (1.6 kilometers): Direction	Wind: Fastest mile (1.6 kilometers): Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	°C.	C.	C.	C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
COLORADO																																
COLORADO SPRINGS	1873	815.4	1015.4	27.1	13.4	20.2	-1.2	36.1	6	9.4	15	6	0	7.8	50	84	24	26	15	16	0	0	1.4	3	14.3	29	29	12	12	7	4.6	
DENVER	1610	839.5	1014.0	29.8	13.4	21.7	-1.1	39.4	6	8.9	15	10	0	8.3	49	63	24	27	15	12	0	0	0.4	18	19.2	N	24	10	12	9	5.5	68
GRAND JUNCTION	1476	853.0	1011.5	33.6	17.6	25.6	-0.1	39.4	6	13.3	23	22	0	6.1	33	13	-1	8	4	7	0	0	0.9	13	17.0	NW	6	14	11	6	4.1	76
PUEBLO	1428	857.4	1013.1	32.4	15.7	24.1	-0.7	40.6	6	10.6	15	18	0	11.7	54	82	36	25	17	12	0	0	0.9	5	23.2	NW	7	11	13	7	4.6	82
CONNECTICUT																																
BRIDGEPORT	2	1014.9	1015.6	28.2	19.8	24.0	0.8	33.9	9	14.4	13	3	0	18.3	72	166	71	54	7	5	0	0	1.8	23	17.9	29	5	10	11	10	5.5	
HARTFORD	52	1008.1	1014.7	30.2	17.6	23.9	0.9	35.6	14	10.6	13	10	0	16.7	66	45	-47	15	9	4	0	0	1.3	22	10.3	SW	13	7	11	13	6.3	68
DELAWARE																																
WILMINGTON	23	1012.5	1015.6	30.4	20.8	25.6	1.2	34.4	14+	13.9	12	7	0	19.4	70	72	-36	30	6	3	0	0	1.4	24	7.6	24	26+	11	11	9	5.5	
DIST.OF COLUMBIA																																
WASHINGTON DULLES	88	1004.4	1015.9	30.4	18.3	24.4		33.9	14+	11.1	12	10	0	18.9	74	127		36	12	7	0	0	0.9	21	9.4	29	21	8	13	10	6.1	
WASHINGTON NATIONAL	3	1013.5	1016.0	31.3	21.2	26.2	0.6	35.0	14+	16.1	12	11	0	18.9	65	68	-37	22	9	4	0	0	1.1	21	10.7	W	10	9	13	9	5.4	71
FLORIDA																																
APALACHICOLA U	4			32.2	24.6	28.4	0.9	35.0	9+	23.3	10+	18	0			161	-41	41	14	11	0	0			14.8	N	7					86
DAYTONA BEACH	9	1015.6	1017.0	32.3	23.1	27.7	1.0	33.9	17+	21.1	1	19	0	22.8	80	119	-52	40	9	13	0	0	0.4	14	10.3	28	15	4	19	8	6.2	
FORT MYERS	5	1016.3		32.9	23.1	28.0	0.1	35.0	17	20.6	3	24	0	22.8	82	243	12	83	20	22	0	0	0.8	12	11.2	2	9+	0	23	8	6.6	
JACKSONVILLE	8	1015.6	1016.6	33.3	22.1	27.7	-0.4	35.6	17+	20.6	26	28	0	22.2	80	138	-57	65	13	18	0	0	0.5	15	11.6	NW	17	6	17	8	5.7	62
KEY WEST	1	1015.6	1016.3	31.3	25.8	28.6	0.1	33.3	8	23.3	24+	7	0	23.3	75	104	-2	47	14	18	0	0	1.7	12	14.3	W	11+	1	19	11	7.0	78
LAKELAND U	65			32.6	22.8	27.7	0.2	34.4	17	21.7	23+	25	0			218	7	63	20		0	0						3	20	8	6.0	59
MIAMI	2	1016.3	1016.5	30.9	24.4	27.7	0.0	32.2	17+	22.2	9+	3	0	23.9	83	156	-15	39	15	16	0	0	1.1	12	12.5	8	21	0	9	22	7.5	
ORLANDO	33	1012.5	1016.8	33.7	24.2	29.0	0.9	35.6	17+	23.3	31+	29	0	22.8	76	158	-45	33	16	17	0	0	0.6	14	13.0	36	8	2	18	11	6.5	
PENSACOLA	34	1011.9	1016.0	33.3	24.7	29.1	1.4	35.6	9+	22.2	4	26	0	23.3	77	328	124	123	16	14	0	0	0.4	26	10.3	25	6	6	16	9	6.1	
TALLAHASSEE	17	1013.9	1016.3	33.5	22.8	28.2	0.8	35.0	22+	20.0	1	28	0	23.3	81	112	-92	22	14	24	0	0	0.2	16	10.3	4	2	4	17	10	6.3	
TAMPA	6	1016.6	1016.7	32.9	23.9	28.4	0.9	34.4	23+	21.7	3	25	0	22.8	75	121	-98	26	16	22	0	0	0.6	20	9.8	14	1	1	18	12	7.1	66
WEST PALM BEACH	5	1015.9	1016.5	32.1	23.6	27.8	-0.3	33.3	27+	22.2	20	21	0	22.2	76	197	27	71	16	26	0	0	1.0	13	12.5	30	14	0	11	20	8.1	
GEORGIA																																
ATHENS	244	987.8	1016.1	31.8	20.7	26.3	-0.2	34.4	4	18.9	30+	16	0	20.6	78	55	-72	20	12	16	0	0	0.1	17	8.0	22	14	7	14	10	6.1	
ATLANTA	308	980.0	1016.2	30.9	21.2	26.1	0.0	33.3	4	19.4	18	8	0	20.6	76	53	-67	15	9	12	0	0	0.3	27	12.1	SE	9	3	14	14	6.7	65
AUGUSTA	41	1010.8	1015.9	33.2	21.3	27.3	0.2	36.1	30	18.9	20	27	0	21.1	75	63	-52	15	15	19	0	0	0.4	11	11.2	27	6	5	11	15	6.5	
COLUMBUS	117			33.1	22.6	27.8	0.6	36.1	4	20.6	21	28	0			92	-57	46	13	9	0	0	0.4	1	9.8	34	28	3	17	11	6.3	
MACON	108	1003.7	1016.3	34.2	22.3	28.3	0.6	37.2	30+	19.4	20	29	0	22.2	77	71	-72	36	7	9	0	0	0.2	14	12.5	NW	16	2	16	13	6.7	70
ROME	194			31.9	21.1	26.5	0.4	33.9	23+	17.8	13	17	0			123	-1	46	12		0	0										
SAVANNAH	14	1014.9	1016.7	33.1	22.7	27.9	0.5	36.1	29	20.6	3+	25	0	22.2	76	73	-94	26	9	14	0	0	0.4	16	15.2	NW	11	3	19	9	6.2	57
HAWAII																																
HILO	8	1015.9	1017.3	28.3	20.2	24.3	0.4	30.0	29+	18.3	23+	0	0	21.1	85	112	-138	14	27	0	0	0	0.4	35	7.2	E	22	1	12	18	7.5	40
HONOLULU	2	1016.3	1016.8	30.8	23.0	26.9	0.9	31.7	30+	21.1	19	0	0	18.3	63	12	1	3	9	0	0	0	6.3	6	14.3	NE	7	10	17	4	4.8	70
KAHULUI	15	1014.2	1016.4	29.3	21.4	25.4	-0.3	31.7	30	17.2	26	0	0	17.8	66	1	-10	1	1	0	0	0	7.0	4	14.8	E	29+	17	12	2	3.5	78
LIHUE	31	1013.5	1018.6	29.0	23.0	26.0	0.7	30.0	31+	20.0	26	0	0	20.0	74	24	-25	4	15	0	0	0	6.0	4	11.6	NE	8	6	18	7	5.6	64
IDAHO																																
BOISE	865	914.3	1012.3	33.3	15.1	24.2	0.2	39.4	10	7.2	1	19	0	4.4	30	2	-4	2	3	2	0	0	1.2	31	13.0	W	20	20	7	4	3.0	83
LEWISTON	431			34.4	15.6	25.1	1.8	39.4	29+	9.4	7	21	0			T	-11	T	1		0	0			17.0Y		10	23	4	4	2.3	
POCATELLO	1358	864.5	1014.0	31.0	11.8	21.4	-1.0	38.3	10	2.8	2	16	0	6.7	43	47	34	23	6	5	0	0	1.3	24	15.6	SW	23	17	5	9	3.8	76
ILLINOIS																																
CAIRO U	96			31.9	22.6	27.3	0.0	35.6	3	18.3	13+	17	0			97	16	24	12		0	0			17.0	N	10	5	17	9	6.2	66
CHICAGO O HARE	201	990.5	1014.5	28.6	18.8	23.7	1.1	35.0	13	12.8	16	4	0	17.8	70	134	48	41	11	8	0	0	0.9	23	12.5	33	3	9	11	11	5.7	
CHICAGO MIDWAY	185	992.6	1014.9	29.9	19.3	24.6	0.4	35.6	13+	12.2	16	11	0	17.2	64	101	15	34	8	7	0	0	0.7	21	11.6	SW	13	10	13	8	5.6	67
MOLINE	177	993.6	1014.6	29.2	18.4	23.8	-0.4	34.4	8	13.9	15	6	0	17.2	69	67	-16	24	10	7	0	0	0.9	22	11.2	N	3	7	14	10	5.9	63
PEORIA	199	991.5	1015.2	29.3	18.4	23.9	-0.6	33.3	13+	14.4	16+	4	0	17.8	71	153	64	54	11	9	0	0	0.4	20	12.5	S	23	8	10	13	5.8	49
ROCKFORD	221	988.2	1014.6	28.6	17.4	23.1	-0.4	33.9	8	12.2	16	5	0	17.8	75	148	42	63	11	8	0	0	0.4	22	13.4	34	3	8	12	11	5.9	
SPRINGFIELD	179	992.9	1014.7	30.0	18.9	24.4	-1.1	33.3	8	13.9	17	4	0	18.3	69	85	-3	43	10	11	0	0	0.8	22	14.8	W	4	11	7	13	5.5	71
INDIANA																																
EVANSVILLE	116	1001.7	1015.4	31.7	20.6	26.2	0.2	35.6	3	15.0	12	15	0	20.6	73	87	2	30	9	6	0	0	0.6	22	13.4	W	21	7	15	9	5.5	75

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

JULY 1973

State and Station	Elevation (ground)	Pressure		Temperature								No of days			Average relative humidity	Precipitation			No. of days		Snow, Ice pellets		Wind		Fastest mile (1.6 kilometers)			No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M	Mb	Mb.	C.	C.	C.	C.	C.		C				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
INDIANA																																
FORT WAYNE	241	986.1	1015.5	29.1	17.7	23.4	- 0.1	33.9	13	12.2	12	5	0	17.2	70	86	0	35	12	8	0	0	1.0	24	16.5	NW	3+	10	8	13	5.9	72
INDIANAPOLIS	241	986.8	1015.4	29.9	19.0	24.4	0.4	33.9	3	12.8	12	4	0	19.4	76	169	81	106	10	8	0	0	0.9	21	15.6	NW	4	10	10	11	5.5	60
SOUTH BEND	236	987.1	1014.6	28.4	18.6	23.6	0.4	34.4	13	12.8	29+	4	0	17.2	69	85	- 4	48	11	8	0	0	1.2	22	11.2	29	26	6	14	11	6.2	
IOWA																																
BURLINGTON	211			29.1	18.9	24.0	- 0.8	33.3	9+	15.6	31+	5	0	18.9	74	108	22	34	11	8	0	0	0.6	23	19.2	34	4	8	13	10	5.6	
DES MOINES	286	980.7	1014.6	29.5	19.8	24.7	0.1	34.4	12	15.6	16+	6	0	18.3	69	233	155	74	16	11	0	0	0.7	19	15.2	NW	1	9	12	10	5.5	61
DUBUQUE	322	976.6		27.3	17.4	22.4	- 0.2	32.8	12	14.4	31+	3	0			110	21	69	8		0	0										
SIOUX CITY	334	975.6	1014.7	28.8	18.6	23.7	- 1.5	35.0	7	13.9	31+	7	0	17.8	72	124	45	64	9	4	0	0	0.9	13	18.8	NW	1	9	10	12	5.7	68
WATERLOO	265	983.4	1014.7	28.2	17.8	23.1	- 0.2	34.4	12	12.8	16+	5	0	15.6	65	84	- 13	35	10	8	0	0	0.7	22	13.9	35	4	8	12	11	6.1	
KANSAS																																
CONCORDIA	448	961.7	1013.4	32.0	18.8	25.4	- 1.4	38.9	3+	14.4	16+	16	0	17.8	68	216	144	79	8	11	0	0	2.2	15	13.4	SE	24	13	10	8	4.7	84
DODGE CITY	787	924.8	1012.8	33.8	19.3	26.6	- 0.2	40.6	6+	13.9	15	20	0	14.4	52	99	40	50	11	7	0	0	2.3	17	22.4	W	21	9	17	5	4.9	83
GOODLAND	1114	889.3	1013.5	30.8	15.5	23.2	- 1.6	41.1	6	10.0	31	12	0	13.3	62	46	- 22	17	7	9	0	0	1.5	14	17.9	2	27	11	13	7	5.0	
TOPEKA	267	983.4	1014.6	31.1	19.3	25.2	- 1.4	36.1	18	12.8	15	15	0	20.0	75	258	167	106	11	11	0	0	0.8	15	19.2	NE	2	10	14	7	5.0	71
WICHITA	403	967.2	1013.7	33.4	20.3	26.8	- 0.3	39.4	3	15.6	16	21	0	17.8	62	154	62	42	11	8	0	0	1.8	17	21.0	N	24	12	13	6	4.7	78
KENTUCKY																																
COVINGTON	265	985.1	1016.0	28.6	18.9	23.8	- 0.3	32.2	3	13.3	12	1	0	18.3	74	182	90	68	13	12	0	0	1.0	20	11.6	31	3	9	9	13	6.0	
LEXINGTON	294	981.7	1016.5	29.2	19.4	24.3	- 0.9	32.8	23	13.9	12	2	0	20.0	78	131	30	37	11	10	0	0	1.4	18	13.0	22	14	8	9	14	6.3	
LOUISVILLE	145	998.0	1015.3	30.7	20.8	25.8	0.4	33.9	3	15.6	12	8	0	19.4	72	238	153	136	12	11	0	0	1.2	19	13.0	N	3	6	14	11	5.7	68
LOUISIANA																																
ALEXANDRIA	28	1011.5	1015.9	32.7	22.0	27.4	- 0.5	35.6	19	17.2	13	25	0	22.2	80	120	- 13	24	11	11	0	0	0.8	23	11.2	24	16	8	15	8	5.4	
BATON ROUGE	20	1013.2	1015.9	34.2	24.1	29.1	0.9	36.1	16	21.1	13	29	0	21.7	70	110	- 49	46	11	16	0	0	1.1	26	11.6	27	16+	3	21	7	6.1	
LAKE CHARLES	3	1014.6	1015.6	32.5	23.8	28.2	0.2	35.0	20	22.2	7	24	0	23.3	80	75	-110	41	10	13	0	0	1.1	21	8.0	18	15+	4	14	13	6.4	
NEW ORLEANS	1	1014.9	1015.7	33.6	24.6	29.1	1.6	35.6	17	22.8	8+	24	0	23.9	76	151	- 20	45	9	9	0	0	0.9	24	16.1	24	26	9	8	14	6.0	
SHREVEPORT	77	1005.8	1015.1	32.6	21.9	27.3	- 1.4	35.0	4	17.2	13	21	0	21.7	77	194	99	88	10	12	0	0	1.0	21	11.2	27	15	7	11	13	6.0	74
MAINE																																
CARIBOU	190	988.8		26.1	14.5	20.3	2.3	31.1	25+	8.9	23+	0	0			117	15	43	12		0	0						4	8	19	7.2	
PORTLAND	13	1011.5	1014.0	26.5	16.6	21.6	1.5	33.9	8	12.8	13	3	0	16.7	77	43	- 29	14	12	3	0	0	1.1	23	11.6	W	14	7	6	18	7.0	55
MARYLAND																																
BALTIMORE	45	1010.8	1016.2	29.9	18.8	24.4	- 0.5	35.0	9+	12.2	12	8	0	18.3	72	107	0	42	10	6	0	0	1.3	24	14.8	SW	20	10	10	11	5.6	63
MASSACHUSETTS																																
BLUE HILL OBS R	192			26.4	17.3	21.9	0.3	33.3	9	11.1	13	2	0			109	26	34	10		0	0			15.2	WSW	13					56
BOSTON	5	1013.5	1014.6	27.9	19.0	23.5	0.3	35.6	8	15.0	31+	4	0	16.7	69	123	50	44	11	4	0	0	1.3	23	11.6	W	29+	9	6	16	6.2	63
WORCESTER	301	979.3	1015.6	26.4	16.9	21.7	0.7	31.1	9+	10.6	13	0	0	16.1	72	97	5	29	8	3	0	0	2.1	26	9.4	30	6	6	12	13	6.5	
MICHIGAN																																
ALPENA	210	989.5	1014.5	25.3	12.3	18.8	0.0	33.3	7	6.7	12	1	0	13.9	74	131	58	60	11	7	0	0	0.8	26	8.5	W	13	5	16	10	6.3	63
DETROIT	189			28.6	19.4	24.0	0.4	35.0	13	14.4	17+	5	0	16.1	63					6			1.0	24	10.3	23	13					
DETROIT METRO	193	990.9	1014.7	28.1	16.9	22.6	0.1	33.3	13	10.0	12	1	0	16.7	72	118	50	38	7	6	0	0	1.2	24	11.6	SW	13	11	8	12	5.6	68
FLINT	235	987.1	1014.6	26.8	15.8	21.3	- 0.4	33.3	13	9.4	12	1	0	15.6	72	45	- 29	13	10	7	0	0	1.5	23	13.0	24	13	4	15	12	6.2	
GRAND RAPIDS	239	986.5	1015.0	28.6	16.2	22.4	0.1	33.9	13	10.0	29	5	0	15.6	68	52	- 17	23	8	6	0	0	1.4	22	15.2	W	2	5	16	10	6.2	54
HOUGHTON LAKE	350	973.6	1015.1	26.1	13.6	19.8	0.4	31.1	25+	6.1	16	0	0	14.4	71	59	- 14	18	9	6	0	0	0.9	26	8.0	28	27	4	15	12	6.4	
LANSING	256	983.7	1015.0	27.4	14.8	21.2	- 0.9	32.8	13	7.8	17	3	0	16.1	76	52	- 14	34	10	6	0	0	1.6	23	13.9	SW	13	8	13	10	5.8	67
MARQUETTE U	206			24.1	14.8	19.4	0.2	36.7	7	10.6	29+	3	0			55	- 26	13	10		0	0			11.6	SW	17+	3	14	9	5.8	60
MUSKEGON	191	992.2	1014.9	26.9	16.4	21.7	- 0.2	30.6	7	10.6	29	0	0	16.1	73	78	17	37	6	4	0	0	1.3	22	10.3	20	12	10	10	11	5.5	
SAULT STE MARIE	220	987.5	1013.7	23.3	10.9	17.2	- 0.9	29.4	25	5.6	16	0	0	14.4	83	107	44	40	9	6	0	0	0.8	28	12.1	NW	13	7	12	12	6.3	63
MINNESOTA																																
DULUTH	435	963.4	1014.2	24.4	11.9	18.2	- 0.4	32.8	6	3.3	21	1	0	12.8	72	60	- 30	17	12	8	0	0	0.8	26	18.3	SW	6	7	16	8	5.7	62
INTERNATIONAL FALLS	359	970.9	1013.3	27.1	13.3	20.2	1.6	35.6	6	8.9	21+	3	0	12.2	62	130	41	55	12	11	0	0	1.2	28	15.6	31	7	9	13	9	5.3	
MINNEAPOLIS	254	984.4	1014.1	28.8	17.6	23.2	0.8	35.0	7+	11.7	15+	6	0	14.4	61	74	- 9	30	8	8	0	0	0.7	27	16.1	SW	6	10	13	8	5.3	77
ROCHESTER	395	968.2	1015.0	27.0	16.3	21.7	- 0.7	32.8	12+	11.1	15	2	0	15.6	72	123	30	37	10	6	0	0	1.3	24	13.4	20	6	8	12	11	5.7	
ST CLOUD	313	978.0		27.4	13.6	20.5	- 1.2	32.8	17	6.7	16	2	0			75	- 8	31	11		0	0						9	12	10	5.3	

See footnotes at end of table

NCC FORM 5155 - Rev March 1971

Climatological data - Right half - Metric

CLIMATOLOGICAL DATA

METRIC UNITS

JULY 1973

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSISSIPPI																																
JACKSON	94	1004.4	1015.9	34.3	23.1	28.7	0.8	36.1	16+	21.1	12	30	0	21.7	69	51	- 70	18	12	11	0	0	0.6	19	13.9	NE	2	4	16	11	6.1	51
MERIDIAN	88	1005.1	1016.1	33.1	22.2	27.7	0.2	35.0	23	18.3	12	29	0	21.1	73	258	100	89	13	14	0	0	0.4	20	11.6	35	30	3	15	13	6.6	
MISSOURI																																
COLUMBIA REGIONAL	270	983.7	1015.3	31.2	19.7	25.4	0.3	33.9	13+	15.6	15	9	0	18.3	69	114	27	54	13	14	0	0	0.9	16	14.8	NW	20	7	8	16	6.1	74
KANSAS CITY	309	978.3	1014.3	30.0	19.6	24.8	- 1.8	35.0	18+	15.0	15	6	0	18.3	69	221	110	68	9	11	0	0	1.0	18	31.3	NW	2	15	7	9	4.6	77
ST JOSEPH	247			31.2	19.6	25.4	- 0.9	36.1	12	12.8	15	15	0	17.2	63	177	95		6		0		0.9	17	13.0	30	4	11	9	11	5.1	
ST LOUIS	163	995.3	1015.2	32.1	19.8	25.9	0.3	35.0	3	15.0	17	19	0	19.4	71	72	- 11	52	9	7	0	0	0.8	21	13.4	S	23	9	16	6	5.2	70
SPRINGFIELD	386	971.2	1015.5	31.1	18.9	25.0	- 1.0	33.9	24+	16.1	31+	12	0	19.4	76	202	103	109	12	10	0	0	1.5	19	17.4	NE	10	10	13	8	5.1	69
MONTANA																																
BILLINGS	1087	892.7	1014.0	30.1	14.0	22.1	- 1.7	38.3	10	8.9	2	11	0	5.6	39	7	- 15	7	4	3	0	0	0.2	4	13.4	NW	11	13	12	6	4.1	79
GLASGOW	696	933.6	1014.0	29.1	12.9	21.0	- 0.5	36.1	10	8.3	18	8	0	8.3	47	15	- 19	7	5	5	0	0	0.5	6	13.4	29	1	17	11	3	3.7	
GREAT FALLS	1116	889.6	1014.1	30.9	12.9	21.9	1.1	40.6	10	6.7	2	13	0	3.3	33	3	- 29	3	2	1	0	0	1.0	27	16.1	W	6	17	7	7	4.2	87
HAVRE	788	923.8	1014.0	30.9	11.1	21.0	- 0.1	40.6	10	6.7	18+	14	0	5.0	39	8	- 24	8	2	5	0	0	0.4	29	16.5	NE	16	16	9	6	3.9	93
HELENA	1167	882.2	1014.7	29.9	11.0	20.5	0.3	38.9	10	3.3	2	9	0	2.2	32	2	- 24	1	2	0	0	0	1.5	30	14.8	W	1	20	6	5	3.0	89
KALISPELL	904	912.0	1014.9	30.5	8.5	19.5	0.8	38.9	10	0.0	2	11	1	3.9	39	1	- 25	1	2	1	0	0	0.4	24	10.7	2	17+	13	12	6	4.1	
MILES CITY	801	922.1	1013.3	30.4	14.8	22.7	- 1.4	39.4	10	7.8	2	10	0	7.8	42	7	- 27		3	3	0		1.1	3								
MISSOULA	972	905.2	1015.2	31.6	10.1	20.9	1.4	40.6	10	2.2	2	17	0	5.0	38	2	- 19	2	1	0	0	0	1.5	32	13.0	NW	8	21	7	3	2.7	96
NEBRASKA																																
GRAND ISLAND	561	949.5	1014.1	30.8	17.9	24.4	- 0.7	38.9	6	11.7	15	13	0	15.6	64	74	10	32	14	11	0	0	1.5	15	15.6	35	1	12	6	13	5.4	
LINCOLN	360	972.6	1014.1	29.9	17.8	23.9	- 1.2	38.3	1	12.2	16+	11	0	17.2	69	114	29	46	13	12	0	0	1.2	14	22.8	NW	1	11	9	11	5.1	66
NORFOLK	471			30.1	17.8	24.0	- 1.0	36.7	12+	11.1	15	11	0			105	28	38	11		0	0						12	7	12	5.5	
NORTH PLATTE	846	918.4	1014.3	30.2	15.1	22.7	- 1.8	40.6	6	8.9	15	13	0	13.9	63	73	9	34	12	12	0	0	1.5	11	16.1	NE	1	8	14	9	5.6	61
OMAHA	298	979.7	1014.3	29.8	18.5	24.2	- 1.7	35.0	12	13.3	16	11	0	19.4	76	126	41	50	14	8	0	0	1.0	15	16.1	NE	9	9	10	12	5.6	67
SCOTTSBLUFF	1206	881.1	1014.2	30.2	13.8	22.0	- 1.7	42.8	6	10.0	16+	12	0	10.0	56	94	57	58	10	11	0	0	0.7	9	11.6	31	29	9	14	8	5.1	
VALENTINE	789			30.9	15.4	23.2	- 0.9	41.1	6	8.3	15	14	0			71	12	17	12		0	0			21.5	SW	28	12	14	5	4.7	73
NEVADA																																
ELKO	1539	845.6	1012.8	31.9	11.2	21.6	0.7	37.8	10	5.6	2	19	0	2.2	32	12	2	5	6	8	0	0	0.2	5	11.2	30	13	17	12	2	3.4	
ELY	1906	811.0	1011.8	30.1	8.4	19.3	- 0.4	35.6	10+	4.4	24+	10	0	- 2.8	27	11	- 6	6	5	10	0	0	1.7	20	17.4	N	13	12	14	5	4.4	81
LAS VEGAS	659	934.3	1008.3	41.3	25.0	33.2	1.1	46.7	5	17.2	21	31	0	2.2	16	T	- 13	T	0	2	0	0	2.3	20	15.2	NW	30	27	2	2	1.5	93
RENO	1342	866.9	1013.2	33.9	8.3	21.2	1.3	37.8	26+	2.8	1	24	0	3.3	33	7	0	6	4	5	0	0	1.3	28	14.8	W	28	20	11	0	2.3	98
WINNEMUCCA	1311	869.3	1013.0	34.9	10.4	22.7	1.0	39.4	10+	3.3	23	24	0	2.2	28	3	- 4	1	2	3	0	0	0.9	32	10.7	W	20	18	11	2	2.8	86
NEW HAMPSHIRE																																
CONCORD	104	1002.0	1014.5	28.3	14.3	21.3	0.4	35.0	8	6.1	13	3	0	15.6	72	27	- 60	11	8	4	0	0	0.8	23	7.6	S	28	8	9	14	6.3	63
MT WASHINGTON OBS	1909			13.2	7.2	10.2	0.7	19.4	8	- 0.6	12	0	1			111	- 59	63	12	5	0	0			38.9Y	W	14	1	8	22	8.4	30
NEW JERSEY																																
ATLANTIC CITY	20	1013.5	1015.9	29.2	18.7	23.9	0.0	33.9	14+	12.8	12	5	0	17.2	70	83	- 11	25	7	4	0	0	1.8	22	11.2	30	15	9	13	9	5.3	61
ATLANTIC CITY U	3			26.5	19.8	23.2	- 0.3	32.2	14	15.0	12	1	0			82	- 17	26	6		0				17.9	NW	11					
NEWARK	2	1013.9	1015.0	30.6	21.3	25.9	1.3	35.0	9	15.0	12	9	0	17.8	63	92	- 1	34	8	4	0	0	1.5	23	11.2	25	5	11	7	13	5.7	
TRENTON U	17			30.2	19.7	24.9	0.5	34.4	9	13.9	12	5	0			60	- 46	13	8		0	0			11.2	W	5	12	8	11	5.5	67
NEW MEXICO																																
ALBUQUERQUE	1619	839.8	1011.8	33.2	18.3	25.8	- 0.1	38.9	7+	13.9	23	19	0	11.1	46	46	15	20	13	12	0	0	0.7	12	17.0	E	25+	15	9	7	4.6	72
CLAYTON	1515			30.1	15.2	22.7	- 0.9	37.2	7+	10.0	15	9	0			51	- 8	16	13		0	0						11	12	8	5.7	
ROSWELL	1112	890.3	1011.4	33.0	19.0	26.0	- 1.1	38.9	7	15.0	26	16	0	14.4	55	57	14	31	10	10	0	0	2.1	16	16.5	NE	21	7	16	8	5.4	65
NEW YORK																																
ALBANY	84	1004.7	1015.1	29.6	15.7	22.7	0.4	36.1	8	10.0	24+	5	0	16.7	71	43	- 46	15	9	4	0	0	1.0	22	8.0	S	28+	7	14	10	5.9	69
BINGHAMTON	485	958.3	1016.3	26.8	15.6	21.2	1.0	31.7	9	10.0	12	0	0	14.4	69	49	- 45	15	8	3	0	0	1.4	25	10.3	SW	28+	6	15	10	5.5	71
BUFFALO	215	990.2	1015.5	27.2	17.5	22.4	1.4	32.2	24	11.1	12	1	0	13.9	63	93	28	37	11	5	0	0	2.2	24	14.8	W	14	2	16	13	6.7	64
NEW YORK U	40	1012.5	1015.5	29.9	20.5	25.2	0.3	34.4	9+	14.4	12	4	0	17.2	65	150	56	63	10	4	0	0	0.9	24	10.7	SW	13					65
NEW YORK KENNEDY	4	1014.6	1015.3	27.6	19.1	23.3	- 1.1	32.8	9	14.4	12	2	0	18.3	76	67	- 36	28	6	3	0	0	2.2	21	13.0	28	5	9	11	11	5.6	
NEW YORK LA GUARDIA	3	1014.2	1015.4	28.8	20.9	24.9	0.0	33.3	9+	15.6	12	3	0	17.8	66	124	30	44	8	4	0	0	1.1	22	17.0	W	5	10	10	11	5.6	
ROCHESTER	167	995.6	1015.3	29.6	16.4	23.0	1.0	34.4	8	8.9	12	7	0	15.0	64	29	- 43	11	9	3	0	0	2.1	25	11.6	SW	13	9	12	10	5.6	74
SYRACUSE	125	1000.0	1014.7	28.9	16.3	22.6	0.3	32.8	28+	10.6	12	4	0	16.1	69	92	13	34	9	5	0	0	1.3	25	17.4	NW	28	10	12	9	5.4	70

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

JULY 1973

State and Station	Elevation, ground	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Ice pellets		Wind		Fastest mile (1.6 kilometers)			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	**Resultant speed**	**Resultant direction**	Speed	Direction	Date	Clear 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm.	Mm.	Mm.			Mm.	Mm	M.p.s.		M.p.s							%
NORTH CAROLINA																																
ASHEVILLE	652	943.1	1017.8	29.1	17.7	23.4	0.9	32.8	28	13.3	13	1	0	19.4	83	177	28	46	12	6	0	0	0.2	11	15.6	30	23	4	10	17	6.9	48
CAPE HATTERAS R	2	1016.6	1017.0	29.3	21.2	25.2	- 0.3	31.1	29	14.4	13	0	0	21.7	79	65	- 91	25	7	6	0	0	0.4	22	8.0	22	28+	9	11	11	5.5	74
CHARLOTTE	224	989.8	1016.6	31.2	20.5	25.8	- 0.4	36.1	9	17.2	20	11	0	20.6	75	92	- 32	36	10	10	0	0	0.4	13	10.3	NW	3	3	9	19	7.1	76
GREENSBORO	273	986.1	1017.1	29.7	19.7	24.7	- 0.4	33.9	4	13.9	18	7	0	20.6	82	135	13	77	14	9	0	0	0.6	19	15.6	N	22+	5	12	14	6.5	59
RALEIGH	132	1001.0	1016.6	30.3	19.1	24.7	- 0.8	32.8	22+	15.0	13	4	0	20.6	83	79	- 60	29	10	10	0	0	0.6	18	8.9	2	11	6	17	8	6.0	67
WILMINGTON	9	1015.2	1016.7	31.8	21.3	26.6	- 0.1	34.4	21	18.3	20+	17	0	21.7	77	237	42	121	11	9	0	0	0.8	12	13.4	W	15	5	10	16	6.3	67
NORTH DAKOTA																																
BISMARCK	502	955.0	1013.9	29.2	11.2	20.2	- 1.8	42.8	11	5.6	15	8	0	10.6	60	31	- 24	15	6	4	0	0	0.5	2	13.4	NW	25+	14	11	6	4.1	81
FARGO	273	981.4	1013.8	27.3	13.0	20.2	- 1.7	35.0	16	6.1	15	3	0	13.3	68	91	18	26	12	11	0	0	0.2	2	16.5	N	18	11	13	7	4.9	70
WILLISTON	579	946.8	1014.2	28.2	12.2	20.2	- 1.6	35.6	5	7.2	19	5	0	9.4	54	26	- 22	8	7	4	0	0	0.7	33	15.2	W	12	16	11	4	3.7	80
OHIO																																
AKRON	368	972.2	1016.1	28.7	16.9	22.8	0.3	32.2	14+	8.9	12	4	0	16.7	71	99	3	42	10	2	0	0	1.1	23	9.8	20	13	6	14	11	6.0	
CINCINNATI ABBE OB	232			29.6	18.9	24.3	- 0.7	33.3	8+	13.3	12	4	0			215	124	91	13		0	0			7.6	W	4					56
CLEVELAND	237	987.1	1015.8	27.6	17.5	22.6	0.4	33.3	13	8.9	12	1	0	17.2	74	75	- 9	43	12	5	0	0	1.0	23	11.2	W	4	7	11	13	5.8	70
COLUMBUS	247	986.8	1016.1	28.6	18.4	23.5	- 0.3	32.8	9	10.6	12	5	0	16.7	69	103	4	35	14	7	0	0	0.8	18	15.6	NW	3	7	11	13	6.4	52
DAYTON	305	980.4	1015.8	29.6	19.1	24.3	0.3	34.4	9	12.2	12	4	0	17.8	72	96	6	42	11	9	0	0	1.2	19	12.1	W	20	10	10	11	6.0	54
MANSFIELD	395			28.0	18.1	23.1	- 0.6	32.2	13	10.6	12	1	0	17.8	75	110	22	57	10	8	0	0	1.4	22	13.4	1	10	5	10	16	6.6	
TOLEDO	204	990.5	1015.2	28.2	16.5	22.4	- 0.2	34.4	13	8.3	12	2	0	15.0	66	81	15	29	11	9	0	0	0.8	24	17.0	NW	3	8	10	13	6.1	58
YOUNGSTOWN	359	973.9	1016.0	27.4	16.0	21.7	0.3	32.8	13	7.8	12	1	0	16.7	75	75	- 34	42	10	2	0	0	1.0	23	9.8	23	27	8	10	13	6.1	
OKLAHOMA																																
OKLAHOMA CITY	392	968.8	1014.0	32.1	20.9	26.6	- 1.5	36.7	20	18.3	16	18	0	20.0	70	86	26	30	11	11	0	0	2.3	17	17.9	NE	10	11	15	5	4.6	73
TULSA	198	990.5	1014.4	32.5	22.2	27.3	- 0.6	36.7	20	18.9	31+	21	0	21.1	72	164	90	65	9	11	[illegible]	0	2.0	17	17.9	SW	23	8	16	7	5.2	77
OREGON																																
ASTORIA	2	1019.0	1019.7	20.3	10.4	15.4	- 0.5	28.3	27	6.7	24+	0	0	10.0	73	2	- 30	1	4	0	0	0	2.1	27	10.3	32	12+	7	9	15	6.3	
BURNS	1265			30.9	12.2	21.6	0.7	35.0	31+	2.8	1	13	0			T	- 9	T	0		0	0						22	6	3	2.7	
EUGENE	109	1004.1	1017.3	29.4	10.2	19.8	0.6	37.2	14	3.9	1	13	0	10.0	59	T	- 7	T	0	0	0	0	1.3	30	7.2	35	25+	22	4	5	2.9	
MEACHAM	1234	879.1	1014.9	25.9	11.2	18.6	1.1	31.7	29+	1.7	1	0	0			1	- 11	1	2		0	0						25	3	3	1.2	
MEDFORD	396	968.8	1015.6	34.9	13.0	24.0	1.8	40.6	28	5.6	1	24	0	7.2	39	1	- 4	1	1	2	0	0	1.7	32	8.9	34	20	25	6	0	1.4	
PENDLETON	452	962.1	1014.7	33.1	14.9	24.1	0.9	38.9	29+	8.9	1	20	0	2.2	25	T	- 5	T	1	0	0	0	1.7	28	11.6	27	10	24	5	2	2.0	
PORTLAND	6	1016.3	1017.6	28.6	13.9	21.3	1.7	37.2	25	10.0	24+	11	0	10.6	55	2	- 9	2	1	0	0	0	2.8	33	11.6	NW	12+	17	4	10	4.0	78
SALEM	60	1010.2	1017.5	29.4	9.9	19.7	0.8	38.3	14	4.4	11	12	0	9.9	54	T	- 9	T	0	0	0	0	1.5	34	10.3	36	12	19	6	6	3.0	
SEXTON SUMMIT R	1169	886.6	1015.7	25.4	11.3	18.3	0.8	31.7	28	3.9	22+	0	0			4	- 5	4	1		0	0			17.4	35	26	23	3	0	0.9	
PACIFIC AREA																																
GUAM TAGUAC R	110			30.3	22.9	26.6	0.2	31.1	29+	20.6	29	0	0			243	14	38	27		0	0			9.8	E	5					52
JOHNSTON	2	1013.5	1014.2	28.2	24.8	26.6	- 0.7	30.0	31	21.7	16	0	0	21.7	75	13	- 20	4	[illegible]	0	0	0	7.4	9	14.8	E	21+	3	17	11	6.4	79
KOROR R	29			31.0	24.4	27.7	0.6	32.8	31+	22.8	19	11	0			325	- 60	64	23	3	0	0			10.3	E	1	0	5	26	8.7	59
KWAJALEIN	2	1009.1	1010.0	30.1	25.2	27.7	0.1	30.6	31+	22.8	14+	0	0	23.9	91	287	60	83	22	0	0	0	4.6	8	16.1	11	10+	4	8	19	7.5	
MAJURO	3			29.4	24.9	27.2	0.4	30.6	29	22.2	15	0	0			185	-133	36	21		0	0			15.2	E	5	4	14	13	6.6	73
PAGO PAGO	4	1012.2	1012.5	29.1	24.1	26.6		30.0	17+	22.2	30+	0	0	23.9	95	206		69	22	1	0	0	4.0	10	12.1	E	17	0	14	17	7.6	56
PONAPE R	37			31.4	23.6	27.5	1.0	32.8	31+	21.7	27+	9	0			239	-173	47	27	1	0	0			8.0	SE	10	2	5	24	8.7	53
TRUK MOEN ISLAND	2			30.8	24.3	27.6	0.6	32.2	21	22.8	23+	1	0			350	37	72	26	2	0	0			11.2	NE	25+	0	2	29	9.4	49
WAKE	3	1013.2	1013.6	31.9	24.9	28.4	0.7	32.2	29+	23.3	27	15	0	22.2	72	31	- 86	15	18	0	0	0	5.5	9	10.7	E	27+	10	10	11	[illegible]	57
YAP R	13			30.3	23.9	27.2	- 0.3	31.7	27+	21.7	31	0	0			257	- 93	42	24	2	0	0			10.7	S	31	2	6	23	8.7	55
PENNSYLVANIA																																
ALLENTOWN	118	1002.0	1015.6	29.6	18.4	24.0	0.6	33.3	14+	13.3	12	4	0	17.8	69	55	- 68	24	8	2	0	0	1.3	25	11.2	29	5	11	14	6	5.8	
ERIE	223	989.2	1015.6	25.8	16.1	20.9	0.4	31.7	13	7.8	12	0	0	16.1	76	39	- 54	21	11	4	0	0	1.3	23	9.8	[illegible]	13	8	14	9	6.0	
HARRISBURG	103	1003.4	1015.8	29.7	18.7	24.2	- 0.4	35.0	9	14.4	12	5	0			55	- 34	28	8	3	0	0	0.6	25	9.4	W	5	9	14	8	5.5	65
PHILADELPHIA	2	1014.6	1015.4	30.4	20.5	25.5	1.3	33.9	9+	14.4	12	6	0	19.4	71	61	- 45	23	8	3	0	0	1.9	23	13.4	NW	11	10	12	9	5.4	64
PITTSBURGH	347	973.2	1016.3	28.6	17.2	22.9	0.6	32.8	9	10.6	12	3	0	16.1	69	55	- 44	18	10	1	0	0	1.4	24	[illegible]	23	26	10	11	10	5.8	57
SCRANTON	283	982.1	1015.7	27.6	16.3	21.9	- 0.5	32.2	9	11.1	12	1	0	15.6	68	98	- 23	29	9	3	0	0	1.1	[illegible]	9.4	W	12	10	13	8	5.3	71
WILLIAMSPORT	160	997.3	1015.9	27.7	15.8	21.8	- 1.3	33.3	9	8.9	12	2	0	17.2	78	101	- 5	30	13	5	0	0	0.8	26	8.9	25	14+	8	12	11	6.0	
RHODE ISLAND																																
BLOCK ISLAND	34			24.7	18.2	21.4	0.6	29.4	9	15.0	18+	0	0			134	66	90	7		0	0										
PROVIDENCE	16	1012.5	1015.0	28.0	18.2	23.1	0.8	34.4	9+	12.8	13	4	0	18.3	77	74		45	8	4	0		1.3	24	[illegible]	24	13	7	9	15	6.7	54

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Ice pellets		Wind		Fastest mile (1.6 kilometers)			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
SOUTH CAROLINA	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CHARLESTON	12	1014.6	1016.6	32.8	23.4	28.1	1.1	35.6	29	20.0	26	25	0	22.2	74	91	-104	63	9	11	0	0	0.7	16	13.4Y	NE	6	4	16	11	6.0	65
CHARLESTON U	3			30.8	24.3	27.6	0.1	33.9	16	21.1	18	6	0			70	-127	31	16		0	0			13.9	NE	6					
COLUMBIA	65	1008.8	1016.6	32.5	21.6	27.1	- 0.5	37.2	30	18.3	13	21	0	21.1	74	81	- 74	19	9	15	0	0	0.7	15	9.4	4	23	5	15	11	6.2	66
GRNVLLE-SPRTNBRG	292	982.7	1016.7	30.8	20.4	25.7	- 0.4	34.4	10+	17.8	18	9	0	19.4	74	94	- 24	26	12	12	0	0	0.2	3	11.2	SW	14	4	13	14	6.6	55
SOUTH DAKOTA																																
ABERDEEN	395	967.5	1013.5	30.9	14.4	22.7	- 0.3	42.2	11	6.1	15	12	0	13.9	62	45	- 19	35	7	6	0	0	0.6	5	25.9	32	1	13	12	6	4.4	
HURON	390	967.8	1013.3	29.8	14.7	22.3	- 1.6	37.8	11+	7.8	15	10	0	13.9	63	54	8	21	8	8	0	0	0.4	12	20.6	NW	1	13	11	7	4.6	72
RAPID CITY	964	906.2	1014.6	29.6	13.4	21.5	- 1.7	43.3	6	9.4	2	9	0	8.9	49	37	- 8	21	7	9	0	0	0.7	36	18.8	NW	1	10	14	7	4.9	65
SIOUX FALLS	432	964.4	1014.7	29.9	17.2	23.6	0.1	37.2	7	11.1	28	11	0	16.7	68	89	17	44	8	5	0	0	0.7	15	17.9	28	1	10	12	9	5.4	
TENNESSEE																																
BRISTOL	459	963.8	1017.0	28.8	18.7	23.7	- 0.7	31.7	13+	12.8	13	0	0	19.4	82	144	3	39	14	9	0	0	0.4	29	9.4	27	14	4	11	16	7.0	
CHATTANOOGA	203	992.2	1016.2	31.4	20.8	26.1	- 0.9	33.9	22+	16.1	13	13	0	20.6	75	176	46	55	14	11	0	0	0.3	18	14.8	NE	4	5	11	15	6.8	53
KNOXVILLE	299	982.1	1016.4	29.2	20.4	24.8	- 0.9	31.7	22+	15.6	13	0	0	20.6	81	111	- 11	30	12	10	0	0	0.7	30	14.8	NE	15	4	9	18	7.2	72
MEMPHIS	79	1005.1	1015.1	33.2	23.7	28.4	1.1	35.6	3	18.3	12	25	0	22.8	76	114	24	49	11	9	0	0	1.3	19	9.4	4	11	8	12	11	5.9	64
NASHVILLE	180	994.2	1015.6	31.2	20.7	25.9	- 0.8	33.9	24+	14.4	12	11	0	21.1	81	195	100	57	15	10	0	0	1.1	18	15.6	NW	4	4	15	12	6.6	57
OAK RIDGE R	276			29.9	19.8	24.9	- 0.2	33.3	3	15.0	13	4	0			141	- 10	46	12		0	0			13.9Y		14+	5	7	18	7.0	
TEXAS																																
ABILENE	544	952.3	1013.4	33.2	21.4	27.3	- 1.1	36.7	7+	17.2	27	23	0	19.4	66	68	10	34	7	9	0	0	3.3	18	14.8	NE	8	11	8	12	5.7	65
AMARILLO	1098	892.3	1012.4	32.7	18.5	25.6	- 1.4	38.9	7+	12.8	15	16	0	15.0	57	104	44	36	9	11	0	0	2.8	17	13.9	N	30+	12	10	9	4.6	78
AUSTIN	182	992.9	1014.5	33.4	23.0	28.2	- 0.9	36.1	26	20.0	13	26	0	21.7	72	75	20	46	8	8	0	0	2.5	19	13.4	W	30	7	18	6	5.2	62
BROWNSVILLE	6	1013.5	1014.2	33.1	24.2	28.7	- 0.2	35.0	31+	22.2	25+	24	0	23.3	77	15	- 28	15	3	0	0	0	4.2	15	11.6	SE	8+	10	18	3	4.3	90
CORPUS CHRISTI	12	1012.9	1014.5	34.4	24.3	29.4	0.4	36.1	31+	21.7	13	31	0	23.9	77	13	- 46	13	2	0	0	0	4.8	14	13.0	SE	7	12	15	4	4.6	88
DALLAS	147			33.7	23.8	28.8	- 0.6	37.2	26	20.0	7	27	0	21.7	69	72	23	19	10	5	0	0	2.9	17	15.6	11	7	12	9	10	5.3	
DEL RIO	313	977.7	1012.8	33.7	22.4	28.1	- 2.1	37.2	27	19.4	8	25	0	20.6	67	62	28	38	6	8	0	0	4.0	12	10.3	13	3	6	13	12	6.5	
EL PASO	1194	882.5	1011.1	34.5	18.4	26.5	- 1.2	40.6	1	15.0	12	22	0	13.3	51	54	21	42	9	6	0	0	0.9	12	17.0	SW	14	11	12	8	4.9	76
FORT WORTH	164	994.2	1014.4	33.7	23.9	28.8	- 0.8	36.1	4	21.7	7	26	0	23.3	75	283	238	81	10	8	0	0	2.2	18	17.9	19	14	14	8	9	5.0	
GALVESTON U	-2			30.8	26.3	28.6	0.2	32.2	24+	23.3	7	2	0			62	- 60	36	8		0	0			11.6	NE	26+					78
HOUSTON INTERCON	29	1011.9	1015.5	34.3	22.3	28.3	0.3	36.7	30	21.1	27+	30	0	23.3	80	172	70	101	8	10	0	0	1.4	18	12.5	12	5	4	21	6	5.7	71
LUBBOCK	992	904.5	1013.2	30.5	19.8	25.2	- 1.2	36.7	6+	15.6	15	11	0	15.0	57	106	55	34	10	13	0	0	2.0	14	17.0	30	21	13	8	10	4.9	83
MIDLAND	869	916.4	1012.5	32.1	19.2	25.6	- 2.7	36.1	7+	15.6	27	20	0	15.6	60	63	15	18	8	10	0	0	3.0	14	13.4	3	22	9	12	10	5.4	
PORT ARTHUR	5			32.3	22.9	27.6	- 0.1	34.4	24	21.1	7	24	0	23.9	84	221	69	90	12	13	0	0	1.6	21	14.8	N	25	7	16	8	5.6	68
SAN ANGELO	580	948.2	1013.0	35.4	21.5	28.5	- 0.8	38.3	21+	17.8	27	26	0	18.3	60	27	- 9	9	7	7	0	0	2.4	18	8.0	34	29+	9	9	13	6.0	
SAN ANTONIO	240	987.1	1014.6	32.9	23.9	28.4	- 0.4	34.4	30+	21.7	16+	28	0	22.2	72	176	122	66	8	5	0	0	2.9	15	15.6	N	30	4	21	6	5.6	74
VICTORIA	32	1010.5	1014.6	34.8	24.4	29.6	1.2	36.1	31+	20.0	13	31	0	23.3	75	73	- 18	41	7	3	0	0	3.0	17	20.1Y	N	27	7	19	5	5.5	
WACO	153	996.6	1014.3	34.1	23.4	28.8	- 0.8	37.2	26	21.1	6	28	0	21.1	68	124	74	114	7	5	0	0	3.3	17	10.7	17	7	9	14	8	5.4	
WICHITA FALLS	303	978.0	1013.5	35.4	21.0	28.2	- 1.6	40.6	20	18.3	16+	27	0	20.0	66	115	65	66	5	6	0	0	2.4	15	13.0	7	21	13	11	7	4.7	
UTAH																																
MILFORD	1533	847.3		33.2	11.7	22.5	- 0.7	38.9	5	6.7	2	22	0			12	- 5	7	4		0	0			15.2	SE	8	18	10	3	2.9	77
SALT LAKE CITY	1286	872.0	1012.4	33.1	16.4	24.8	- 0.2	40.0	10+	10.0	23	20	0	8.3	40	27	12	14	7	13	0	0	0.3	13	18.8	W	20	15	12	4	3.7	82
WENDOVER	1291	871.3	1013.4	31.5	18.8	25.2	- 1.2	38.3	10	13.3	22	17	0	3.3	29	14	7	8	8		0	0										
VERMONT																																
BURLINGTON	101	1001.7	1013.9	27.7	15.2	21.4	0.9	34.4	8	8.3	12	2	0	16.1	74	77	- 21	47	11	8	0	0	1.3	19	14.3	NW	28	5	15	11	6.0	57
VIRGINIA																																
LYNCHBURG	279	983.7		29.2	18.3	23.7	- 0.9	33.3	8	13.3	18+	4	0			169	62	81	10		0	0			10.3	W	10	9	10	12	5.7	63
NORFOLK	7	1015.6	1016.6	30.4	21.0	25.7	- 0.3	35.0	9	16.7	25+	9	0	19.4	72	106	- 44	58	8	4	0	0	1.3	17	20.6	34	10	11	10	10	5.1	61
RICHMOND	50	1010.2	1016.3	30.8	19.6	25.2	- 0.4	33.9	21+	13.9	12	9	0	20.0	77	92	- 50	37	8	9	0	0	1.0	18	18.8	NW	11	7	11	13	6.4	74
ROANOKE	350	976.0	1017.0	30.0	18.3	24.2	- 0.6	33.9	8	13.3	13+	9	0	18.9	75	130	22	35	11	7	0	0	0.5	26	8.9	15	1	11	8	12	5.8	
WALLOPS ISLAND	3			27.3	20.2	23.8		31.7	5	15.6	13	0	0			38		16	10		0	0			13.0Y	NNE	16+					
WASHINGTON																																
OLYMPIA	59	1011.5	1018.6	25.3	8.8	17.1	- 0.7	33.3	28	3.3	24	1	0	10.6	69	1	- 18	1	1	0	0	0	0.6	23	9.4	24	4	13	7	11	4.8	
QUILLAYUTE	55	1012.2	1019.6	20.1	8.8	14.4	- 0.9	32.8	13	4.4	24	1	0	10.0	78	29	- 30	11	10	0	0	0	1.0	25	8.5	NW	11	8	5	18	6.5	45
SEATTLE	6			24.3	13.1	18.7	- 0.2	29.4	14+	9.4	1	0	0			6	- 7	5	3		0	0			14.3Y	SW	10					
SEATTLE-TACOMA	122	1002.0	1018.4	24.1	12.2	18.2	- 0.1	32.2	28	7.2	1	1	0	10.6	66	2	- 19	1	3	0	0	0	0.8	28	10.7	SW	10	14	7	10	4.5	72
SPOKANE	718	931.9	1013.9	30.4	13.2	21.8	0.4	35.6	29+	6.1	1	14	0	2.8	31	T	- 10	T	0	0	0	0	1.9	23	12.5	SW	10	21	8	2	2.8	91

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

JULY 1973

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WASHINGTON																																
STAMPEDE PASS R	1206	882.5		18.9	8.4	13.7	0.2	28.3	28	2.2	1	0	0			8	- 29	6	4		0	0						15	6	10	4.4	
WALLA WALLA U	289			32.8	17.0	24.9	0.4	38.9	29	10.0	1	18	0			3	- 2	3	1		0	0			9.8	W	10	24	5	2	1.8	91
YAKIMA	321	976.6	1014.3	33.4	11.2	22.3	0.7	39.4	15	3.9	1	19	0	5.6	35	T	- 3	T	0	0	0	0	1.7	30	12.5	29	10	23	5	3	2.2	
WEST INDIES																																
SAN JUAN P.R.	4	1014.2	1016.6	31.6	25.6	28.6	1.7	33.3	11+	24.4	19+	11	0	22.2	71	62	- 97	24	13	5	0	0	3.7	9	12.1	E	12	6	15	10	5.9	55
WEST VIRGINIA																																
BECKLEY	763	930.6	1016.8	26.4	16.0	21.2	- 0.4	30.0	13	8.9	12	0	0	17.2	81	132	2	21	17	13	0	0	1.3	21	13.0	27	4	4	8	19	7.5	
CHARLESTON	286	983.1	1016.5	29.4	17.8	23.6	- 0.2	32.8	7	11.1	12	5	0	18.9	79	175	31	50	17	13	0	0	0.4	20	14.3	36	3	6	11	14	6.5	
ELKINS	594	947.9		27.1	14.2	20.6	- 0.6	30.0	10	6.1	12	0	0			97	- 42	22	16		0	0						3	12	16	7.3	
HUNTINGTON	252	986.5	1016.0	30.2	19.1	24.7	0.7	33.9	9+	13.3	13	9	0	20.0	79	89	- 25	25	15	8	0	0	0.7	21	7.6	32	24+	3	9	19	7.5	
PARKERSBURG U	187			29.4	18.4	23.9	- 0.4	33.9	9	12.2	12	4	0			166	61	74	12		0	0			15.2	NW	3					61
WISCONSIN																																
GREEN BAY	208	989.2	1014.2	27.9	16.2	22.1	0.7	33.3	12+	11.1	11	2	0	15.0	65	49	- 20	19	6	3	0	0	0.8	24	14.3	SW	26	7	10	14	6.1	72
LA CROSSE	198	990.9	1014.9	29.3	17.2	23.3	0.1	37.2	12	11.1	16+	10	0	16.7	71	64	- 31		8	4	0		0.6	23								
MADISON	262	983.7	1014.5	28.3	15.7	22.0	0.3	35.0	8	8.9	16	4	0	16.1	71	68	- 23	49	7	5	0	0	1.1	24	20.6	NW	9	9	7	15	6.1	60
MILWAUKEE	205	989.5	1014.4	26.9	16.8	21.9	1.5	33.3	7	10.6	16	5	0	16.1	72	39	- 36	17	10	4	0	0	1.1	25	14.3	SW	12	9	11	11	5.5	64
WYOMING																																
CASPER	1627	840.2	1014.4	28.8	11.6	20.2	- 1.8	37.2	6	6.1	14	9	0	7.8	54	57	32	31	9	11	0	0	1.0	24	23.2	21	6	12	10	9	4.9	
CHEYENNE	1867	816.5	1015.9	25.7	11.9	18.8	- 2.3	36.7	6	7.8	13	7	0	6.1	52	127	81	87	11	10	0	0	0.9	28	15.6	NW	24	9	13	9	5.5	59
LANDER	1696	832.0	1014.6	27.8	12.7	20.3	- 1.2	36.7	11	8.9	30	9	0	5.6	46	53	34	25	10	13	0	0	1.3	26	20.1	SW	6	12	11	8	5.0	78
SHERIDAN	1208	880.5	1014.9	28.6	11.7	20.1	- 1.7	37.2	6	6.7	2	7	0	7.8	49	16	- 14	6	6	5	0	0	0.4	24	14.8	NW	6	12	9	10	5.0	70

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations" table of the annual issue of this publication.

Conversion formulae to English Units are as follows:

1 foot = 0.3048 meters
$°F. = \frac{9}{5} \times °C + 32$
1 inch = 25.4 millimeters
1 mile per hour = 0.447 meters per second

HEATING DEGREE DAYS

(Base 65°F.)

JULY 1973

State and station	Current season: This month	Current season: Period July through this month	Normals July through this month
ALABAMA			
BIRMINGHAM	0	0	0
HUNTSVILLE	0	0	0
MOBILE	0	0	0
MONTGOMERY	0	0	0
ALASKA			
ANCHORAGE	216	216	220
ANNETTE	314	314	231
BARROW	778	778	815
BARTER ISLAND	741	741	775
BETHEL	355	355	319
BETTLES	255	255	231
BIG DELTA	163	163	181
COLD BAY	537	537	462
FAIRBANKS	111	111	148
GULKANA	240	240	254
HOMER	385	385	394
JUNEAU	343	343	288
KING SALMON	284	284	326
KODIAK	447	447	338
KOTZEBUE	483	483	375
MC GRATH	218	218	219
NOME	598	598	462
ST. PAUL ISLAND	634	634	598
SUMMIT	419	419	403
TALKEETNA	229	229	220
YAKUTAT	394	394	36[illegible]
ARIZONA			
FLAGSTAFF	39	39	52
PHOENIX	0	0	0
TUCSON	0	0	0
WINSLOW	0	0	0
YUMA	0	0	0
ARKANSAS			
FORT SMITH	0	0	0
LITTLE ROCK	0	0	0
CALIFORNIA			
BAKERSFIELD	0	0	0
BISHOP	0	0	0
BLUE CANYON	13	13	27
EUREKA U	287	287	270
FRESNO	0	0	0
LONG BEACH	0	0	0
LOS ANGELES	0	0	19
LOS ANGELES U	0	0	0
MT SHASTA R	14	14	37
OAKLAND	56	56	80
RED BLUFF	0	0	0
SACRAMENTO	0	0	0
SANDBERG R	4	4	7
SAN DIEGO	0	0	6
SAN FRANCISCO	100	100	93
SAN FRANCISCO U	199	199	202
SANTA MARIA	95	95	112
STOCKTON	0	0	0
COLORADO			
ALAMOSA	74	74	55
COLORADO SPRINGS	32	32	9
DENVER	8	8	0
GRAND JUNCTION	0	0	0
PUEBLO	2	2	0
CONNECTICUT			
BRIDGEPORT	0	0	0
HARTFORD	0	0	0
DELAWARE			
WILMINGTON	0	0	0
DIST.OF COLUMBIA			
WASHINGTON DULLES	0	0	0
WASHINGTON NATIONAL	0	0	0
FLORIDA			
APALACHICOLA U	0	0	0
DAYTONA BEACH	0	0	0
FORT MYERS	0	0	0
JACKSONVILLE	0	0	0
KEY WEST	0	0	0
LAKELAND U	0	0	0
MIAMI	0	0	0
ORLANDO	0	0	0
PENSACOLA	0	0	0
TALLAHASSEE	0	0	0
TAMPA	0	0	0
WEST PALM BEACH	0	0	0
GEORGIA			
ATHENS	0	0	0
ATLANTA	0	0	0
AUGUSTA	0	0	0
COLUMBUS	0	0	0
MACON	0	0	0
ROME	0	0	0
SAVANNAH	0	0	0
IDAHO			
BOISE	4	4	0
LEWISTON	1	1	0
POCATELLO	12	12	0
ILLINOIS			
CAIRO U	0	0	0
CHICAGO O HARE	0	0	7
CHICAGO MIDWAY	0	0	0
MOLINE	0	0	0
PEORIA	0	0	0
ROCKFORD	0	0	6
SPRINGFIELD	0	0	0
INDIANA			
EVANSVILLE	0	0	0
FORT WAYNE	0	0	0
INDIANAPOLIS	0	0	0
SOUTH BEND	0	0	6
IOWA			
BURLINGTON	0	0	0
DES MOINES	0	0	0
DUBUQUE	0	0	11
SIOUX CITY	0	0	0
WATERLOO	0	0	7
KANSAS			
CONCORDIA	0	0	0
DODGE CITY	0	0	0
GOODLAND	4	4	0
TOPEKA	0	0	0
WICHITA	0	0	0
KENTUCKY			
COVINGTON	0	0	0
LEXINGTON	0	0	0
LOUISVILLE	0	0	0
LOUISIANA			
ALEXANDRIA	0	0	0
BATON ROUGE	0	0	0
LAKE CHARLES	0	0	0
NEW ORLEANS	0	0	0
SHREVEPORT	0	0	0
MAINE			
CARIBOU	9	9	84
PORTLAND	0	0	27
MARYLAND			
BALTIMORE	0	0	0
MASSACHUSETTS			
BLUE HILL OBS R	4	4	6
BOSTON	0	0	0
WORCESTER	6	6	10
MICHIGAN			
ALPENA	42	42	75
DETROIT	0	0	0
DETROIT METRO	0	0	5
FLINT	8	8	14
GRAND RAPIDS	1	1	8
HOUGHTON LAKE	26	26	59
LANSING	11	11	9
MARQUETTE U	59	59	57
MUSKEGON	3	3	15
SAULT STE MARIE	92	92	96
MINNESOTA			
DULUTH	72	72	67
INTERNATIONAL FALLS	26	26	66
MINNEAPOLIS	1	1	14
ROCHESTER	3	3	21
ST CLOUD	14	14	18
MISSISSIPPI			
JACKSON	0	0	0
MERIDIAN	0	0	0
MISSOURI			
COLUMBIA REGIONAL	0	0	0
KANSAS CITY	0	0	0
ST JOSEPH	0	0	0
ST LOUIS	0	0	0
SPRINGFIELD	0	0	0
MONTANA			
BILLINGS	4	4	10
GLASGOW	8	8	15
GREAT FALLS	6	6	18
HAVRE	8	8	21
HELENA	23	23	33
KALISPELL	47	47	72
MILES CITY	3	3	9
MISSOULA	18	18	39
NEBRASKA			
GRAND ISLAND	2	2	6
LINCOLN	1	1	0
NORFOLK	4	4	6
NORTH PLATTE	10	10	7
OMAHA	0	0	0
SCOTTSBLUFF	18	18	0
VALENTINE	7	7	8
NEVADA			
ELKO	5	5	27
ELY	18	18	23
LAS VEGAS	0	0	0
RENO	7	7	17
WINNEMUCCA	1	1	6
NEW HAMPSHIRE			
CONCORD	15	15	16
MT WASHINGTON OBS	445	445	502
NEW JERSEY			
ATLANTIC CITY	0	0	0
ATLANTIC CITY U	0	0	0
NEWARK	0	0	0
TRENTON U	0	0	0
NEW MEXICO			
ALBUQUERQUE	0	0	0
CLAYTON	4	4	0
ROSWELL	0	0	0
NEW YORK			
ALBANY	2	2	9
BINGHAMTON	5	5	21
BUFFALO	2	2	12
NEW YORK U	0	0	0
NEW YORK KENNEDY	0	0	0
NEW YORK LA GUARDIA	0	0	0
ROCHESTER	2	2	9
SYRACUSE	2	2	11
NORTH CAROLINA			
ASHEVILLE	0	0	0
CAPE HATTERAS R	0	0	0
CHARLOTTE	0	0	0
GREENSBORO	0	0	0
RALEIGH	0	0	0
WILMINGTON	0	0	0
NORTH DAKOTA			
BISMARCK	12	12	18
FARGO	32	32	13
WILLISTON	14	14	22
OHIO			
AKRON	2	2	9
CINCINNATI ABBE OB	0	0	0
CLEVELAND	3	3	9
COLUMBUS	0	0	0
DAYTON	0	0	0
MANSFIELD	1	1	0
TOLEDO	3	3	5
YOUNGSTOWN	8	8	9
OKLAHOMA			
OKLAHOMA CITY	0	0	0
TULSA	0	0	0
OREGON			
ASTORIA	164	164	163
BURNS U	19	19	30
EUGENE	29	29	41
MEACHAM	88	88	88
MEDFORD	0	0	11
PENDLETON	1	1	6
PORTLAND	6	6	48
SALEM	30	30	43
SEXTON SUMMIT R	107	107	97
PENNSYLVANIA			
ALLENTOWN	0	0	0
ERIE	9	9	24
HARRISBURG	0	0	0
PHILADELPHIA	0	0	0
PITTSBURGH	2	2	7
SCRANTON	2	2	7
WILLIAMSPORT	5	5	0
RHODE ISLAND			
BLOCK ISLAND	0	0	9
PROVIDENCE	2	2	0
SOUTH CAROLINA			
CHARLESTON	0	0	0
CHARLESTON U	0	0	0
COLUMBIA	0	0	0
GRNVLLE-SPRTNBRG	0	0	0
SOUTH DAKOTA			
ABERDEEN	2	2	12
HURON	5	5	9
RAPID CITY	16	16	13
SIOUX FALLS	1	1	10
TENNESSEE			
BRISTOL	0	0	0
CHATTANOOGA	0	0	0
KNOXVILLE	0	0	0
MEMPHIS	0	0	0
NASHVILLE	0	0	0
OAK RIDGE R	0	0	0
TEXAS			
ABILENE	0	0	0
AMARILLO	0	0	0
AUSTIN	0	0	0
BROWNSVILLE	0	0	0
CORPUS CHRISTI	0	0	0
DALLAS	0	0	0
DEL RIO	0	0	0
EL PASO	0	0	0
FORT WORTH	0	0	0
GALVESTON U	0	0	0
HOUSTON INTERCON	0	0	0
LUBBOCK	0	0	0
MIDLAND	0	0	0
PORT ARTHUR	0	0	0
SAN ANGELO	0	0	0
SAN ANTONIO	0	0	0
VICTORIA	0	0	0
WACO	0	0	0
WICHITA FALLS	0	0	0
UTAH			
MILFORD	0	0	0
SALT LAKE CITY	1	1	0
WENDOVER	2	2	0
VERMONT			
BURLINGTON	10	10	20
VIRGINIA			
LYNCHBURG	0	0	0
NORFOLK	0	0	0
RICHMOND	0	0	0
ROANOKE	0	0	0
WALLOPS ISLAND	0	0	0
WASHINGTON			
OLYMPIA	97	97	89
QUILLAYUTE	217	217	194
SEATTLE-TACOMA	70	70	80
SPOKANE	17	17	21
STAMPEDE PASS R	265	265	281
WALLA WALLA U	0	0	5
YAKIMA	13	13	20
WEST VIRGINIA			
BECKLEY	5	5	11
CHARLESTON	0	0	0
ELKINS	12	12	20
HUNTINGTON	0	0	0
PARKERSBURG U	0	0	0
WISCONSIN			
GREEN BAY	4	4	22
LA CROSSE	1	1	10
MADISON	4	4	14
MILWAUKEE	10	10	15
WYOMING			
CASPER	36	36	13
CHEYENNE	80	80	22
LANDER	35	35	9
SHERIDAN	23	23	28

Data from airport unless otherwise specified
U indicates Urban, R indicates Rural, sites.

COOLING DEGREE DAYS

(Base 65°F.)

r 1973

State and station	Current season		Normals January through this month
	This month	Period January through this month	
ALABAMA			
BIRMINGHAM	452	969	
HUNTSVILLE	454	928	
MOBILE	598	1588	
MONTGOMERY	551	1319	
ALASKA			
ANCHORAGE	0	0	
ANNETTE	0	0	
BARROW	0	0	
BARTER ISLAND	0	0	
BETHEL	0	0	
BETTLES	0	9	
BIG DELTA	11	14	
COLD BAY	0	0	
FAIRBANKS	24	37	
GULKANA	0	0	
HOMER	0	0	
JUNEAU	0	0	
KING SALMON	0	0	
KODIAK	0	0	
KOTZEBUE	0	0	
MC GRATH	0	2	
NOME	0	0	
ST. PAUL ISLAND	0	0	
SUMMIT	0	0	
TALKEETNA	0	0	
YAKUTAT		0	
ARIZONA			
FLAGSTAFF	69	103	
PHOENIX	894	2203	
TUCSON	603	1391	
WINSLOW	343	546	
YUMA	865	2207	
ARKANSAS			
FORT SMITH	472	897	
LITTLE ROCK	506	1111	
CALIFORNIA			
BAKERSFIELD	624	1602	
BISHOP	385	702	
BLUE CANYON	171	295	
EUREKA U	0	1	
FRESNO	484	1199	
LONG BEACH	254	517	
LOS ANGELES	99	188	
LOS ANGELES U	236	556	
MT SHASTA R	206	315	
OAKLAND	25	104	
RED BLUFF	551	1224	
SACRAMENTO	373	843	
SANDBERG R	283	569	
SAN DIEGO	133	257	
SAN FRANCISCO	18	89	
SAN FRANCISCO U	8	58	
SANTA MARIA	4	83	
STOCKTON	375	987	
COLORADO			
ALAMOSA	30	44	
COLORADO SPRINGS	145	249	
DENVER	199	339	
GRAND JUNCTION	410	667	
PUEBLO	328	576	
CONNECTICUT			
BRIDGEPORT	324	507	
HARTFORD	318	569	
DELAWARE			
WILMINGTON	416	809	
DIST.OF COLUMBIA			
WASHINGTON DULLES	344	675	
WASHINGTON NATIONAL	448	889	
FLORIDA			
APALACHICOLA U	568	1492	
DAYTONA BEACH	527	1656	
FORT MYERS	545	2077	
JACKSONVILLE	533	1463	
KEY WEST	582	2651	
LAKELAND U	529	1760	
MIAMI	531	2407	
ORLANDO	602	2092	
PENSACOLA	605	1589	
TALLAHASSEE	557	1442	
TAMPA	574	1894	
WEST PALM BEACH	539	2306	
GEORGIA			
ATHENS	450	897	
ATLANTA	438	864	
AUGUSTA	505	1084	
COLUMBUS	539	1207	
MACON	562	1290	
ROME	464	983	
SAVANNAH	540	1375	

State and station	Current season		Normals January through this month
	This month	Period January through this month	
HAWAII			
HILO	341	1762	
HONOLULU	485	2445	
KAHULUI	402	1857	
LIHUE	435	2148	
IDAHO			
BOISE	341	569	
LEWISTON	382	586	
POCATELLO	194	295	
ILLINOIS			
CAIRO	503	1000	
CHICAGO O HARE	308	505	
CHICAGO MIDWAY	357	607	
MOLINE	312	542	
PEORIA	315	536	
ROCKFORD	272	456	
SPRINGFIELD	350	625	
INDIANA			
EVANSVILLE	438	827	
FORT WAYNE	291	541	
INDIANAPOLIS	349	636	
SOUTH BEND	297	531	
IOWA			
BURLINGTON	323	554	
DES MOINES	358	646	
DUBUQUE	233	366	
SIOUX CITY	308	578	
WATERLOO	268	473	
KANSAS			
CONCORDIA	399	719	
DODGE CITY	467	834	
GOODLAND	281	465	
TOPEKA	394	732	
WICHITA	482	888	
KENTUCKY			
COVINGTON	310	562	
LEXINGTON	342	659	
LOUISVILLE	422	811	
LOUISIANA			
ALEXANDRIA	512	1207	
BATON ROUGE	607	1592	
LAKE CHARLES	555	1414	
NEW ORLEANS	607	1565	
SHREVEPORT	504	1221	
MAINE			
CARIBOU	126	193	
PORTLAND	189	261	
MARYLAND			
BALTIMORE	344	651	
MASSACHUSETTS			
BLUE HILL OBS R	208	349	
BOSTON	296	501	
WORCESTER	201	331	
MICHIGAN			
ALPENA	72	122	
DETROIT	324	576	
DETROIT METRO	241	402	
FLINT	182	283	
GRAND RAPIDS	238	405	
HOUGHTON LAKE	119	178	
LANSING	176	289	
MARQUETTE U	127	152	
MUSKEGON	194	265	
SAULT STE MARIE	33	42	
MINNESOTA			
DULUTH	72	73	
INTERNATIONAL FALLS	136	195	
MINNEAPOLIS	280	443	
ROCHESTER	196	320	
ST CLOUD	141	220	
MISSISSIPPI			
JACKSON	583	1420	
MERIDIAN	526	1267	
MISSOURI			
COLUMBIA REGIONAL	401	691	
KANSAS CITY	368	693	
ST JOSEPH	400	790	
ST LOUIS	435	772	
SPRINGFIELD	382	659	
MONTANA			
BILLINGS	219	339	
GLASGOW	165	269	
GREAT FALLS	213	314	
HAVRE	166	248	
HELENA	151	200	
KALISPELL	118	145	
MILES CITY	250	393	
MISSOULA	165	208	

State and station	Current season		Normals January through this month
	This month	Period January through this month	
NEBRASKA			
GRAND ISLAND	345	602	
LINCOLN	318	601	
NORFOLK	326	568	
NORTH PLATTE	[illegible]	392	
OMAHA	332	615	
SCOTTSBLUFF	228	370	
VALENTINE	285	439	
NEVADA			
ELKO	192	269	
ELY	77	115	
LAS VEGAS	833	1881	
RENO	173	261	
WINNEMUCCA	248	390	
NEW HAMPSHIRE			
CONCORD	184	[illegible]	
MT WASHINGTON OBS	0	0	
NEW JERSEY			
ATLANTIC CITY	321	585	
ATLANTIC CITY U	278	421	
NEWARK	432	774	
TRENTON U	379	689	
NEW MEXICO			
ALBUQUERQUE	422	737	
CLAYTON	254	418	
ROSWELL	434	870	
NEW YORK			
ALBANY	248	425	
BINGHAMTON	175	271	
BUFFALO	233	367	
NEW YORK U	390	693	
NEW YORK KENNEDY	287	448	
NEW YORK LA GUARDIA	372	644	
ROCHESTER	267	482	
SYRACUSE	249	433	
NORTH CAROLINA			
ASHEVILLE	288	495	
CAPE HATTERAS R	394	905	
CHARLOTTE	426	826	
GREENSBORO	363	745	
RALEIGH	363	804	
WILMINGTON	465	1059	
NORTH DAKOTA			
BISMARCK	125	173	
FARGO	140	216	
WILLISTON	125	204	
OHIO			
AKRON	259	461	
CINCINNATI ABBE OB	336	656	
CLEVELAND	244	432	
COLUMBUS	295	565	
DAYTON	343	636	
MANSFIELD	272	501	
TOLEDO	237	408	
YOUNGSTOWN	204	347	
OKLAHOMA			
OKLAHOMA CITY	465	915	
TULSA	508	1024	
OREGON			
ASTORIA	6	6	
BURNS U	206	286	
EUGENE	119	159	
MEACHAM	108	139	
MEDFORD	323	519	
PENDLETON	327	527	
PORTLAND	178	277	
SALEM	115	155	
SEXTON SUMMIT R	117	169	
PACIFIC AREA			
GUAM TAGUAC R	470	2944	
JOHNSTON	467	2634	
KOROR R	531	3653	
KWAJALEIN	526	3677	
MAJURO	500	3461	
PAGO PAGO	469	3554	
PONAPE R	519	3512	
TRUK MOEN ISLAND	523	3624	
WAKE	572	3053	
YAP R	500	3525	
PENNSYLVANIA			
ALLENTOWN	322	544	
ERIE	163	253	
HARRISBURG	334	621	
PHILADELPHIA	404	749	
PITTSBURGH	264	464	
SCRANTON	212	348	
WILLIAMSPORT	205	395	
RHODE ISLAND			
BLOCK ISLAND	184	234	
PROVIDENCE	272	478	

State and station	Current season		Normals January through this month
	This month	Period January through this month	
SOUTH CAROLINA			
CHARLESTON	554	1292	
CHARLESTON U	524	1287	
COLUMBIA	494	1073	
GRNVLLE-SPRTNBRG	414	830	
SOUTH DAKOTA			
ABERDEEN	252	393	
HURON	233	335	
RAPID CITY	[illegible]	289	
SIOUX FALLS	[illegible]	456	
TENNESSEE			
BRISTOL	309	589	
CHATTANOOGA	443	[illegible]	
KNOXVILLE	362	746	
MEMPHIS	571	1252	
NASHVILLE	432	971	
OAK RIDGE R	374	703	
TEXAS			
ABILENE	508	1155	
AMARILLO	414	[illegible]	
AUSTIN	557	1354	
BROWNSVILLE	585	1939	
CORPUS CHRISTI	629	1854	
DALLAS	589	1379	
DEL RIO	550	1658	
EL PASO	459	973	
FORT WORTH	593	1325	
GALVESTON U	576	1461	
HOUSTON INTERCON	554	1408	
LUBBOCK	387	923	
MIDLAND	414	979	
PORT ARTHUR	524	1332	
SAN ANGELO	573	1345	
SAN ANTONIO	570	1517	
VICTORIA	638	1733	
WACO	587	1259	
WICHITA FALLS	559	1089	
UTAH			
MILFORD	239	341	
SALT LAKE CITY	[illegible]	634	
WENDOVER	393	[illegible]	
VERMONT			
BURLINGTON	187	339	
VIRGINIA			
LYNCHBURG	308	621	
NORFOLK	420	938	
RICHMOND	391	875	
ROANOKE	331	647	
WALLOPS ISLAND	307	577	
WASHINGTON			
OLYMPIA	35	55	
QUILLAYUTE	7	11	
SEATTLE	69	96	
SEATTLE-TACOMA	67	102	
SPOKANE	216	314	
STAMPEDE PASS R	15	19	
WALLA WALLA U	375	610	
YAKIMA	245	363	
WEST INDIES			
SAN JUAN P.R.	578	3396	
WEST VIRGINIA			
BECKLEY	172	318	
CHARLESTON	304	620	
ELKINS	147	259	
HUNTINGTON	357	699	
PARKERSBURG U	321	652	
WISCONSIN			
GREEN BAY	220	334	
LA CROSSE	283	461	
MADISON	215	329	
MILWAUKEE	216	356	
WYOMING			
CASPER	147	213	
CHEYENNE	112	177	
LANDER	152	248	
SHERIDAN	129	203	

Data from airport unless otherwise specified
U indicates City, R indicates Rural sites

STORM SUMMARY

JULY 1973

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				@HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				Ø ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS
Alabama	2	2			4				?					2	7	4													
Alaska *																													
Arizona												3		1	4	3													
Arkansas												5			1	4										1			
California *																													
Colorado	3	3			3			6	5			4	4		1	4												5	4
Connecticut																												?	?
Delaware														1		4													
Florida	1	1			3							3		2		5													
Georgia								3	5			5	4		7	5													
Hawaii *																													
Idaho	1	1			2				6		1	4																3	
Illinois	6	5			5			?	?			5	?	1	1	?	?												
Indiana	3	2			6					4		4		6	2	5										1		5	5
Iowa	2	2			4			6	5		4	6	6			5												6	5
Kansas								5	5			5	5		1	6													
Kentucky	1	1			4			5	5		3	5	4		1	5	3									3		6	5
Louisiana	1	1										2		1	2	4													
Maine							2	4	4																	2		6	6
Maryland															2													4	
Massachusetts												4	1			4	1												
Michigan	5	4		1	5				C			4	C		1	4											4	4	
Minnesota	6	3			4		3	6	6		2	6	6	1	3	6	4												
Mississippi												4		5	37	5													
Missouri	4	4			4			1	3			3	1			3										1			
Montana								3	5			3	4		1	3													
Nebraska	5	3			6			6	7		2	6	?	1	9	6	4												
Nevada ‡																													
New Hampshire																										4		6	6
New Jersey												3	2																
New Mexico	1	1										4				4	4												
New York											7	5	?	1	1	4													
North Carolina								5	5			4	4			4										1			
North Dakota	3	1			5			5	5		5	5	4																
Ohio	10	5		1	5			3	3	2	5	5	4	2		4										1	3	7	
Oklahoma	1	1			4			3				5				4												3	
Oregon																?	?												
Pacific Area ‡																													
Pennsylvania	1	1			5			4	5		15	6	3			4	2											6	3
Puerto Rico *																													
Rhode Island *																													
South Carolina								3	3			5	2	1		4													
South Dakota	10	4	1	15	6			6	6			5	5																
Tennessee									4			4		1	1	5	3											4	
Texas	4	3						4	4			5		2	1	4												5	6
Utah														1		3												5	
Vermont *																													
U S Virgin Is *																													
Virginia															4											5		11	
Washington *																													
West Virginia															5											3	35	6	?
Wisconsin	5	3			5			4	5			5		2		4													
Wyoming	4	3						°5	C	4	1	2		1														°5	C

- • Includes crop damage.
- C Crop damage.
- * No occurrence of storms or unusual weather phenomena reported.
- @ Includes heavy sleet storm.
- # Freezing drizzle and freezing rain, commonly known as glaze.
- Ø For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
- ‡ No Storm Data Report received for this State.
- ◇ Report Incomplete.
- † Storm damages are placed in categories varying from 1 to 9 as follows:
  - 1 Less than $50
  - 2 $50 to $500
  - 3 $500 to $5,000
  - 4 $5,000 to $50,000
  - 5 $50,000 to $500,000
  - 6 $500,000 to $5 Million
  - 7 $5 Million to $50 Million
  - 8 $50 Million to $500 Million
  - 9 $500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JULY 1973

Herbert J. Thompson and Raymond J. Haley
Office of Hydrology

The most serious flooding this month occurred in southern Texas with near record crests reported on several streams. A record flood occurred on the Raccoon River in Iowa. Locally heavy rains produced considerable urban flooding with numerous flash floods, some rather serious, in the East, the Midwest, and the Southwest. The prolonged drought in the Pacific Northwest continued. The South Umpqua River in Oregon reached minimum flow levels, and many water rights were curtailed.

Hydrologic events of unusual significance or involving loss of life or property damage are discussed in more detail below.

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	ATLANTIC SLOPE DRAINAGE		
Connecticut River Basin	Serious flash flooding occurred late on the 4th with rainfall of up to 5 inches over the lower Connecticut valley in Vermont and a maximum of over 7 inches in the central lakes' region of New Hampshire. Damage was estimated at $5 million in Vermont and $100,000 in New Hampshire. Two drownings were reported, one in each State.	2	5,100
Shenandoah River Basin	A severe flash flood occurred on Tom's Brook, a minor tributary of the Shenandoah River, late on the 26th. There are no rain gages in the basin and the intense rainfall was extremely localized. Three flood-related deaths were reported, and several homes were damaged.	3	N.A.
Tar, Neuse, and Cape Fear Rivers	Significant flooding along the Neuse River and minor flooding along the Tar and Cape Fear Rivers continued into July from rainfall which occurred near the end of June. (See flood report for June).		
Edisto River Basin	The severe flooding which occurred near the end of June continued into July along the North Fork of the Edisto River at Givhans Ferry State Park, S.C. (See flood report for June).		
	UPPER MISSISSIPPI SYSTEM		
Mill Creek	Significant flash flooding occurred on the 22d in Clinton, Iowa, resulting from more than 4 inches of rain just west of the city. An industrial park and some residences were affected. This was reported to be the second flood in five weeks in that area, with the last previous flood occurring in 1954.	0	N.A.
Des Moines River Basin	Two periods of heavy rainfall the first week of the month resulted in serious flooding in the Raccoon Basin and along the Des Moines River just below the mouth of the Raccoon. At Van Meter, Iowa, the crest stage of 21.9 feet was the highest of record. The previous record stage was 21.8 feet on July 3, 1958.	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

JULY 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	UPPER MISSISSIPPI SYSTEM-Continued		
Des Moines River Basin (Continued)	On the Raccoon River at the S.W. 18th Street bridge in Des Moines, Iowa, the crest stage of 19.3 feet was second only to the record stage of 19.8 feet in June 1947.		
Illinois River	The longest flood of record on this river ended on the 12th, by which date all points on the Illinois River had fallen below flood stage. At Beardstown, Ill., the river was over flood stage for 126 days.		
Sangamon River Basin	Flash flooding occurred in the vicinity of Springfield, Ill., on the 1st. Rainfall amounted to as much as 10 inches in 6 to 7 hours. There were bridge and highway washouts and losses of livestock.	0	N.A.
	MISSOURI BASIN		
Kansas River Basin	Three periods of rather heavy rainfall occurred during the month, but the only significant flooding resulted from the storm of the 18th-20th, with storm totals of 7 to 8 inches reported over the Big Blue and Lower Kansas River Basins. Agricultural flooding was rather extensive with 2,500 acres inundated. Losses were limited to growing crops.	0	87
	OHIO BASIN		
Kanawha River Basin	Flash flooding occurred in Kanawha County around Charleston, W. Va., on the 9th. Five inches of rain in two hours were responsible.	0	1,000
Dry and Sugar Creeks	Flash flooding occurred along these streams in Gallatin County, Ky., on the 21st. Homes and roads were damaged.	0	N.A.
	WEST GULF OF MEXICO DRAINAGE		
San Antonio River Basin	During the period from the 15th to the 17th, 9.52 inches of rainfall occurred at 4 miles south of Pipe Creek. On the night of the 14th-15th, some 4.25 inches occurred at 4 miles south of Pipe Creek, 6 inches at the city of Medina, and an estimated 16 inches occurred at Bandera. The Medina River above Medina Lake reacted sharply and reached a stage of 37.3 feet on the 15th, which exceeded the peak of July 1, 1932, and is only known to have been exceeded once since 1880, which was in 1919. Medina Lake at the Dam reached a stage of 1077.5 feet on the 15th, which is the second highest stage since the Medina Dam was built in	2	N.A.

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	WEST GULF OF MEXICO DRAINAGE-Cont'd.		
San Antonio River Basin (Continued)	1913. The highest stage was 1078.0 feet which occurred on September 16, 1919. The gage at Rio Medina below Medina Dam was destroyed by the floodwaters. The Medina River near Somerset reached a stage of 29.5 feet on July 17, which is the highest since 1890. The Medina River at Highway 281 South reached a stage of 43.6 feet (32,000 c.f.s.) on the 17th, which is about the same discharge that occurred on August 29, 1946. However, the crest for the present flood was about 5 feet higher than for the 1946 flood. The Medina River empties into the San Antonio River above Elmendorf, and the gage at Elmendorf reached a stage of 45.65 feet (32,000 c.f.s.) on the 17th, which is the highest since 1962, but well below the historical floods of 1946 and 1913, which reached stages of 61 feet and 53 feet, respectively. The San Antonio River at Falls City was above flood stage from the 18th to the 25th, reaching a crest of 25.25 feet (flood stage 12 feet) on the 20th, which is equal in stage to the 1967 high water, but greater in discharge and well below the 1946 flood. There was a loss of cars, camping equipment, boat docks, and boats on Medina Lake, probably reaching the amount of $25,000 damage during the flooding on the 15th.		
	On the morning of the 15th, some 6.25 inches of rainfall were measured at Bulverde at the headwaters of Cibolo Creek. A sharp rise occurred on the Creek, and people were evacuated by helicopter in the Bulverde area. Flooding occurred downstream from Schertz to the city of Cibolo, where some 120 trailer homes were flooded. One drowning occurred.		
	Heavy rainfall occurred during the 14th-15th in the San Antonio metropolitan area. Leon Creek rose sharply when 3 inches of rain fell on the headwaters of the creek, moved downstream, and flooded low areas along the western portions of the city. A 16-year-old boy drowned during this flood.		
Guadalupe River Basin	On the night of the 14th-15th, 9 to 11 inches of rain were unofficially reported over the headwaters of the Blanco River in Texas, while the city of Blanco received only 1.25 inches. A 14-foot rise moved down the Blanco River on the morning of the 15th, and swept 8 automobiles, several campers, and assorted camping equipment, downstream with a loss estimated at some $30,000. These floodwaters moved down the Blanco River and then downstream into the Guadalupe River, inundating the farms and		

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	WEST GULF OF MEXICO DRAINAGE-Cont'd.		
Guadalups River Basin (Continued)	pastureland along the way. There are no operational river gages along this section of the river.		
Frio River Basin	On the headwaters of the Frio River in Texas some 10 inches of rain fell on the night of the 14th-15th at Rio Frio just north of Garner State Park. At daybreak a rise on the river to some 20 feet was estimated at Garner State Park. There were approximately 9,000 people camped on the flood plain of the Frio River in the park on the morning of the 15th. These people were warned by the park officials and were moved to higher ground. Some camping equipment such as tents, etc., was lost during this evacuation. Downstream at Con Can, 28 cars, and a large amount of camping equipment, was swept downstream with an estimated loss of $70,000 at that point. Fortunately, there was no loss of life at either of these locations. All communications in this area in the way of telephone lines were lost. Fifth Army heliocopters made flights into the area to assist the marooned public. On the Sabinal River during the night of the 14th to the 15th, nearly 6 inches of rainfall occurred on the headwaters from Vanderpool to Utopia. A sharp rise occurred on the Sabinal River at Utopia to some 25 feet. This moved downstream and reached a peak of 27.9 feet on the 16th at the city of Sabinal, which was the highest stage at this gage since 1958. On the Seco Creek at Rowe Ranch near D'Hanis, an estimated 8 inches of rain near the headwaters resulted in a stage of 25.9 feet on the 15th, which was the highest since 1958. On the 14th-15th, 7.90 inches fell at Tarpley over the headwaters of the Hondo Creek. The creek reached a stage of 27 feet on the 15th, which was the highest since 1958. Hondo Creek at King Waterhold near Hondo reached a stage of 16.75 feet on the 15th - the highest since 1932. The combined flow from these creeks and rivers moved down the Frio River, which was above flood stage at Derby from the 16th to the 24th, with a peak of 15.3 feet on the 18th. At Tilden, the river was above flood stage from the 14th to the 19th with a peak stage of 18.4 feet on the 16th, and again from the 20th to the 27th with a peak stage of 26.39 feet (flood stage 12 feet) on the 22d. At Calliham the river was above flood stage from the 21st to the 30th, with a peak stage of 29.56 feet on the 24th (flood stage 12 feet).	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

JULY 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	WEST GULF OF MEXICO DRAINAGE-Cont'd.		
Rio Grande Basin	During the period of the 14th-17th, 6.27 inches of rain fell at Tornillo, Texas. Several arroyos which drain into the Rio Grande River flooded about 6,000 acres in the area. Two feed lots and several homes were flooded. Crop damage was extensive to cotton and pecans. Irrigation systems were also damaged.	0	1,275

N.A. Not Available.

FLOOD STAGE DATA

(All dates in July unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest	
		From–	To–	Stage	Date
	Ft.			Ft.	
ST. LAWRENCE DRAINAGE					
Otter Creek:					
Center Rutland, Vt.	7	June 30	2	13.21	June 30
Winooski:					
Montpelier, Vt.	15	June 30	1	17.53	June 30
ATLANTIC SLOPE DRAINAGE					
Androscoggin:					
Gulf Island Dam, Maine	35,000 c.f.s.	1	2	43,000 c.f.s.	1
Pemigewasset:					
Plymouth, N. H.	11	June 30	2	22.7	1
Merrimack:					
Manchester, N. H.	7	2	2	7.2	2
Connecticut:					
White River Junc., Vt.	18	June 30	3	25.8	June 30
North Walpole, N. H.	28	June 30	1	28.5	1
Montague City, Mass.	28	June 30	3	31.5	June 30
Northampton, Mass.	112	1	1	112.5	1
Holyoke, Mass.	9	2	2	9.1	2
Hartford, Conn.	16	1	7	21.27	3
Bodkin Rock, Conn.	8	1	8	12.1	4
Wanaque:					
Wanaque, N. J.	5	June 30	1	E 5.8	June 30
Passaic:					
Little Falls, N. J.	6	June 29	1	E 7.5	June 29
Millstone:					
Blackwells Mills, N. J.	7	June 30	1	E 9.0	June 30
Raritan:					
Round Brook, N. J.	8	June 30	1	11.4	June 30
E. Br. Delaware:					
Fishs Eddy, N. Y.	11	June 29	1	16.8	June 29
Tar:					
Rocky Mount, N. C.	9	2	4	10.1	3
Tarboro, N. C.	19	5	6	20.4	5
Greenville, N. C.	13	6	8	14.1	7
Neuse:					
Neuse, N. C.	14	June 28	4	20.75	June 29
Smithfield, N. C.	13	June 29	6	20.42	2
Goldsboro, N. C.	14	5	11	18.3	8
Kinston, N. C.	14	8	12	14.9	10
Cape Fear:					
Huske L&D, N. C.	42	1	2	43.8	1
Elizabethtown, N. C.	20	1	2	21.9	1
Lumber:					
Lumberton, N. C.	9	June 24	7	10.0	June 30, 4
Edisto:					
Givhans Ferry, S. C.	10	June 12	6	15.84	June 14
Savannah:					
Millhaven-Wade 2 SE, Ga.	15	June 4	3	17.9	June 24
Clyo, Ga.	11	June 5	11	16.5	June 21
Upper Mississippi Basin					
North Raccoon River:					
Jefferson, Iowa	10	1	8	15.05 15.10	2 4
Perry, Iowa	13	1	7	16.59	4
South Raccoon River:					
Redfield, Iowa	14	1	5	16.00 17.00 21.00	1 2 4
Upper Mississippi Basin—Cont'd					
Raccoon River:					
Van Meter, Iowa	13	1	7	21.1 21.9	1 4
Des Moines SW 18th, Iowa	12	1	9	17.8 19.3	2 5
Des Moines River:					
Des Moines 14th St., Iowa	21	1	8	24.66 26.80	2 5
Eddyville, Iowa	15	5 22	5 22	15.45 15.01	5 22
Illinois River:					
Havana, Ill.	14	Mar 9	11	23.8	May 1
Beardstown, Ill.	14	Mar 9	12	26.85	May 1
Meredosia, Ill.	14	U	10	26.75	Apr 29
Missouri Basin					
West Nishnabotna River:					
Hancock, Iowa	8	4	4	10.18	4
Nishnabotna River:					
Hamburg, Iowa (Rural FS)	16	3 4	4 5	20.13 24.28	3 4
Little Platte River:					
Smithville, Mo.	24	4 20	4 21	25.70 26.41	4 21
Republican River:					
Clay Center, Kans.	15	20	21	17.5	21
Lyons Creek:					
Woodbine, Kans.	17	19	20	22.0	20
Clarks Creek:					
Junction City, Kans.	16	19	20	18.10	20
Black Vermillion River:					
Frankfort, Kans. (Hway 9)	19	18	21	26.90	21
Fancy Creek:					
Winkler, Kans.	11	20	21	#12.80	20
Mill Creek:					
Paxico, Kans.	19	19	20	24.3	20
Soldier Creek:					
Topeka, Kans.	12	20	20	#15.80	20
Wakarusa River:					
Lawrence, Kans.	23	19	21	#30.4	20
Stranger Creek:					
Easton, Kans.	15	3	4	#16.35	3
Grand River:					
Sumner, Mo.	26	21	23	30.00	22
Chariton River:					
Novinger, Mo.	20	21	21	20.25	21
Prairie Hill, Mo.	15	21	22	17.25	22
Missouri River:					
St. Joseph, Mo.	17	3	5	19.6	4
Waverly, Mo.	18	21	23	20.2	22
Boonville, Mo.	21	22	24	21.54	23
Ohio Basin					
Eel:					
Bowling Green, Ind.	17	21	22	19.26	22
Embassass:					
Ste. Marie, Ill.	18	26	29	19.78	27
Lawrenceville, Ill.	11	June 29 26	3 Aug 2	12.9 14.22	1 31
White:					
Spencer, Ind.	14	22	22	14.44	22
Elliston, Ind.	18	23	24	19.0	23

FLOOD STAGE DATA

(All dates in July unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest	
		From—	To—	Stage	Date
	Ft.			Ft.	
Ohio Basin–Continued					
White: (Cont'd)					
Edwardsport, Ind.	15	25	26	15.3	25
Petersburg, Ind.	16	24	30	17.02	25
Little Wabash:					
Wilcox, Ill.	16	June 28	5	#20.16	2
Lower Mississippi Basin					
St. Francis:					
Fisk, Mo.	20	Mar 11	1	P24.70	Mar 26
St. Francis, Ark	18	Mar 11	1	P22.33	May 3
Atchafalaya Basin					
Atchafalaya:					
Morgan City, La.	7	Dec 20	17	13.7	May 27
WEST GULF COAST DRAINAGE					
Sabine:					
Deweyville, Tex.	14	5	7	15.04	6
Angelina:					
Lufkin, Tex. (Near)	8	June 11 14	3 21	12.40 9.3	June 15 17
Neches:					
Diboll, Tex. (Near)	10	U	9	12.1	6
East Fork Trinity:					
Crandall, Tex.	13	June 29	4	13.9	2, 3
Trinity:					
Moss Bluff, Tex.	4	June 11	18	9.3	June 19
San Antonio:					
Falls City, Tex. (Near)	12	18	25	25.25	20

River and station	Flood stage	Above flood stages -dates		Crest	
		From—	To—	Stage	Date
	Ft.			Ft	
WEST GULF COAST DRAINAGE (Continued)					
Guadalupe:					
Dupont, Tex.	20	June 12 9	6 Aug 15	26.8 23.3	June 14 26, 27
Frio:					
Derby, Tex. (Near)	6	10 16	13 24	9.4 15.3	11 18
Tilden, Tex.	12	11 20	19 27	18.4 26.39	16 22
Calliham, Tex.	12	21	30	29.50	24
Nueces:					
Three Rivers, Tex. (Near)	25	24	28	29.83	25
Mathis Bridge, Tex.	15	23	29	24.65	27
Calallen, Tex.	7	24	31	8.8	28
Rio Grande:					
Mercedes, Tex.	21	June 30	8	U	—

E Estimated

# Highest Stage Observed

__ Highest Stage of Record

U Unknown

P See Previous Monthly Reports for additional Crest Information.

RAWINSONDE DATA

Average monthly values

JULY 1973

ALBANY, N. Y.
1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	86	18.8	16.5	20	.7
1000	27	146	18.1	14.8	22	.4
950	31	577	18.8	12.6	28	2.8
900	31	1,041	16.7	9.8	29	4.7
850	31	1,525	13.2	7.7	29	5.4
800	31	2,033	10.4	3.3	28	5.9
750	31	2,569	7.8	-3.0	28	6.8
700	31	3,136	5.3	-6.6	27	7.9
650	31	3,738	2.3	-10.2	27	9.1
600	31	4,381	-1.1	-15.3	26	10.4
550	31	5,070	-5.0	-20.1	26	11.3
500	31	5,812	-9.8	-25.2	26	12.2
450	31	6,618	-15.0	-30.1	26	13.6
400	31	7,498	-21.2	-35.3	26	14.5
350	31	8,472	-28.5	-41.1	26	15.7
300	30	9,554	-36.5	-47.4	27	17.6
250	30	10,795	-45.3		27	20.1
200	30	12,256	-53.4		27	20.3
175	30	13,110	-56.5		27	19.2
150	29	14,083	-58.0		28	14.6
125	28	15,228	-59.4		27	11.6
100	28	16,624	-59.2		28	7.0
80	26	18,026	-57.8		30	1.7
70	26	18,870	-57.0		03	1.3
60	26	19,850	-55.6		08	2.9
50	26	21,017	-53.7		09	4.7
40	25	22,456	-51.7		09	6.6
30	21	24,334	-49.3		08	8.8
25	21	25,534	-47.6		08	10.8
20	20	27,015	-45.6		09	12.4
15	17	28,948	-42.6		09	14.0
10	6	31,705	-38.6			
7						

ALBUQUERQUE, N. MEX.
840 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,619	19.7	10.8	05	1.2
1000						
950						
900						
850						
800	31	2,040	18.4	5.0	14	1.1
750	31	2,590	15.4	2.0	21	1.1
700	31	3,171	11.5	-1.0	26	1.4
650	31	3,787	7.2	-3.3	27	1.3
600	31	4,439	1.9	-5.7	28	1.4
550	31	5,135	-3.2	-9.5	27	1.4
500	31	5,883	-8.3	-16.3	28	2.3
450	31	6,693	-13.2	-23.2	27	3.2
400	31	7,581	-18.9	-30.0	27	4.6
350	30	8,563	-25.9	-37.0	26	6.6
300	29	9,658	-34.3	-45.8	27	8.3
250	29	10,908	-43.9		26	11.9
200	29	12,373	-54.0		26	12.9
175	29	13,219	-59.7		26	12.1
150	28	14,168	-65.0		26	9.4
125	26	15,266	-68.6		27	5.4
100	26	16,601	-68.5		23	1.2
80	26	17,949	-65.6		09	3.0
70	26	18,765	-63.7		09	5.1
60	26	19,717	-60.8		08	7.2
50	26	20,859	-58.3		09	8.9
40	22	22,271	-55.4		09	11.5
30	21	24,119	-51.7		09	12.5
25	20	25,307	-49.6		09	13.0
20	20	26,777	-47.1		09	14.3
15	17	28,685	-45.0		08	15.2
10	11	31,426	-40.8			
7						

AMARILLO, TEXAS
893 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,095	19.2	14.7	20	1.7
1000						
950						
900						
850	31	1,520	20.2	11.6	22	4.0
800	31	2,042	17.9	7.9	22	2.8
750	31	2,592	14.4	4.4	23	1.9
700	31	3,171	10.3	1.0	23	1.6
650	31	3,784	6.2	-2.0	23	1.5
600	31	4,435	1.7	-5.5	25	1.0
550	31	5,132	-2.8	-10.6	32	1.1
500	31	5,882	-7.3	-16.7	33	1.5
450	30	6,695	-12.0	-24.8	29	2.0
400	30	7,587	-17.9	-31.6	29	3.1
350	30	8,574	-24.9	-36.7	28	4.2
300	30	9,674	-33.2	-44.7	27	6.4
250	29	10,928	-43.1		26	9.1
200	29	12,396	-53.8		26	10.5
175	29	13,244	-58.9		27	10.1
150	29	14,198	-64.8		27	7.6
125	29	15,299	-68.6		28	4.4
100	29	16,638	-68.4		29	.6
80	29	17,988	-64.8		09	3.4
70	29	18,807	-62.8		08	5.0
60	28	19,763	-60.5		08	7.6
50	28	20,907	-57.6		09	9.0
40	26	22,327	-55.3		09	11.1
30	26	24,180	-51.0		09	12.8
25	26	25,373	-48.7		09	14.2
20	25	26,848	-45.9		09	14.0
15	22	28,770	-43.7		08	15.4
10	14	31,528	-39.8		09	17.8
7						

* **ANCHORAGE, ALASKA**
1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	45	12.0	8.2	17	3.6
1000	31	132	12.0	6.5	17	3.9
950	31	561	10.0	4.8	18	4.7
900	31	1,009	7.3	3.7	18	3.4
850	31	1,477	4.4	1.6	16	2.4
800	31	1,969	2.0	-1.4	14	2.5
750	31	2,488	-.6	-5.0	15	2.4
700	31	3,037	-3.6	-10.0	15	2.6
650	31	3,619	-7.0	-15.5	15	2.9
600	31	4,239	-10.7	-20.7	15	2.6
550	31	4,903	-15.0	-24.8	15	2.4
500	31	5,617	-19.9	-29.7	15	2.3
450	31	6,390	-25.7	-35.0	15	2.4
400	31	7,232	-32.3	-40.6	15	2.4
350	31	8,163	-39.6	-46.6	14	2.2
300	31	9,196	-47.7		09	1.4
250	31	10,381	-53.8		04	1.4
200	31	11,828	-48.8		32	.5
175	31	12,707	-47.8		26	.6
150	31	13,726	-47.5		21	1.0
125	31	14,931	-47.6		19	1.4
100	31	16,406	-47.6		17	1.6
80	31	17,880	-47.6		14	1.9
70	31	18,762	-47.7		14	1.8
60	31	19,780	-47.6		11	1.9
50	31	20,985	-47.5		10	3.2
40	30	22,464	-46.6		09	4.0
30	28	24,377	-45.4		09	4.8
25	28	25,598	-44.0		09	5.6
20	28	27,102	-42.1		09	6.8
15	28	29,061	-39.3		09	8.1
10	25	31,869	-34.2		08	9.2
7	17	34,387	-29.4		09	11.9

* **ANNETTE, ALASKA**
1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	37	10.2	7.3	10	.9
1000	31	163	10.6	7.9	12	1.1
950	31	590	8.3	5.6	16	2.0
900	31	1,035	5.7	3.1	18	2.1
850	31	1,501	3.2	.3	20	2.5
800	31	1,991	.9	-2.6	20	3.5
750	31	2,508	-1.6	-7.1	21	4.1
700	31	3,054	-4.5	-13.0	22	4.5
650	31	3,635	-7.5	-16.9	23	5.0
600	31	4,254	-11.1	-19.3	23	6.5
550	31	4,917	-15.0	-23.3	24	7.1
500	31	5,632	-19.7	-29.3	24	7.9
450	31	6,406	-25.2	-34.5	24	9.0
400	31	7,250	-31.5	-39.5	24	9.2
350	31	8,185	-38.4	-43.8	25	10.5
300	31	9,224	-46.1		25	11.9
250	31	10,422	-50.5		25	13.2
200	30	11,877	-49.2		25	12.0
175	30	12,756	-48.1		25	10.0
150	30	13,771	-48.7		24	8.6
125	30	14,968	-49.2		24	6.6
100	30	16,430	-50.0		23	4.6
80	30	17,887	-50.5		21	2.6
70	30	18,757	-50.9		17	1.9
60	29	19,764	-50.8		15	1.9
50	29	20,953	-50.3		12	2.7
40	28	22,414	-49.0		10	3.6
30	28	24,311	-47.2		09	4.7
25	27	25,522	-45.7		08	6.2
20	27	27,016	-43.7		09	8.7
15	23	28,966	-40.9		09	9.2
10	20	31,750	-36.1		09	11.5
7	17	34,243	-31.3		10	12.5

ATHENS, GEORGIA
988 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	21.3	19.6	32	.4
1000						
950	31	588	22.6	18.6	28	1.4
900	31	1,058	20.5	15.4	28	2.2
850	31	1,550	17.3	12.9	27	2.2
800	31	2,067	14.3	9.3	28	2.5
750	31	2,610	11.0	5.0	27	2.7
700	31	3,183	7.6	2.1	27	2.9
650	31	3,791	4.6	-3.6	28	3.1
600	31	4,440	1.1	-7.3	28	3.1
550	31	5,136	-2.5	-12.5	28	3.6
500	31	5,886	-7.1	-17.8	29	3.5
450	31	6,701	-12.0	-24.0	31	3.0
400	31	7,593	-17.5	-30.1	31	3.5
350	31	8,582	-24.6	-36.1	32	4.6
300	31	9,683	-32.7	-44.8	33	6.3
250	31	10,940	-43.0		32	8.7
200	31	12,407	-54.6		33	10.9
175	31	13,250	-60.3		33	12.2
150	31	14,199	-65.7		34	10.0
125	31	15,294	-69.7		36	5.8
100	31	16,625	-68.2		03	3.3
80	30	17,973	-65.5		06	6.1
70	30	18,791	-62.7		07	7.9
60	30	19,747	-60.4		08	9.0
50	28	20,888	-57.5		09	10.7
40	28	22,307	-54.9		09	12.1
30	28	24,162	-51.1		09	12.9
25	27	25,354	-48.9		09	14.3
20	26	26,829	-46.3		09	15.3
15	22	28,746	-44.5		09	16.8
10	14	31,493	-40.0		09	18.4

* **BARROW, ALASKA**
1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	2.2	1.1	23	1.3
1000	30	82	2.4	1.6	22	1.9
950	31	496	3.6	-.5	24	5.1
900	31	935	2.2	-3.0	24	5.9
850	31	1,395	.0	-4.8	24	6.5
800	31	1,879	-2.0	-6.3	24	6.9
750	31	2,390	-4.3	-9.6	24	7.7
700	31	2,932	-6.5	-13.9	24	7.6
650	31	3,508	-9.2	-16.9	24	7.6
600	31	4,124	-12.5	-21.0	25	7.7
550	31	4,783	-16.6	-26.1	25	8.2
500	31	5,493	-21.1	-30.2	25	8.8
450	31	6,263	-26.4	-34.5	25	8.6
400	31	7,105	-32.1	-40.6	25	9.0
350	31	8,038	-38.8	-44.0	26	8.5
300	31	9,079	-44.9		26	7.9
250	31	10,288	-47.7		27	8.0
200	31	11,771	-44.4		26	5.9
175	31	12,667	-43.9		26	4.7
150	31	13,701	-44.2		27	4.0
125	31	14,923	-44.6		28	2.4
100	29	16,416	-44.9		25	1.4
80	28	17,909	-44.7		29	.7
70	28	18,803	-44.5		08	.2
60	28	19,836	-44.3		09	.7
50	27	21,060	-44.1		06	2.0
40	24	22,560	-43.8		08	2.6
30	20	24,498	-42.8		08	3.7
25	13	25,745	-41.3		08	4.7
20	6	27,281	-39.2			
15						
10						

BARTER IS., ALASKA
1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	3.4	2.3	14	.4
1000	31	89	5.2	3.8	23	.3
950	31	511	6.8	1.0	27	3.2
900	31	954	5.8	-.4	26	5.1
850	31	1,420	3.4	-3.2	25	6.1
800	31	1,910	.7	-6.4	25	6.7
750	31	2,426	-1.9	-9.2	25	7.4
700	31	2,972	-5.0	-12.8	24	8.0
650	31	3,551	-8.3	-15.8	24	8.2
600	31	4,169	-12.0	-20.6	24	8.8
550	31	4,830	-16.0	-25.7	24	8.9
500	31	5,541	-20.7	-30.2	24	9.7
450	31	6,312	-26.0	-35.4	24	9.1
400	31	7,155	-32.3	-41.4	24	9.4
350	31	8,086	-39.1	-44.4	24	10.6
300	31	9,124	-46.0		25	9.8
250	31	10,326	-48.5		24	6.8
200	31	11,802	-46.0		24	4.8
175	31	12,693	-44.8		26	4.5
150	31	13,725	-44.6		24	3.3
125	31	14,944	-45.0		24	3.2
100	31	16,435	-45.1		24	2.0
80	31	17,924	-45.2		24	1.2
70	31	18,817	-44.9		18	.5
60	31	19,849	-44.6		12	.7
50	31	21,070	-44.4		09	.9
40	31	22,568	-43.6		08	2.3
30	29	24,511	-42.3		08	3.5
25	29	25,747	-41.2		09	4.6
20	29	27,269	-39.4		08	5.0
15	27	29,247	-36.8		09	5.5
10	19	32,087	-30.9		08	5.7

BETHEL, ALASKA
1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	9.4	7.5	26	1.7
1000	31	114	10.1	7.6	24	1.7
950	31	540	8.7	5.5	19	2.3
900	31	986	6.5	3.1	18	3.8
850	31	1,454	4.1	-.8	19	3.4
800	31	1,945	1.6	-3.7	18	3.3
750	31	2,463	-1.1	-7.2	17	3.1
700	31	3,011	-3.7	-13.3	17	3.8
650	31	3,593	-6.7	-16.5	18	3.9
600	31	4,214	-10.1	-20.1	18	3.4
550	31	4,880	-14.4	-22.8	16	3.1
500	31	5,596	-19.1	-28.1	16	2.8
450	31	6,372	-24.6	-33.9	16	3.2
400	31	7,218	-31.0	-40.2	16	3.0
350	31	8,154	-38.2	-43.9	17	1.8
300	31	9,194	-46.0		17	.8
250	31	10,389	-52.4		35	1.4
200	31	11,840	-48.3		30	1.4
175	31	12,722	-47.4		29	1.9
150	31	13,742	-47.3		27	1.6
125	31	14,947	-47.5		33	.8
100	31	16,422	-47.6		06	.3
80	30	17,895	-47.5		07	.8
70	30	18,778	-47.4		11	1.0
60	30	19,797	-47.4		11	1.3
50	30	21,004	-47.1		10	2.8
40	28	22,482	-46.6		09	3.8
30	28	24,396	-45.1		10	4.7
25	26	25,619	-44.2		08	5.4
20	26	27,120	-42.8		09	5.7
15	17	29,088	-39.2		09	7.9
10	9	31,907	-34.2			

* **BISMARCK, N. DAK.**
956 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	503	12.7	10.5	07	.2
1000						
950	26	568	13.6	10.5	06	.3
900	31	1,015	17.5	7.5	32	.9
850	31	1,502	15.4	4.6	31	3.7
800	31	2,014	12.8	2.0	31	5.9
750	31	2,553	9.7	-3.5	30	7.5
700	31	3,122	6.1	-7.2	29	9.2
650	31	3,726	2.2	-9.7	29	10.5
600	31	4,367	-2.0	-15.1	29	11.5
550	31	5,053	-6.5	-19.4	29	12.8
500	31	5,790	-11.8	-25.4	29	14.1
450	31	6,590	-16.8	-31.9	28	14.6
400	31	7,463	-23.5	-38.5	28	16.3
350	31	8,429	-30.3	-43.9	28	19.1
300	31	9,504	-38.6	-50.5	28	22.0
250	30	10,732	-48.0		28	24.4
200	30	12,180	-53.4		27	24.4
175	30	13,038	-54.7		27	21.6
150	30	14,022	-55.6		28	18.1
125	30	15,180	-57.2		28	13.5
100	30	16,589	-57.3		28	7.5
80	29	17,999	-57.2		27	2.5
70	29	18,846	-56.2		34	.5
60	28	19,827	-55.1		07	1.7
50	28	20,995	-53.8		08	3.2
40	27	22,434	-51.7		08	5.7
30	26	24,320	-48.4		09	8.0
25	24	25,525	-46.8		09	9.3
20	22	27,008	-44.8		09	9.5
15	18	28,948	-41.9		09	11.0
10						

BOISE, IDAHO
915 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	871	17.3	2.9	13	1.5
1000						
950						
900	31	1,009	20.0	3.6	14	.8
850	31	1,503	21.0	.6	32	1.0
800	31	2,025	17.8	-2.0	30	1.8
750	31	2,573	13.7	-4.4	29	2.0
700	31	3,148	9.2	-6.6	27	3.0
650	31	3,758	4.5	-8.6	26	5.2
600	31	4,404	-.5	-11.4	26	6.8
550	31	5,092	-5.9	-15.3	25	7.6
500	31	5,832	-10.9	-22.1	26	7.9
450	31	6,633	-16.4	-29.2	25	8.5
400	31	7,508	-22.7	-34.1	25	10.6
350	31	8,477	-30.0	-41.4	25	11.5
300	31	9,552	-38.5	-48.9	25	13.4
250	31	10,779	-48.1		25	14.2
200	31	12,224	-54.9		25	16.5
175	31	13,074	-56.2		26	17.6
150	31	14,051	-57.7		26	15.4
125	30	15,199	-59.9		26	12.7
100	30	16,592	-60.1		26	6.5
80	30	17,985	-59.5		25	2.4
70	30	18,823	-58.3		20	.1
60	29	19,795	-57.3		08	2.2
50	28	20,955	-55.2		09	4.7
40	27	22,386	-53.2		09	6.1
30	26	24,25	-50.5		09	8.4
25	26	25,445	-48.5		09	9.3
20	25	26,922	-45.9		09	10.5
15	23	28,851	-43.5		09	12.7
10	14	31,611	-39.2			
7						

BOOTHVILLE, LA.
1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1	26.6	24.6	28	.6
1000	31	141	26.7	23.9	29	1.7
950	31	594	23.7	21.2	29	3.2
900	31	1,066	20.7	16.9	27	1.7
850	31	1,559	17.4	12.8	23	1.5
800	31	2,076	14.9	8.4	21	1.4
750	31	2,620	12.0	4.0	23	1.3
700	31	3,195	8.6	.3	24	.8
650	31	3,805	5.2	-3.2	33	.3
600	31	4,455	1.6	-7.1	34	1.3
550	31	5,152	-2.5	-12.1	36	1.6
500	31	5,902	-6.9	-17.4	02	2.1
450	31	6,717	-11.7	-22.1	03	2.4
400	31	7,610	-17.4	-29.2	03	3.0
350	31	8,601	-24.2	-36.2	05	3.1
300	31	9,704	-32.3	-43.7	06	3.5
250	30	10,965	-42.5		06	4.2
200	30	12,434	-54.3		06	5.2
175	30	13,278	-60.6		06	5.6
150	30	14,222	-67.2		05	5.9
125	30	15,308	-72.0		05	7.3
100	29	16,625	-71.2		07	7.7
80	28	17,958	-67.3		08	8.3
70	28	18,770	-64.0		08	9.9
60	28	19,720	-61.7		08	11.8
50	28	20,858	-58.4		09	14.2
40	27	22,269	-56.0		09	15.0
30	24	24,116	-52.4		09	16.9
25	23	25,302	-49.9		09	18.9
20	23	26,770	-47.5		09	19.6
15	21	28,682	-44.3		08	20.4
10	17	31,424	-40.3			
7						

* **BROWNSVILLE, TEXAS**
1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	7	24.5	23.2	16	1.8
1000	31	123	25.8	24.8	16	4.5
950	31	575	23.3	20.9	17	9.6
900	31	1,047	21.1	15.5	17	9.5
850	31	1,541	18.7	9.7	17	8.6
800	31	2,059	16.1	6.0	16	7.6
750	31	2,606	13.3	1.5	15	6.6
700	31	3,183	9.9	-2.4	14	5.5
650	31	3,795	6.4	-6.4	13	4.7
600	31	4,447	2.4	-10.1	12	4.6
550	31	5,144	-2.0	-17.1	11	4.3
500	31	5,895	-6.7	-22.9	09	4.4
450	31	6,711	-11.4	-27.4	09	3.9
400	31	7,604	-17.2	-32.8	08	4.3
350	31	8,595	-24.2	-38.8	08	3.4
300	31	9,696	-32.8	-45.5	08	3.6
250	31	10,953	-43.0		09	4.0
200	31	12,419	-54.7		09	6.1
175	30	13,261	-61.1		08	6.4
150	30	14,203	-67.7		08	7.3
125	30	15,286	-72.7		07	9.3
100	30	16,594	-72.2		08	11.2
80	30	17,924	-67.1		08	10.9
70	30	18,734	-64.9		08	11.3
60	29	19,677	-63.0		08	12.7
50	28	20,807	-59.9		09	15.4
40	28	22,209	-57.1		09	16.6
30	26	24,091	-52.5		09	18.8
25	24	25,232	-50.0		09	20.6
20	22	26,694	-47.6		09	22.5
15	21	28,609	-44.5		09	22.9
10	20	31,346	-40.6		09	26.5
7	15	33,804	-36.2		09	28.5

BUFFALO, N. Y.
991 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	218	18.7	14.7	21	1.7
1000						
950	31	578	19.2	12.7	25	3.5
900	31	1,042	16.4	10.3	27	4.3
850	31	1,526	13.2	8.0	27	4.9
800	31	2,034	10.3	2.5	27	5.9
750	31	2,569	7.7	-2.2	27	6.9
700	31	3,135	4.8	-7.3	27	8.0
650	31	3,737	1.7	-10.8	27	8.9
600	31	4,378	-1.7	-16.0	27	9.6
550	31	5,066	-5.5	-20.8	27	10.5
500	31	5,807	-10.1	-24.6	27	11.9
450	31	6,611	-15.3	-29.1	27	12.4
400	31	7,491	-21.3	-35.3	28	13.4
350	31	8,465	-28.4	-41.1	28	14.9
300	31	9,548	-36.6	-47.1	28	17.4
250	31	10,788	-45.5		28	20.2
200	31	12,247	-53.6		29	21.7
175	31	13,101	-56.4		29	18.9
150	31	14,076	-57.9		29	14.6
125	31	15,221	-59.4		28	12.2
100	31	16,617	-59.5		29	7.9
80	30	18,018	-58.4		30	2.8
70	30	18,862	-57.1		34	1.7
60	30	19,840	-55.8		05	2.0
50	30	21,006	-54.0		08	3.5
40	29	22,449	-51.6		08	5.3
30	28	24,328	-48.5		09	7.5
25	27	25,534	-46.8		08	8.6
20	26	27,022	-44.4		09	10.4
15	22	28,961	-41.7		09	12.3
10						
7						

CAPE HATTERAS, N. C.
1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	22.9	21.0	33	.7
1000	31	149	24.4	20.7	31	.8
950	31	598	21.6	16.7	29	1.3
900	31	1,066	19.0	11.7	30	1.1
850	31	1,555	16.0	6.7	30	1.6
800	31	2,069	13.6	3.4	29	2.2
750	31	2,610	11.3	-1.4	29	3.5
700	31	3,183	7.9	-5.2	29	4.0
650	31	3,792	4.9	-9.3	29	4.3
600	31	4,441	1.4	-13.5	28	4.0
550	31	5,136	-2.5	-17.9	28	4.4
500	31	5,886	-7.1	-22.7	28	4.2
450	31	6,700	-12.2	-27.4	28	4.4
400	31	7,590	-18.2	-32.9	28	4.4
350	31	8,576	-25.3	-39.7	30	5.6
300	31	9,674	-33.8	-46.7	31	5.8
250	31	10,927	-43.3		31	7.2
200	31	12,392	-54.5		32	10.5
175	31	13,237	-59.7		33	11.5
150	31	14,191	-64.2		33	9.3
125	31	15,300	-66.4		33	5.3
100	31	16,654	-64.9		36	2.8
80	31	18,020	-62.7		06	4.4
70	31	18,847	-60.7		07	5.8
60	31	19,811	-58.9		08	7.8
50	31	20,961	-56.5		09	9.9
40	31	22,387	-53.7		09	11.9
30	28	24,252	-49.2		09	13.4
25	28	25,453	-47.3		09	13.6
20	25	26,936	-44.9		09	13.9
15	20	28,869	-43.1		09	15.5
10	7	31,635	-38.6			
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JULY 1973

• CARIBOU, MAINE
989 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	191	17.6	15.2	24	1.3
1000						
950	31	539	17.5	11.5	28	3.4
900	31	1,001	15.5	8.4	27	4.7
850	31	1,483	12.2	5.9	27	5.8
800	31	1,989	8.8	3.3	27	6.8
750	31	2,520	5.4	-1.5	27	8.3
700	31	3,082	2.7	-7.6	27	9.3
650	31	3,678	-.5	-13.0	26	10.1
600	31	4,314	-4.0	-16.8	26	11.4
550	31	4,996	-7.9	-19.9	26	12.7
500	31	5,730	-12.5	-24.4	26	14.4
450	31	6,527	-17.7	-28.1	26	16.1
400	30	7,400	-23.6	-33.9	26	18.1
350	30	8,366	-30.6	-40.7	26	20.9
300	30	9,440	-38.8	-45.5	25	23.8
250	29	10,667	-47.8		25	25.1
200	29	12,119	-52.9		26	23.9
175	29	12,979	-53.7		26	20.3
150	29	13,968	-54.9		26	16.4
125	29	15,131	-55.7		26	11.4
100	29	16,552	-56.2		26	6.7
80	29	17,972	-55.5		26	2.5
70	29	18,825	-54.8		19	.6
60	29	19,813	-54.0		11	2.0
50	29	20,988	-52.7		09	4.2
40	27	22,435	-50.2		09	5.5
30	26	24,328	-47.5		09	7.8
25	24	25,536	-46.2		09	8.9
20	21	27,016	-44.6		09	9.7
15	16	28,959	-41.3		09	12.0
10	13	31,742	-36.0		09	15.0
7	9	34,232	-31.6			

CHARLESTON, S. C.
1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	13	23.5	21.1	35	.5
1000	31	142	24.3	22.4	32	.5
950	31	592	22.8	18.6	28	1.3
900	31	1,062	20.1	15.6	28	1.3
850	31	1,554	17.0	12.1	29	1.4
800	31	2,069	14.1	8.1	29	1.3
750	31	2,612	11.2	2.3	30	1.7
700	31	3,186	7.9	-.2	30	2.1
650	31	3,794	4.8	-5.2	28	2.5
600	31	4,443	1.3	-11.3	27	3.0
550	31	5,139	-2.6	-15.7	28	2.9
500	31	5,889	-6.9	-19.8	29	2.3
450	31	6,704	-11.8	-24.8	30	2.5
400	31	7,596	-17.5	-31.2	32	3.1
350	31	8,584	-24.8	-36.2	33	4.6
300	31	9,685	-33.2	-44.6	34	6.0
250	30	10,939	-43.3		35	7.9
200	30	12,404	-54.6		35	10.2
175	30	13,247	-60.7		35	11.1
150	30	14,192	-66.5		36	10.2
125	30	15,286	-69.6		02	6.6
100	30	16,617	-68.2		04	5.1
80	30	17,967	-65.0		06	6.7
70	30	18,786	-63.0		08	8.4
60	30	19,741	-60.6		08	10.0
50	30	20,885	-57.5		09	12.3
40	30	22,306	-54.0		09	13.3
30	30	24,170	-50.1		09	13.8
25	28	25,368	-48.0		09	14.7
20	28	26,848	-45.5		09	15.6
15	22	28,771	-43.5		09	17.2
10	5	31,498	-40.9			
7						

CHATHAM, MASS.
1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	16	18.4	16.9	24	2.3
1000	31	131	19.8	16.2	25	3.5
950	31	575	19.7	12.6	26	5.2
900	31	1,039	17.2	9.2	25	5.2
850	31	1,525	14.2	6.2	25	5.5
800	31	2,035	11.5	1.4	26	6.0
750	31	2,572	8.6	-2.9	26	6.9
700	31	3,140	5.6	-7.8	26	8.2
650	30	3,743	2.6	-10.7	26	8.6
600	30	4,387	-.9	-16.1	26	9.5
550	30	5,076	-4.9	-17.9	26	10.2
500	29	5,823	-9.7	-23.5	27	10.5
450	28	6,629	-15.0	-27.9	26	11.8
400	28	7,509	-21.1	-34.3	26	12.4
350	28	8,485	-27.9	-39.6	25	13.2
300	28	9,571	-36.1	-47.1	25	14.2
250	27	10,818	-45.3		25	15.5
200	27	12,275	-55.1		26	17.2
175	26	13,122	-59.0		27	16.1
150	26	14,086	-60.6		27	11.8
125	26	15,217	-61.7		27	9.6
100	26	16,603	-60.7		28	4.8
80	26	17,995	-59.6		33	1.4
70	26	18,833	-58.4		07	1.6
60	25	19,808	-56.5		09	3.1
50	22	20,968	-54.6		09	5.4
40	22	22,403	-52.7		09	7.3
30	20	24,277	-49.6		09	9.6
25	18	25,475	-47.5		09	10.3
20	15	26,962	-44.8		09	11.0
15	13	28,893	-42.7		09	13.3
10	12	31,671	-38.1		09	16.8
7	6	34,184	-33.8			

CHIHUAHUA, MEXICO
858 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,428	20.2	13.8	11	.2
1000						
950						
900						
850	31	1,510	20.3	12.6	12	.1
800	31	2,034	18.5	10.5	15	.5
750	31	2,585	14.9	7.9	13	1.0
700	31	3,165	10.8	5.2	09	1.5
650	31	3,780	6.7	1.7	06	2.3
600	31	4,433	2.3	-3.1	05	2.6
550	31	5,131	-1.8	-9.3	05	3.1
500	31	5,884	-6.3	-16.6	05	2.9
450	31	6,702	-10.8	-22.3	05	2.4
400	31	7,598	-16.6	-27.3	08	2.5
350	31	8,591	-23.6	-34.0	07	2.3
300	31	9,695	-32.2	-42.6	04	1.6
250	31	10,955	-42.5		05	1.3
200	31	12,423	-54.4		04	2.8
175	31	13,267	-60.6		07	2.2
150	31	14,212	-66.8		07	2.4
125	31	15,302	-70.9		08	3.8
100	30	16,620	-70.7		09	7.2
80	29	17,950	-68.1		08	8.8
70	29	18,759	-64.9		08	11.5
60	28	19,704	-62.8		09	12.4
50	28	20,835	-59.8		09	14.6
40	28	22,239	-57.0		09	16.3
30	24	24,080	-52.8		09	17.4
25	24	25,263	-50.4		09	19.7
20	24	26,729	-47.3		09	20.5
15	21	28,646	-45.0		09	18.6
10	19	31,368	-41.5		08	23.5
7	7	33,768	-38.3			

• COLD BAY, ALASKA
1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	7.4	6.9	21	1.6
1000	30	124	6.8	6.0	24	1.3
950	31	539	5.0	4.3	26	.7
900	31	980	3.9	1.8	31	.3
850	31	1,443	2.1	-1.4	22	.6
800	31	1,932	.5	-4.2	20	.9
750	31	2,449	-1.6	-6.9	23	.6
700	31	2,995	-4.2	-10.4	25	1.3
650	31	3,577	-7.3	-14.9	27	1.3
600	31	4,197	-10.8	-20.3	28	2.0
550	31	4,860	-14.9	-25.2	28	2.3
500	31	5,575	-19.6	-30.1	28	2.9
450	31	6,350	-24.9	-35.4	29	3.6
400	31	7,195	-31.3	-41.1	29	4.5
350	31	8,130	-38.4	-45.0	29	4.8
300	31	9,171	-46.1		29	4.5
250	31	10,371	-49.7		29	7.9
200	31	11,844	-46.7		29	8.9
175	30	12,717	-47.1		29	8.4
150	30	13,735	-48.2		30	6.4
125	30	14,934	-49.0		30	5.1
100	29	16,393	-49.4		30	3.1
80	29	17,855	-49.5		34	1.3
70	29	18,731	-49.1		04	.8
60	29	19,743	-49.3		07	1.6
50	29	20,938	-49.2		08	2.5
40	29	22,405	-48.4		09	4.1
30	29	24,305	-46.8		09	5.8
25	26	25,524	-45.4		09	6.6
20	25	27,019	-43.3		09	7.0
15	22	28,965	-41.1		09	8.0
10	12	31,742	-36.5		09	11.0
7	6	34,233	-31.7			

DAYTON, OHIO
982 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	299	19.3	17.5	17	.6
1000						
950	31	583	21.2	15.4	25	2.7
900	31	1,050	18.7	12.6	28	3.7
850	31	1,539	15.6	9.5	28	4.9
800	31	2,052	12.9	4.8	28	5.6
750	31	2,592	10.0	-1.3	27	6.4
700	31	3,163	7.2	-6.0	28	6.6
650	31	3,769	4.1	-9.0	28	7.5
600	31	4,416	.4	-12.6	28	8.1
550	31	5,109	-3.5	-18.8	28	8.6
500	31	5,856	-8.1	-23.3	28	9.1
450	31	6,666	-13.4	-28.7	28	10.3
400	31	7,553	-19.3	-33.4	28	11.8
350	31	8,535	-26.4	-39.0	29	12.9
300	31	9,628	-34.7	-46.2	29	14.3
250	31	10,875	-44.2		30	16.7
200	30	12,335	-54.3		29	19.9
175	30	13,183	-58.4		30	18.5
150	30	14,144	-62.1		30	15.6
125	30	15,264	-64.3		29	10.5
100	30	16,632	-63.3		29	5.9
80	30	18,009	-61.4		36	2.4
70	30	18,841	-60.0		05	3.4
60	29	19,806	-58.1		07	4.7
50	28	20,960	-55.7		08	7.0
40	27	22,389	-53.3		09	8.2
30	26	24,256	-49.9		09	9.8
25	23	25,452	-47.7		08	10.7
20	22	26,935	-45.1		08	12.5
15	20	28,861	-42.5		09	14.3
10	[illegible]	31,615	-38.6			

DEL RIO, TEXAS
977 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	314	23.8	21.0	11	3.7
1000						
950	29	563	22.7	20.5	15	7.4
900	29	1,034	20.9	18.2	17	9.5
850	29	1,529	18.7	14.7	16	8.1
800	29	2,048	16.2	9.2	16	7.2
750	29	2,596	14.1	2.9	16	6.1
700	29	3,175	10.8	-.9	17	3.3
650	29	3,789	6.8	-2.5	17	2.2
600	29	4,442	2.3	-6.7	18	1.1
550	29	5,139	-2.2	-12.1	19	1.2
500	29	5,890	-6.7	-18.7	17	1.1
450	29	6,707	-11.2	-24.3	16	1.4
400	29	7,600	-17.0	-30.9	15	1.0
350	29	8,592	-23.9	-37.9	16	1.3
300	29	9,697	-32.2	-46.0	16	1.2
250	29	10,957	-42.2		08	1.0
200	29	12,428	-54.0		14	.7
175	29	13,273	-60.1		14	1.0
150	29	14,220	-66.7		11	1.7
125	29	15,310	-71.3		08	4.3
100	29	16,626	-71.1		09	6.9
80	29	17,959	-66.9		08	8.9
70	29	18,771	-64.5		08	9.9
60	29	19,718	-62.4		09	10.6
50	29	20,851	-59.7		09	12.9
40	28	22,259	-56.2		09	14.5
30	26	24,099	-52.6		09	16.7
25	23	25,283	-50.3		09	18.2
20	16	26,763	-47.1		09	18.5
15	13	28,678	-44.9		09	20.6
10						

DENVER, COLO.
841 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,611	15.6	8.3	22	1.2
1000						
950						
900						
850						
800	31	2,032	17.4	5.3	28	1.3
750	31	2,582	14.9	1.9	31	1.0
700	31	3,162	11.0	-1.4	29	1.5
650	31	3,776	6.7	-4.7	29	2.8
600	31	4,428	1.7	-8.0	29	4.3
550	31	5,123	-3.6	-13.3	28	4.5
500	31	5,869	-8.5	-19.0	27	4.9
450	31	6,678	-14.2	-24.8	27	6.4
400	31	7,561	-20.2	-33.5	27	8.1
350	31	8,540	-27.2	-40.2	27	9.5
300	31	9,628	-35.9	-47.3	26	11.9
250	31	10,870	-45.3		26	14.3
200	30	12,327	-54.0		26	16.4
175	30	13,177	-57.9		26	16.9
150	30	14,140	-61.4		27	14.0
125	29	15,266	-63.9		27	7.1
100	29	16,628	-65.0		27	3.9
80	29	17,997	-61.9		30	.3
70	29	18,826	-60.5		09	1.7
60	29	19,791	-58.5		09	3.6
50	28	20,945	-56.4		08	6.2
40	28	22,371	-53.9		09	7.9
30	26	24,235	-50.3		09	10.2
25	22	25,433	-48.3		09	11.1
20	21	26,911	-46.2		09	12.0
15	20	28,834	-43.3		09	13.2
10	13	31,589	-39.8		09	17.0

DODGE CITY, KANS.
925 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	791	20.3	15.0	18	1.5
1000						
950						
900	31	1,026	21.3	14.5	20	4.8
850	31	1,522	20.9	9.6	23	5.5
800	31	2,045	18.0	6.2	23	3.6
750	31	2,594	14.3	2.6	24	2.0
700	31	3,172	9.9	-1.1	25	1.1
650	31	3,784	5.8	-5.2	27	1.7
600	31	4,434	1.5	-9.4	29	1.6
550	31	5,130	-2.9	-14.2	28	2.6
500	31	5,878	-7.7	-20.4	28	3.2
450	31	6,690	-12.9	-25.0	27	3.4
400	31	7,579	-18.6	-31.1	26	5.2
350	31	8,564	-25.5	-37.1	26	6.7
300	31	9,660	-34.0	-44.2	26	8.8
250	31	10,912	-43.8		26	12.5
200	31	12,376	-54.4		26	14.5
175	31	13,223	-58.8		26	12.5
150	30	14,179	-63.7		26	12.1
125	30	15,288	-66.7		28	7.9
100	29	16,637	-63.4		28	3.1
80	29	18,001	-63.1		08	1.6
70	29	18,827	-61.3		08	4.0
60	29	19,787	-59.8		08	5.8
50	29	20,935	-56.8		09	7.5
40	28	22,356	-54.2		09	9.3
30	27	24,217	-50.4		09	11.6
25	26	25,413	-48.4		09	12.1
20	26	26,891	-45.9		09	13.3
15	23	28,818	-43.1		09	14.4
10	14	31,564	-39.6		08	18.0

EL PASO, TEXAS
882 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,193	21.4	13.6	07	.4
1000						
950						
900						
850	31	1,514	21.9	10.9	13	1.8
800	31	2,039	19.5	7.2	15	2.2
750	31	2,592	16.0	4.0	14	2.0
700	31	3,173	11.5	.8	11	1.6
650	31	3,788	6.9	-.9	08	1.3
600	31	4,441	2.1	-4.4	09	1.1
550	31	5,138	-2.4	-9.3	07	1.6
500	31	5,889	-6.9	-16.2	36	1.1
450	31	6,704	-11.9	-22.4	29	1.2
400	31	7,596	-17.6	-30.1	30	2.1
350	31	8,585	-24.6	-37.5	29	3.4
300	31	9,686	-33.0	-45.7	29	4.3
250	31	10,941	-43.3		27	5.3
200	31	12,406	-54.6		26	5.0
175	30	13,250	-60.6		27	4.5
150	30	14,196	-66.4		26	3.0
125	29	15,289	-70.1		35	1.0
100	28	16,615	-70.0		08	3.6
80	28	17,950	-67.2		09	6.6
70	28	18,762	-64.5		09	8.8
60	28	19,710	-62.0		09	10.2
50	28	20,844	-59.4		09	12.0
40	28	22,254	-55.9		09	13.3
30	27	24,100	-52.1		09	14.5
25	25	25,287	-50.3		09	16.1
20	24	26,755	-47.6		09	17.1
15	20	28,672	-44.4		08	18.5
10	16	31,409	-40.5		08	22.2

ELY, NEV.
811 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,908	11.2	-3.1	20	3.1
1000						
950						
900						
850						
800	31	2,026	16.0	2.8	19	2.6
750	31	2,576	15.9	.6	18	2.3
700	31	3,158	11.9	-2.7	23	3.1
650	31	3,774	7.3	-5.8	24	5.6
600	31	4,427	1.9	-8.9	24	6.7
550	31	5,121	-3.8	-12.1	23	6.4
500	31	5,866	-9.3	-19.1	25	6.3
450	31	6,672	-15.1	-26.3	25	7.0
400	31	7,552	-21.3	-34.4	26	7.9
350	30	8,528	-28.5	-42.1	26	9.6
300	30	9,611	-37.0	-50.1	26	11.5
250	30	10,849	-45.7		26	14.5
200	30	12,308	-54.0		26	17.0
175	30	13,158	-57.8		26	16.6
150	29	14,122	-61.5		26	14.2
125	29	15,245	-64.1		26	9.9
100	28	16,608	-64.7		27	3.9
80	27	17,976	-63.2		03	.2
70	27	18,801	-60.9		08	2.7
60	27	19,764	-59.4		09	4.3
50	24	20,912	-57.2		09	7.0
40	24	22,333	-54.7		09	8.3
30	23	24,192	-50.8		09	10.3
25	23	25,385	-48.9		09	12.0
20	23	26,860	-46.3		09	13.0
15	20	28,786	-43.1		09	14.2
10	16	31,563	-39.3		09	16.1
7	7	34,063	-33.6			

EMPALME, MEXICO
1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	26.1	22.0	13	.3
1000	31	99	26.4	22.3	13	1.1
950	31	553	25.8	16.7	15	4.2
900	31	1,029	24.1	12.4	16	4.0
850	31	1,527	21.2	11.9	15	2.4
800	31	2,050	18.2	9.6	12	1.5
750	31	2,600	15.0	6.5	09	1.6
700	31	3,182	11.3	3.1	08	2.1
650	31	3,798	7.4	-.7	08	2.6
600	31	4,452	2.9	-5.2	07	2.2
550	31	5,151	-1.8	-11.0	06	2.6
500	31	5,903	-6.4	-17.5	05	2.9
450	31	6,720	-11.1	-23.6	03	3.5
400	31	7,614	-16.8	-30.7	06	2.2
350	31	8,606	-23.9	-37.9	09	2.0
300	31	9,710	-32.2	-44.6	10	2.2
250	31	10,970	-42.3		13	3.2
200	31	12,440	-54.4		14	3.5
175	31	13,284	-60.4		15	3.7
150	30	14,226	-66.7		14	2.4
125	30	15,315	-71.6		09	2.3
100	27	16,631	-71.7		08	7.1
80	25	17,959	-67.7		09	9.2
70	24	18,769	-65.9		08	10.8
60	24	19,710	-63.4		09	12.6
50	24	20,839	-60.3		09	14.7
40	24	22,241	-57.1		09	16.3
30	24	24,076	-53.8		09	17.7
25	24	25,255	-50.8		09	19.0
20	21	26,721	-48.0		09	19.6
15	19	28,630	-45.3		09	21.7
10	10	31,363	-42.8			
7						

• FAIRBANKS, ALASKA
996 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	135	13.1	9.7	31	.3
1000	[illegible]	166	12.2	9.2		
950	31	530	12.7	6.9	26	4.1
900	31	983	10.1	4.5	26	6.0
850	31	1,455	6.7	2.1	26	5.8
800	31	1,951	3.2	-.3	25	5.7
750	31	2,471	-.3	-3.5	24	5.9
700	31	3,020	-3.6	-8.7	24	6.0
650	31	3,603	-6.9	-13.2	24	6.4
600	31	4,223	-10.8	-18.7	24	6.3
550	31	4,887	-14.9	-24.2	24	6.0
500	31	5,601	-19.8	-28.6	25	5.4
450	31	6,375	-25.4	-34.2	24	5.8
400	31	7,218	-32.1	-40.6	24	6.9
350	26	8,158	-39.1	-46.9	24	6.0
300	26	9,194	-47.1		25	5.0
250	26	10,382	-53.3		25	4.1
200	26	11,829	-49.9		24	2.9
175	26	12,707	-47.5		23	3.1
150	26	13,727	-47.3		23	2.1
125	26	14,934	-47.2		21	2.0
100	26	16,410	-47.2		20	1.9
80	26	17,888	-47.1		18	1.2
70	26	18,772	-47.0		15	1.1
60	26	19,794	-46.8		12	1.5
50	26	21,004	-46.3		11	2.0
40	24	22,488	-45.3		09	3.4
30	24	24,413	-44.1		09	4.8
25	24	25,640	-42.9		09	5.7
20	24	27,152	-40.8		09	6.6
15	22	29,121	-37.5		09	6.8
10	21	31,946	-32.0		08	8.5
7	14	34,460	-27.7			

FLINT, MICH.
988 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	236	17.0	14.6	21	1.1
1000						
950	31	570	19.0	11.5	25	3.1
900	31	1,033	16.5	9.9	27	3.5
850	31	1,518	13.3	5.8	28	3.9
800	31	2,027	10.9	.1	29	5.5
750	31	2,563	8.1	-4.3	28	7.1
700	31	3,130	5.2	-6.7	28	8.0
650	31	3,732	2.0	-10.4	28	9.3
600	31	4,373	-1.7	-14.3	28	10.3
550	31	5,061	-5.5	-19.4	28	11.2
500	31	5,803	-10.1	-24.5	28	12.6
450	31	6,607	-15.5	-28.8	28	14.6
400	30	7,487	-21.5	-35.6	28	16.8
350	30	8,461	-28.5	-41.6	28	18.5
300	30	9,544	-36.5	-46.8	28	21.9
250	30	10,784	-45.5		29	24.5
200	30	12,242	-54.1		29	28.9
175	30	13,095	-56.3		29	23.8
150	29	14,067	-59.3		29	17.9
125	29	15,204	-60.8		29	13.0
100	29	16,594	-60.2		29	7.2
80	29	17,988	-59.1		32	2.6
70	29	18,828	-57.8		01	1.7
60	28	19,800	-56.6		07	2.7
50	28	20,961	-55.1		07	5.0
40	28	22,396	-52.5		09	7.1
30	26	24,268	-49.4		09	9.1
25	24	25,462	-47.8		08	9.4
20	22	26,942	-45.6		08	11.8
15	18	28,870	-42.8		09	14.1
10	6	31,606	-39.6			

FORT WORTH, TEXAS
993 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	180	24.2	21.7	19	2.6
1000						
950	31	572	24.2	19.7	21	6.8
900	31	1,045	22.0	16.1	21	7.0
850	31	1,540	19.0	13.0	22	5.5
800	31	2,060	15.9	9.3	22	4.5
750	31	2,606	12.6	5.0	22	3.3
700	31	3,182	8.9	1.0	21	2.9
650	31	3,792	5.5	-3.7	21	2.8
600	31	4,443	1.8	-9.3	22	2.3
550	31	5,139	-2.7	-13.1	22	2.1
500	31	5,889	-6.6	-18.5	25	2.1
450	31	6,706	-11.2	-23.7	25	2.8
400	31	7,600	-17.1	-30.5	26	2.8
350	31	8,591	-23.7	-37.6	25	3.5
300	31	9,696	-32.0	-45.8	25	5.0
250	31	10,958	-42.0		25	6.0
200	28	12,434	-53.5		25	5.9
175	27	13,280	-59.7		25	5.6
150	26	14,231	-66.1		26	3.7
125	26	15,322	-70.9		33	.3
100	26	16,646	-69.1		08	2.7
80	26	17,990	-65.9		08	5.6
70	26	18,806	-63.6		08	7.0
60	26	19,757	-61.3		09	9.0
50	25	20,896	-58.6		09	10.5
40	24	22,307	-56.0		09	12.6
30	21	24,157	-52.0		09	14.4
25	20	25,344	-49.3		09	15.8
20	18	26,815	-47.1		09	15.7
15	11	28,736	-44.3		09	17.1
10						
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JULY 1973

GLASGOW, MONT.
934 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	696	14.4	8.6	07	1.5
1000						
950						
900	31	1,014	18.2	5.4	33	.5
850	31	1,502	15.9	2.3	29	2.8
800	31	2,014	12.4	-.4	28	4.4
750	31	2,552	8.7	-2.7	28	6.0
700	31	3,119	5.0	-7.8	28	8.1
650	31	3,720	1.2	-10.8	28	9.5
600	31	4,359	-3.0	-14.8	28	11.1
550	31	5,042	-7.4	-19.0	28	13.1
500	31	5,778	-12.3	-24.5	28	14.4
450	31	6,575	-17.9	-29.7	28	16.3
400	31	7,445	-24.0	-36.5	28	17.6
350	31	8,408	-31.3	-43.8	28	19.0
300	31	9,478	-39.6	-50.6	28	22.3
250	31	10,700	-49.0		28	24.6
200	31	12,143	-54.3		27	23.1
175	31	13,001	-53.7		27	20.4
150	31	13,990	-54.4		28	16.6
125	31	15,155	-55.7		28	12.4
100	31	16,574	-56.4		27	7.3
80	31	17,991	-55.6		29	2.7
70	31	18,845	-54.6		35	.5
60	31	19,833	-54.1		08	1.7
50	31	21,006	-53.0		08	2.5
40	30	22,451	-51.0		09	4.7
30	29	24,335	-48.2		09	6.6
25	28	25,541	-46.3		09	7.4
20	28	27,032	-44.2		09	9.3
15	26	28,983	-41.1		09	10.5
10	16	31,749	-37.1		09	12.5
7						

GRAND JUNCTION, COLO.
853 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,472	18.9	4.5	12	3.4
1000						
950						
900						
850	27	1,513	19.9	6.3	12	3.3
800	31	2,028	19.3	3.9	13	3.6
750	31	2,580	16.3	1.3	18	1.0
700	31	3,163	12.1	-2.1	26	2.8
650	31	3,779	7.2	-4.4	27	4.5
600	31	4,431	1.9	-7.4	27	5.1
550	31	5,126	-3.6	-10.9	26	5.7
500	31	5,872	-9.3	-15.7	26	6.1
450	31	6,679	-14.3	-24.0	26	6.7
400	31	7,563	-20.2	-32.8	26	8.7
350	31	8,541	-27.4	-40.0	26	10.8
300	31	9,629	-35.9	-48.0	26	12.6
250	31	10,871	-45.2		26	15.3
200	31	12,332	-53.9		26	16.9
175	31	13,182	-57.6		26	16.8
150	31	14,146	-61.5		27	13.9
125	31	15,270	-64.0		26	7.8
100	31	16,631	-64.7		26	4.4
80	31	18,001	-62.2		06	.6
70	31	18,829	-60.7		08	2.7
60	31	19,793	-58.8		09	4.8
50	30	20,946	-56.7		09	6.9
40	28	22,370	-54.0		09	9.3
30	28	24,233	-50.0		08	10.9
25	26	25,428	-48.3		09	12.0
20	24	26,904	-46.1		09	12.9
15	14	28,834	-43.4		08	14.3
10						
7						

* GREAT FALLS, MONT.
890 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,118	14.9	3.8	24	1.5
1000						
950						
900						
850	31	1,507	17.0	.6	27	1.5
800	31	2,021	13.6	-1.4	27	2.0
750	31	2,561	9.9	-3.2	27	3.9
700	31	3,130	6.0	-5.8	27	6.9
650	31	3,733	1.7	-8.2	26	8.6
600	31	4,373	-2.7	-13.8	26	10.5
550	31	5,057	-7.0	-20.0	26	12.1
500	31	5,794	-12.1	-23.7	26	13.3
450	30	6,591	-17.3	-28.9	26	15.1
400	30	7,463	-23.6	-34.8	26	15.9
350	30	8,428	-31.0	-41.9	26	17.4
300	30	9,499	-39.7	-50.3	26	19.7
250	29	10,718	-48.9		26	22.3
200	29	12,159	-55.1		26	23.4
175	29	13,011	-55.1		26	22.3
150	29	13,997	-55.3		26	17.8
125	29	15,158	-56.6		26	13.1
100	28	16,573	-56.7		26	7.2
80	27	17,989	-56.4		25	2.8
70	26	18,837	-55.3		22	.8
60	26	19,823	-54.2		09	1.7
50	25	20,996	-53.2		09	3.2
40	24	22,441	-51.5		09	4.8
30	22	24,322	-48.1		09	7.1
25	22	25,528	-46.5		09	8.2
20	21	27,013	-44.7		08	9.9
15	19	28,956	-41.6		09	11.2
10	19	31,731	-37.4		09	13.3
7	15	34,203	-32.8		09	16.5

GREEN BAY, WIS.
990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	210	17.4	13.9	27	.7
1000						
950	29	560	18.3	11.0	27	2.5
900	29	1,022	16.1	9.0	27	3.2
850	29	1,506	13.3	6.4	27	4.5
800	29	2,015	10.8	2.4	27	6.2
750	29	2,551	8.2	-3.9	27	7.4
700	29	3,117	4.8	-7.4	28	8.7
650	29	3,718	1.6	-12.2	28	10.4
600	29	4,359	-2.1	-15.6	28	11.9
550	29	5,045	-6.0	-20.3	28	13.0
500	29	5,784	-11.2	-23.4	28	14.3
450	29	6,585	-16.4	-27.3	28	15.1
400	29	7,461	-22.5	-33.7	28	16.7
350	28	8,431	-29.3	-40.7	28	18.1
300	28	9,511	-37.3	-47.1	27	22.1
250	28	10,747	-46.3		27	27.1
200	28	12,203	-53.6		27	30.2
175	27	13,057	-55.9		28	26.2
150	27	14,034	-57.9		28	18.3
125	27	15,180	-58.8		28	12.0
100	26	16,575	-59.1		28	7.4
80	26	17,977	-58.2		31	2.8
70	26	18,821	-57.0		35	1.7
60	26	19,800	-55.8		06	2.2
50	24	20,967	-54.3		07	4.0
40	23	22,405	-51.8		09	6.1
30	23	24,285	-48.5		08	7.7
25	22	25,488	-47.3		08	9.5
20	22	26,971	-45.2		09	11.0
15	20	28,906	-42.3		09	12.5
10	15	31,693	-37.4		09	14.3
7						

GREENSBORO, N. C.
986 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	275	20.7	19.6	21	.3
1000						
950	31	595	21.6	17.3	27	1.7
900	31	1,065	19.9	13.7	28	3.0
850	31	1,556	17.1	11.3	28	3.4
800	31	2,072	14.0	8.2	29	3.9
750	31	2,614	10.7	3.8	29	4.5
700	31	3,186	7.3	-2.6	29	4.6
650	31	3,794	4.5	-6.3	28	4.9
600	31	4,442	1.0	-11.6	28	5.3
550	31	5,137	-2.7	-17.4	28	5.7
500	31	5,887	-6.7	-21.4	28	5.5
450	31	6,702	-12.0	-25.5	29	5.2
400	30	7,594	-18.1	-32.2	29	6.3
350	30	8,581	-25.1	-37.7	30	7.4
300	30	9,680	-33.4	-44.8	30	9.5
250	30	10,934	-43.3		31	11.8
200	30	12,400	-54.3		31	15.1
175	30	13,246	-59.5		32	15.7
150	30	14,199	-64.1		32	11.6
125	30	15,305	-67.5		33	6.7
100	30	16,652	-65.9		35	3.5
80	30	18,014	-63.4		06	4.2
70	30	18,839	-61.6		08	5.9
60	30	19,798	-59.5		08	8.2
50	30	20,947	-56.7		09	9.5
40	30	22,372	-53.7		09	11.6
30	30	24,237	-49.7		09	12.1
25	28	25,438	-47.6		09	12.9
20	24	26,917	-45.7		09	14.4
15	21	28,842	-43.9		09	16.6
10	5	31,570	-39.5			
7						

GUADALUPE IS., MEXICO
1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	23	16.4	14.6	34	7.1
1000	30	119	15.3	13.9	33	6.8
950	30	554	16.9	8.0	33	4.4
900	30	1,022	22.9	2.3	32	3.2
850	30	1,518	21.9	2.6	31	2.2
800	30	2,042	19.5	1.2	33	1.6
750	30	2,594	16.1	-1.2	36	1.5
700	30	3,175	11.9	-2.7	03	1.9
650	30	3,791	7.7	-6.7	04	2.3
600	30	4,445	2.8	-9.6	05	2.7
550	30	5,143	-2.2	-13.1	06	2.4
500	30	5,893	-7.3	-20.7	06	1.4
450	30	6,706	-12.4	-27.2	05	.4
400	30	7,596	-18.4	-33.0	23	.8
350	30	8,582	-25.5	-39.1	19	.8
300	30	9,678	-33.7	-47.6	21	1.0
250	30	10,932	-43.2		22	1.9
200	30	12,401	-53.7		20	3.2
175	30	13,248	-59.5		21	2.4
150	30	14,199	-65.8		17	2.3
125	30	15,292	-70.5		17	2.0
100	27	16,612	-71.2		07	3.8
80	27	17,946	-67.3		06	7.7
70	27	18,756	-65.4		06	8.4
60	26	19,699	-62.7		07	9.9
50	26	20,830	-59.8		07	13.3
40	23	22,235	-56.9		08	13.8
30	20	24,084	-52.5		08	15.6
25	17	25,269	-51.2		07	15.5
20	15	26,728	-48.8		07	16.1
15	12	28,631	-45.9			
10						
7						

* GUAM, MARIANA IS.
999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	111	25.4	23.6	10	2.3
1000	9	114	25.1	23.5		
950	31	551	23.7	21.4	10	7.0
900	31	1,023	21.0	17.9	11	6.8
850	31	1,517	18.1	14.2	11	6.0
800	31	2,036	15.7	10.6	10	5.4
750	31	2,582	12.9	6.5	10	5.3
700	31	3,160	9.7	2.5	10	5.1
650	31	3,772	6.2	-1.0	10	4.7
600	31	4,425	2.4	-4.2	10	4.7
550	31	5,123	-1.7	-7.9	10	4.4
500	31	5,876	-6.0	-15.0	09	4.6
450	30	6,695	-10.6	-20.1	09	3.5
400	30	7,592	-16.2	-26.8	08	2.4
350	30	8,588	-23.0	-33.3	06	1.9
300	30	9,696	-31.4	-42.3	04	2.4
250	29	10,960	-41.8		03	3.3
200	29	12,431	-54.2		02	5.5
175	27	13,273	-61.3		36	7.2
150	27	14,212	-69.4		35	8.3
125	25	15,282	-75.8		01	6.4
100	23	16,569	-74.4		07	7.2
80	22	17,877	-71.4		08	12.3
70	22	18,671	-68.8		08	14.0
60	22	19,600	-65.6		08	14.3
50	20	20,718	-61.5		09	14.4
40	18	22,110	-58.7		08	14.6
30	17	23,935	-54.3		09	15.5
25	14	25,123	-51.9		09	16.0
20	14	26,579	-49.3		09	18.6
15	13	28,476	-46.9		09	24.9
10	5	31,171	-41.9			
7						

HILO, HAWAII
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	21.7	20.2	25	1.2
1000	31	150	21.8	18.5	31	.7
950	31	595	18.6	16.3	05	2.3
900	31	1,058	15.5	13.6	06	3.2
850	31	1,541	12.4	11.0	06	3.3
800	31	2,050	11.4	.9	08	4.1
750	31	2,588	10.6	-5.4	10	4.2
700	31	3,160	7.8	-9.1	11	3.7
650	31	3,768	4.6	-13.2	11	2.4
600	31	4,415	1.0	-17.0	13	1.6
550	31	5,110	-2.3	-21.6	17	.8
500	31	5,861	-6.9	-25.7	23	.9
450	31	6,675	-12.1	-30.0	28	1.9
400	31	7,565	-18.6	-35.0	27	4.0
350	31	8,549	-25.8	-40.9	27	7.4
300	30	9,645	-34.4	-48.0	26	11.6
250	30	10,895	-44.0		26	14.9
200	30	12,355	-55.5		26	17.1
175	30	13,194	-61.7		26	17.4
150	29	14,134	-67.4		26	16.4
125	28	15,220	-70.8		26	10.1
100	28	16,544	-70.1		16	.6
80	28	17,872	-69.0		10	7.4
70	28	18,675	-66.7		10	10.2
60	28	19,614	-64.1		09	12.1
50	28	20,738	-61.4		09	14.8
40	27	22,131	-58.4		09	15.6
30	26	23,957	-54.5		09	17.8
25	26	25,133	-51.7		09	19.5
20	25	26,589	-49.4		09	21.7
15	22	28,489	-47.0		09	23.9
10	15	31,201	-41.7		09	26.1
7						

HUNTINGTON W. VA.
987 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	19.7	18.9	18	.7
1000						
950	31	580	21.6	17.8	25	3.0
900	31	1,049	19.5	14.5	28	4.6
850	31	1,539	16.4	10.8	28	5.1
800	31	2,053	13.5	6.2	28	5.9
750	31	2,595	10.6	1.0	27	6.4
700	31	3,166	7.4	-5.2	27	6.7
650	31	3,774	4.4	-9.7	27	7.1
600	31	4,422	1.0	-14.1	28	7.4
550	31	5,116	-3.0	-17.5	28	8.2
500	31	5,865	-7.4	-22.6	28	8.4
450	31	6,678	-12.7	-27.7	28	8.8
400	31	7,566	-18.8	-33.4	28	9.6
350	31	8,551	-25.8	-39.5	29	10.7
300	31	9,646	-34.2	-47.1	29	12.2
250	31	10,897	-43.5		29	15.9
200	31	12,364	-53.7		30	18.1
175	31	13,213	-58.5		30	18.1
150	31	14,171	-62.7		30	14.7
125	31	15,288	-65.3		30	8.9
100	30	16,648	-64.4		31	4.3
80	30	18,022	-61.6		04	2.8
70	30	18,853	-59.9		06	3.9
60	30	19,820	-58.2		07	5.5
50	30	20,974	-56.1		08	7.7
40	29	22,402	-53.2		09	9.1
30	27	24,276	-49.6		09	10.8
25	26	25,475	-47.6		09	11.7
20	23	26,958	-44.8		09	13.3
15	17	28,896	-42.3		09	14.7
10	5	31,662	-38.8			
7						

* INTERNATIONAL FALLS, MINN.
971 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	359	15.0	11.1	27	.9
1000						
950	31	542	16.8	12.1	28	1.6
900	31	1,002	14.4	8.7	28	3.4
850	31	1,483	11.8	4.8	29	4.1
800	31	1,989	8.9	.9	30	4.5
750	31	2,521	6.3	-4.3	29	5.5
700	31	3,084	3.2	-8.6	29	7.4
650	31	3,681	.0	-11.5	29	8.9
600	31	4,318	-3.6	-15.7	29	10.0
550	31	5,001	-7.8	-20.2	29	11.0
500	31	5,735	-12.6	-25.0	29	12.7
450	31	6,532	-18.0	-30.9	29	14.3
400	31	7,402	-24.3	-36.1	29	15.6
350	31	8,363	-31.6	-43.1	28	17.8
300	31	9,433	-39.7	-48.3	28	20.2
250	29	10,651	-48.6		28	23.9
200	28	12,108	-52.0		28	22.8
175	28	12,973	-52.4		28	20.8
150	28	13,966	-53.9		28	17.3
125	28	15,135	-54.6		29	11.7
100	27	16,560	-55.4		29	7.9
80	26	17,986	-55.3		30	3.6
70	24	18,841	-54.4		32	2.2
60	24	19,830	-53.9		04	1.5
50	24	21,003	-53.2		07	2.7
40	24	22,448	-50.9		08	4.2
30	24	24,334	-47.8		08	6.5
25	23	25,545	-46.2		09	8.2
20	23	27,035	-44.2		09	8.8
15	20	28,980	-41.1		09	11.0
10	16	31,768	-36.6		09	13.8
7	10	34,242	-32.9			

JACKSON, MISS.
1004 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	100	23.0	21.2	19	.7
1000	31	137	23.4	21.6	22	1.2
950	31	588	23.9	19.4	25	3.8
900	31	1,061	21.0	16.9	26	3.5
850	31	1,554	17.9	12.7	25	3.2
800	31	2,072	15.0	7.7	25	3.2
750	31	2,616	11.9	4.0	25	2.6
700	31	3,191	8.6	.3	25	2.7
650	31	3,801	5.4	-4.0	26	2.9
600	31	4,451	1.6	-6.1	25	2.5
550	31	5,148	-2.2	-10.2	26	2.2
500	31	5,899	-6.4	-16.7	28	1.7
450	31	6,717	-11.0	-24.7	31	1.3
400	31	7,612	-16.7	-29.6	33	1.8
350	31	8,604	-23.5	-36.5	33	2.1
300	31	9,710	-31.9	-44.7	31	2.7
250	31	10,971	-42.0		33	3.0
200	30	12,444	-54.2		33	4.2
175	30	13,268	-60.5		34	3.6
150	30	14,233	-66.9		36	3.5
125	29	15,323	-71.5		03	4.2
100	29	16,644	-70.1		07	4.1
80	29	17,987	-65.9		07	6.7
70	29	18,802	-63.7		07	8.3
60	29	19,754	-61.3		08	9.6
50	29	20,893	-58.5		09	11.9
40	29	22,306	-55.6		09	12.0
30	27	24,157	-51.9		09	14.3
25	25	25,343	-49.9		09	16.2
20	24	26,813	-47.0		09	17.7
15	21	28,738	-44.1		08	18.3
10	13	31,464	-41.2		08	22.2

JOHN F. KENNEDY INT. AP NY
1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	21.7	17.0	28	.8
1000	31	130	21.5	16.3	29	1.9
950	31	576	20.8	13.0	28	3.7
900	31	1,042	18.0	10.3	27	3.5
850	31	1,529	14.5	8.2	27	4.6
800	31	2,040	11.4	3.6	28	6.1
750	3	2,578	9.2	-1.7	28	7.3
700	31	3,147	6.3	-6.6	27	7.1
650	31	3,752	3.7	-11.3	27	7.6
600	31	4,397	.0	-14.5	27	8.6
550	31	5,089	-4.0	-18.5	27	9.5
500	31	5,835	-8.6	-23.4	27	10.5
450	31	6,643	-14.0	-29.0	27	10.4
400	31	7,527	-20.2	-33.1	27	11.7
350	30	8,505	-27.1	-39.6	26	12.8
300	29	9,595	-35.0	-47.3	27	13.1
250	28	10,846	-44.3		28	15.6
200	27	12,313	-54.4		28	16.1
175	27	13,160	-58.5		28	16.8
150	26	14,125	-61.0		27	14.1
125	25	15,253	-62.4		27	11.3
100	25	16,634	-61.2		29	5.7
80	25	18,024	-59.5		31	1.7
70	25	18,863	-57.9		05	1.3
60	24	19,838	-56.5		09	4.2
50	22	21,002	-54.3		09	5.3
40	20	22,441	-52.1		10	8.2
30	18	24,314	-48.8		09	9.2
25	18	25,517	-47.0		09	10.8
20	15	27,007	-44.8		09	12.3
15	14	28,947	-42.1			
10	6	31,695	-37.9			

JOHNSTON IS., PACIFIC AREA
1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	26.0	21.6	09	7.0
1000	31	128	24.3	20.9	09	7.9
950	31	576	20.5	18.6	08	9.5
900	31	1,042	17.5	14.4	08	9.9
850	31	1,529	14.6	10.9	08	9.3
800	31	2,041	12.7	4.0	09	7.6
750	31	2,582	10.6	-2.2	09	5.6
700	31	3,154	8.2	-8.9	08	4.4
650	31	3,763	6.0	-13.4	07	3.7
600	31	4,414	2.6	-15.7	08	2.9
550	31	5,112	-1.7	-20.1	07	2.4
500	31	5,863	-6.7	-24.4	08	1.0
450	31	6,677	-12.1	-26.5	25	1.4
400	31	7,568	-18.4	-31.8	27	4.5
350	31	8,553	-25.3	-37.5	27	8.1
300	31	9,650	-33.7	-44.8	26	11.9
250	31	10,903	-43.8		26	15.1
200	31	12,362	-56.1		26	17.2
175	31	13,199	-62.4		26	17.3
150	31	14,135	-68.9		26	16.3
125	31	15,212	-72.6		26	10.9
100	31	16,524	-72.4		17	1.0
80	30	17,840	-70.3		09	8.0
70	30	18,640	-67.5		09	11.1
60	29	19,574	-65.2		09	12.6
50	29	20,693	-62.1		09	13.7
40	28	22,084	-59.3		09	15.6
30	28	23,904	-55.3		09	17.6
25	27	25,073	-52.7		09	18.9
20	26	26,521	-50.0		09	22.2
15	22	28,408	-46.8		09	25.6
10	15	31,103	-43.7		09	30.4

KEY WEST, FLA.
1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	27.2	23.4	14	1.3
1000	31	132	26.7	22.8	13	1.6
950	31	585	23.2	20.3	13	1.9
900	31	1,056	20.5	15.9	13	1.8
850	31	1,548	17.4	12.4	14	1.7
800	31	2,065	14.6	8.2	14	1.5
750	31	2,608	11.7	3.9	15	1.4
700	31	3,183	8.6	-.8	16	1.3
650	31	3,793	5.2	-4.6	15	1.0
600	31	4,443	1.3	-7.8	14	.8
550	31	5,138	-2.8	-12.0	08	.6
500	31	5,888	-7.4	-16.0	03	.7
450	31	6,702	-12.0	-21.8	03	1.4
400	30	7,595	-17.7	-29.2	04	2.2
350	30	8,584	-24.6	-36.5	04	3.2
300	30	9,685	-32.9	-44.2	04	4.3
250	30	10,941	-43.2		04	5.3
200	30	12,404	-55.4		04	7.6
175	30	13,244	-61.5		05	8.1
150	30	14,185	-67.7		05	10.1
125	29	15,270	-71.0		06	9.0
100	29	16,591	-70.2		07	8.5
80	29	17,930	-66.7		07	10.0
70	29	18,742	-64.7		08	12.1
60	29	19,689	-62.3		09	14.1
50	28	20,823	-59.3		09	17.5
40	26	22,233	-56.0		09	17.2
30	24	24,080	-51.4		09	18.2
25	23	25,273	-48.5		09	19.2
20	21	26,752	-45.3		09	20.3
15	16	28,676	-43.0		09	22.6
10						

* KOROR, CAROLINE IS.
1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	27.8	24.5	13	1.7
1000	31	85	26.8	24.8	13	1.8
950	31	539	23.8	22.0	14	1.9
900	31	1,012	20.8	18.4	14	1.7
850	31	1,505	18.0	14.9	14	1.7
800	31	2,024	15.4	11.8	14	1.5
750	31	2,570	12.7	8.5	12	2.4
700	31	3,147	9.5	4.6	12	2.8
650	31	3,760	6.3	1.5	11	3.4
600	31	4,413	2.6	-1.8	11	3.8
550	31	5,113	-1.4	-5.0	11	4.0
500	31	5,868	-5.7	-10.8	10	4.6
450	31	6,688	-10.2	-16.4	10	5.5
400	31	7,587	-15.4	-24.0	10	5.8
350	31	8,585	-22.2	-30.7	09	6.6
300	31	9,697	-30.5	-39.4	09	7.6
250	31	10,966	-40.7	-47.4	07	8.1
200	31	12,444	-53.1		05	10.5
175	31	13,291	-60.2		05	10.8
150	31	14,235	-68.0		05	10.2
125	30	15,311	-75.4		06	6.4
100	30	16,591	-77.5		08	5.1
80	30	17,888	-71.7		08	10.8
70	29	18,685	-67.5		08	10.8
60	29	19,621	-64.4		09	8.8
50	29	20,746	-60.8		09	7.4
40	29	22,143	-57.8		09	7.6
30	27	23,974	-54.1		10	7.6
25	27	25,149	-52.2		10	7.3
20	26	26,598	-49.9		09	10.3
15	21	28,481	-47.8		10	16.8
10	11	31,194	-43.1			

See reference notes at end of table.

RAWINSONDE DATA

Average monthly values

KWAJALEIN, MARSHALL IS.
1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	30	4	26.9	24.0	08	5.2
1000	30	96	26.2	23.5	08	6.1
950	30	548	22.9	21.3	08	8.1
900	30	1,019	20.2	17.5	09	8.3
850	30	1,512	17.6	14.6	09	7.9
800	30	2,030	15.3	10.8	09	8.0
750	30	2,576	12.6	6.1	09	7.7
700	30	3,153	9.5	2.4	09	7.2
650	30	3,765	6.2	-2.4	09	6.8
600	30	4,417	2.5	-6.9	09	6.4
550	30	5,117	-1.2	-9.3	09	6.0
500	30	5,871	-5.6	-13.8	09	4.8
450	30	6,691	-10.6	-20.1	10	4.0
400	30	7,588	-16.4	-27.7	11	3.3
350	30	8,579	-23.3	-33.3	14	2.4
300	30	9,689	-31.7	-41.4	20	1.4
250	29	10,949	-42.4	-52.1	25	2.7
200	28	12,415	-54.9	-63.5	25	5.7
175	28	13,255	-61.9		26	8.6
150	27	14,193	-68.9		26	10.4
125	26	15,266	-75.3		26	9.8
100	22	16,551	-76.5		16	2.0
80	13	17,850	-72.2		09	6.8
70	12	18,643	-69.2		08	6.9
60	10	19,569	-65.8		08	9.6
50	10	20,689	-61.7		09	9.2
40	10	22,083	-58.4		08	9.6
30	10	23,904	-55.2		09	10.6
25	10	25,076	-52.2		09	10.5
20	8	26,533	-50.1			
15	7	28,427	-48.3			
10	7	31,113	-44.8			
7						

LAKE CHARLES, LA.
1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	5	24.2	22.8	01	.2
1000	31	136	25.3	23.0	25	1.6
950	31	587	23.1	19.9	23	4.3
900	31	1,059	20.7	15.3	22	3.7
850	31	1,552	17.8	10.4	22	2.9
800	31	2,069	15.1	6.2	22	2.6
750	31	2,613	12.0	2.8	24	2.5
700	31	3,188	8.5	-.6	25	2.1
650	31	3,798	5.2	-4.2	26	1.9
600	31	4,448	1.3	-7.7	28	1.7
550	31	5,143	-2.7	-12.6	30	.9
500	31	5,894	-6.6	-18.8	31	.8
450	31	6,709	-11.6	-23.6	34	.8
400	31	7,603	-16.9	-31.1	02	1.3
350	31	8,596	-23.6	-37.3	05	1.7
300	31	9,701	-31.9	-44.7	06	2.8
250	31	10,962	-42.1		06	3.3
200	31	12,433	-53.9		06	3.8
175	31	13,279	-60.2		07	3.9
150	31	14,226	-66.5		06	4.2
125	31	15,314	-71.8		06	5.9
100	31	16,630	-71.0		08	6.9
80	29	17,966	-66.4		08	8.8
70	29	18,780	-63.6		08	10.0
60	29	19,731	-61.3		09	11.1
50	28	20,872	-58.5		09	12.2
40	26	22,282	-56.1		09	13.4
30	25	24,127	-51.8		09	13.9
25	22	25,317	-49.6		09	17.4
20	18	26,793	-47.0		09	19.5
15	13	28,711	-44.6		09	18.6
10						
7						

LANDER, WYO.
832 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	1,697	14.4	3.9	24	1.6
1000						
950						
900						
850						
800	31	2,031	16.7	2.6	27	1.1
750	31	2,578	13.8	-.5	27	1.8
700	31	3,156	9.8	-3.6	28	3.3
650	31	3,767	5.2	-6.2	28	4.4
600	31	4,415	.4	-10.3	28	4.7
550	31	5,106	-4.8	-15.1	27	5.6
500	31	5,849	-10.0	-20.6	27	6.4
450	31	6,653	-15.5	-26.9	27	7.4
400	31	7,531	-22.2	-34.1	27	8.1
350	31	8,501	-29.4	-40.4	26	9.9
300	31	9,580	-38.0	-47.7	26	12.4
250	31	10,811	-47.5		26	15.5
200	31	12,259	-54.7		26	19.7
175	31	13,109	-57.1		26	20.3
150	31	14,079	-59.6		26	16.7
125	31	15,215	-61.2		27	10.9
100	31	16,596	-62.4		26	5.7
80	31	17,980	-60.5		29	1.1
70	31	18,816	-58.4		08	1.3
60	31	19,788	-57.5		09	3.1
50	31	20,944	-55.5		08	5.6
40	31	22,375	-53.2		09	7.4
30	28	24,244	-50.3		09	9.6
25	28	25,440	-48.3		09	10.6
20	27	26,921	-46.0		09	13.1
15	22	28,847	-43.2		09	13.5
10	8	31,607	-38.4			
7						

* LIHUE KAUAI, HAWAII
1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	36	23.9	20.3	05	5.3
1000	31	163	23.0	19.3	06	6.5
950	31	608	19.1	17.4	06	8.4
900	31	1,072	16.1	13.5	07	8.8
850	31	1,557	13.2	9.6	07	8.2
800	31	2,065	11.8	-.3	08	8.1
750	31	2,605	10.6	-7.9	08	7.2
700	31	3,176	7.8	-12.6	09	6.0
650	31	3,783	4.7	-15.7	09	4.4
600	31	4,431	1.3	-19.5	09	3.3
550	31	5,127	-2.3	-22.4	07	2.5
500	31	5,877	-7.0	-26.7	06	1.6
450	31	6,690	-12.5	-31.3	33	.3
400	31	7,578	-19.4	-37.0	31	1.2
350	31	8,559	-27.0	-43.0	28	4.2
300	31	9,648	-35.5	-50.6	27	8.6
250	31	10,891	-45.2		27	13.5
200	31	12,346	-56.0		26	17.7
175	30	13,183	-61.3		26	18.9
150	30	14,128	-66.2		26	15.3
125	29	15,227	-67.9		26	8.3
100	28	16,568	-68.5		20	1.2
80	27	17,908	-67.3		09	7.3
70	25	18,716	-65.4		09	10.0
60	25	19,661	-62.8		09	11.7
50	25	20,790	-60.8		09	14.5
40	24	22,188	-57.6		09	16.2
30	22	24,020	-53.6		09	19.3
25	22	25,199	-51.3		09	20.4
20	21	26,658	-48.6		09	22.9
15	19	28,565	-45.7		09	24.7
10	15	31,294	-41.6		09	25.6
7	7	33,735	-38.0			

LITTLE ROCK, ARK.
1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	79	22.8	20.3	22	1.1
1000	31	131	23.9	22.4	22	1.5
950	31	583	24.2	19.6	24	3.6
900	31	1,055	21.2	16.8	25	3.6
850	31	1,549	17.7	11.1	25	3.2
800	31	2,066	14.9	8.6	25	3.2
750	31	2,610	11.9	2.8	25	3.1
700	31	3,185	8.7	-1.3	24	3.0
650	31	3,795	5.3	-4.7	24	3.5
600	31	4,446	1.8	-8.4	25	3.0
550	31	5,143	-2.1	-13.8	25	2.6
500	31	5,894	-6.8	-18.9	26	3.2
450	31	6,709	-11.5	-24.7	27	3.9
400	31	7,603	-17.2	-29.1	28	5.8
350	31	8,594	-24.1	-36.3	28	6.4
300	31	9,697	-32.4	-45.1	28	7.7
250	31	10,957	-42.4		27	9.0
200	31	12,428	-53.7		27	9.3
175	31	13,274	-60.0		27	8.7
150	31	14,223	-65.5		29	6.3
125	31	15,319	-69.5		30	2.7
100	31	16,652	-67.7		04	1.8
80	31	18,005	-64.7		07	5.6
70	31	18,824	-62.6		08	7.5
60	31	19,782	-59.9		08	8.3
50	31	20,929	-57.1		09	9.9
40	31	22,348	-54.9		09	11.2
30	30	24,201	-51.5		09	12.9
25	29	25,394	-48.9		09	14.8
20	28	26,872	-46.0		09	16.4
15	24	28,799	-43.4		09	16.3
10	18	31,563	-39.4		09	19.8
7						

MCGRATH, ALASKA
1000 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	103	11.1	7.6	22	.8
1000	17	135	11.6	7.4	22	1.4
950	31	537	11.4	6.4	24	3.6
900	31	988	8.7	4.7	23	4.0
850	31	1,458	5.5	2.5	22	4.6
800	31	1,952	2.5	-.2	21	5.0
750	31	2,471	-.6	-3.9	21	5.3
700	31	3,020	-3.8	-7.6	22	5.0
650	31	3,602	-7.2	-11.2	22	4.7
600	31	4,222	-10.8	-17.2	21	4.7
550	31	4,885	-15.1	-24.0	21	5.0
500	31	5,599	-19.8	-30.5	22	4.4
450	31	6,373	-25.0	-34.1	22	3.8
400	31	7,219	-31.3	-39.8	21	3.7
350	31	8,153	-38.4	-44.6	19	4.2
300	23	9,202	-46.2		19	4.0
250	23	10,393	-53.3		23	.7
200	23	11,839	-49.3		29	1.3
175	23	12,718	-48.0		30	1.1
150	23	13,735	-47.5		30	.6
125	22	14,943	-47.7		22	.4
100	21	16,416	-47.5		15	.7
80	21	17,892	-47.2		12	1.2
70	21	18,777	-47.0		11	1.6
60	21	19,798	-47.2		10	2.0
50	21	21,005	-47.0		09	2.9
40	20	22,488	-46.0		08	4.1
30	20	24,407	-44.9		09	5.3
25	20	25,630	-43.7		09	5.8
20	18	27,134	-41.9		08	6.4
15	15	29,091	-39.1		08	6.8
10						
7						
5						

MAJURO, MARSHALL IS.
+ 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	3	28.3	24.0	09	3.2
1000	31	96	26.6	22.5	09	3.9
950	31	548	23.1	20.9	10	6.0
900	31	1,019	20.3	17.1	10	6.5
850	31	1,511	17.5	13.6	10	6.9
800	31	2,028	15.3	9.7	10	7.1
750	31	2,574	12.7	5.5	09	7.3
700	31	3,151	9.9	1.3	09	6.7
650	31	3,764	6.7	-4.9	10	6.8
600	31	4,417	3.0	-8.4	09	6.7
550	31	5,117	-1.0	-13.3	09	5.8
500	31	5,871	-5.3	-16.2	09	5.3
450	31	6,692	-10.0	-23.0	10	4.0
400	31	7,590	-15.5	-28.5	10	3.2
350	31	8,588	-22.4	-34.5	10	2.3
300	31	9,698	-30.9	-42.3	06	.2
250	30	10,965	-41.4		25	1.0
200	30	12,440	-53.7		26	5.3
175	29	13,285	-60.5		27	7.6
150	29	14,229	-67.7		27	10.2
125	29	15,308	-74.4		28	8.5
100	29	16,594	-76.6		11	1.1
80	29	17,896	-70.8		10	6.2
70	29	18,697	-66.7		10	6.6
60	29	19,636	-63.5		10	6.7
50	28	20,763	-60.7		10	6.6
40	26	22,163	-57.4		11	6.1
30	26	23,998	-53.6		10	5.6
25	22	25,174	-51.5		09	6.5
20	16	26,634	-49.2		09	9.5
15	12	28,552	-46.6			
10						
7						
5						

* MEDFORD, OREG.
970 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	401	14.9	7.1	32	.6
1000						
950	31	580	17.6	6.6	29	.9
900	31	1,042	16.7	4.8	28	1.0
850	31	1,527	14.8	2.9	36	.6
800	31	2,039	13.8	-5.0	26	.3
750	31	2,581	11.2	-8.4	24	2.2
700	31	3,153	7.5	-10.8	24	4.3
650	31	3,758	3.4	-13.4	24	5.5
600	31	4,402	-.9	-17.2	24	5.9
550	31	5,090	-5.6	-21.4	24	6.4
500	31	5,831	-10.6	-26.0	25	7.2
450	31	6,633	-16.3	-31.1	25	7.6
400	31	7,508	-22.9	-38.0	25	8.4
350	31	8,475	-30.4	-44.6	25	9.6
300	31	9,549	-38.9	-51.4	25	10.8
250	31	10,775	-47.9		26	12.7
200	31	12,223	-54.6		26	17.4
175	31	13,075	-56.3		25	18.3
150	31	14,050	-58.4		25	17.1
125	31	15,193	-60.3		25	13.2
100	31	16,582	-60.7		25	6.7
80	31	17,973	-59.7		24	1.7
70	31	18,810	-59.1		13	1.4
60	31	19,779	-57.8		10	2.8
50	31	20,935	-55.9		10	4.8
40	31	22,364	-53.3		09	6.7
30	30	24,227	-50.5		09	9.0
25	30	25,422	-48.4		09	10.3
20	29	26,900	-46.0		09	11.8
15	28	28,826	-43.2		09	13.0
10	27	31,580	-39.0		09	15.6
7	24	34,051	-34.1		09	18.9
5	8	36,449	-31.2			

MERIDA, MEXICO
1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	29	11	23.1	22.7	09	.9
1000	29	127	24.8	24.0	10	3.6
950	29	578	23.8	20.4	12	6.3
900	29	1,051	21.7	15.0	12	6.1
850	29	1,546	18.8	10.0	12	5.9
800	29	2,065	16.2	4.9	12	5.0
750	29	2,611	13.0	1.1	11	5.1
700	29	3,187	9.5	-1.3	11	4.4
650	29	3,799	5.8	-3.6	11	4.0
600	29	4,450	2.0	-8.0	10	3.9
550	29	5,147	-2.1	-12.8	09	3.7
500	29	5,899	-6.4	-18.1	08	4.0
450	29	6,715	-11.3	-22.2	08	4.7
400	29	7,609	-17.2	-29.1	08	4.2
350	28	8,600	-24.1	-34.5	07	3.9
300	28	9,703	-32.5	-43.0	07	4.2
250	27	10,961	-42.6		08	3.9
200	27	12,430	-54.4		08	3.8
175	27	13,274	-60.4		06	3.1
150	27	14,219	-66.8		06	3.8
125	26	15,308	-71.9		05	4.9
100	26	16,621	-71.2		06	7.8
80	26	17,952	-68.0		08	9.0
70	26	18,759	-65.6		08	9.8
60	25	19,701	-63.4		08	10.6
50	24	20,830	-60.2		08	11.8
40	24	22,232	-56.7		09	12.5
30	23	24,076	-52.7		09	14.7
25	20	25,262	-49.6		09	14.3
20	19	26,738	-47.1		09	15.6
15	14	28,656	-44.6		08	17.0
10	6	31,384	-38.8			
7						
5						

MIAMI, FLA.
1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	4	24.9	23.8	02	.2
1000	31	142	25.9	23.3	13	.8
950	31	594	22.9	20.0	16	2.2
900	31	1,065	20.1	16.4	16	2.3
850	31	1,556	16.8	12.9	16	1.7
800	30	2,074	14.3	9.5	16	1.6
750	30	2,617	11.5	5.5	17	1.4
700	30	3,191	8.0	1.2	18	1.2
650	30	3,800	4.7	-2.7	19	1.0
600	30	4,448	.8	-5.2	22	.3
550	30	5,143	-3.2	-9.9	35	.4
500	30	5,892	-7.3	-14.3	02	.9
450	30	6,706	-12.0	-20.0	01	1.7
400	30	7,597	-17.7	-25.6	01	2.3
350	29	8,588	-24.6	-32.9	03	3.3
300	29	9,689	-33.0	-42.6	04	5.1
250	29	10,945	-43.2		04	5.8
200	29	12,408	-55.2		04	8.0
175	29	13,249	-61.7		04	10.2
150	29	14,189	-67.9		04	11.0
125	28	15,274	-71.0		05	10.6
100	28	16,596	-69.8		07	8.3
80	28	17,934	-67.1		07	10.0
70	27	18,744	-64.9		08	12.2
60	27	19,691	-62.2		08	14.7
50	27	20,827	-59.0		09	16.9
40	27	22,232	-57.1		10	18.0
30	27	24,075	-51.8		09	19.7
25	25	25,267	-49.3		09	19.8
20	24	26,743	-46.4		09	20.5
15	17	28,669	-43.7		09	21.9
10	7	31,406	-40.8			
7						
5						

MIDLAND, TEXAS
916 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	874	19.9	15.9	12	1.4
1000						
950						
900	31	1,030	21.3	17.2	17	3.4
850	31	1,525	19.8	13.6	18	6.9
800	31	2,047	17.7	9.6	17	4.1
750	31	2,597	14.5	5.2	14	2.6
700	31	3,177	10.5	1.5	11	1.9
650	31	3,790	6.6	-2.2	07	1.3
600	31	4,443	2.4	-7.3	05	1.0
550	31	5,141	-2.2	-13.2	05	1.2
500	31	5,892	-6.6	-18.3	01	.6
450	31	6,708	-11.3	-24.0	29	.8
400	31	7,602	-17.0	-30.2	28	1.2
350	31	8,594	-23.8	-37.7	29	2.4
300	31	9,698	-32.4	-45.4	30	2.7
250	31	10,957	-42.4		28	4.5
200	29	12,425	-54.0		26	5.2
175	29	13,270	-60.3		25	4.6
150	29	14,218	-66.0		25	2.9
125	27	15,310	-70.6		01	.3
100	24	16,635	-70.2		07	3.2
80	22	17,972	-66.4		09	6.6
70	22	18,785	-64.7		09	8.0
60	22	19,733	-61.9		09	8.8
50	21	20,868	-59.2		09	11.2
40	21	22,275	-56.4		09	13.0
30	19	24,122	-51.5		09	14.7
25	16	25,308	-49.5		09	16.6
20	13	26,777	-46.6		09	16.1
15	11	28,696	-44.3		09	18.3
10	6	31,440	-39.9			
7						

MONTERREY, MEXICO
963 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	29	423	22.6	21.8	12	1.0
1000						
950	29	571	22.2	21.2	12	2.5
900	29	1,041	19.7	17.7	14	6.0
850	29	1,534	18.5	12.0	14	8.3
800	29	2,053	17.3	5.6	15	7.2
750	29	2,603	15.0	-.4	15	5.8
700	29	3,183	11.1	-4.9	14	3.5
650	29	3,797	7.1	-7.5	14	2.6
600	29	4,450	2.5	-10.1	12	3.0
550	29	5,147	-2.0	-15.3	11	3.3
500	29	5,899	-6.6	-21.0	11	4.3
450	29	6,715	-11.2	-27.2	11	4.9
400	29	7,609	-16.9	-33.7	10	4.7
350	29	8,602	-23.8	-39.6	10	4.1
300	29	9,705	-32.3	-46.9	10	4.4
250	29	10,965	-42.5		08	3.7
200	29	12,434	-54.2		08	5.0
175	29	13,277	-60.7		08	5.6
150	29	14,222	-67.2		08	6.9
125	29	15,307	-72.5		08	9.1
100	28	16,617	-71.7		08	10.5
80	28	17,948	-67.3		08	11.0
70	27	18,757	-65.4		08	11.9
60	26	19,701	-63.2		08	13.2
50	26	20,830	-60.3		09	16.4
40	25	22,234	-57.0		09	18.0
30	23	24,075	-52.4		09	20.4
25	22	25,263	-50.3		09	21.4
20	20	26,726	-48.3		09	23.7
15	15	28,633	-44.8		09	25.7
10						
7						

MONETT, MO.
966 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	438	20.3	18.5	17	1.5
1000						
950	31	578	21.8	18.3	21	2.6
900	31	1,049	20.8	13.9	23	5.1
850	31	1,542	17.9	9.2	24	3.9
800	31	2,059	14.7	5.2	25	3.5
750	31	2,602	11.5	.9	25	2.8
700	31	3,175	8.0	-2.0	24	2.5
650	31	3,784	4.7	-6.8	24	2.7
600	31	4,433	1.1	-10.1	25	3.4
550	31	5,127	-3.1	-14.6	26	3.9
500	31	5,876	-7.5	-20.8	27	4.7
450	31	6,689	-12.3	-26.8	27	5.2
400	31	7,579	-18.2	-32.0	28	6.4
350	31	8,567	-24.7	-38.6	28	7.5
300	30	9,669	-33.1	-45.4	28	9.2
250	30	10,925	-42.7		28	12.3
200	30	12,394	-53.9		27	14.1
175	30	13,241	-59.3		27	13.4
150	30	14,194	-64.5		27	11.3
125	30	15,298	-67.5		28	6.7
100	30	16,643	-66.9		30	2.1
80	30	17,999	-64.2		07	3.8
70	30	18,821	-62.2		08	5.4
60	30	19,779	-59.9		08	6.8
50	30	20,924	-57.3		09	8.0
40	30	22,345	-54.7		09	9.5
30	30	24,199	-51.4		09	11.7
25	28	25,387	-49.4		09	12.6
20	27	26,860	-46.5		09	14.5
15	27	28,783	-44.1		09	15.1
10	17	31,537	-40.8		09	19.2
7	8	33,960	-37.1			

MONTGOMERY, ALA.
1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	57	22.8	20.2	11	.2
1000	31	142	22.6	21.3	26	.2
950	31	591	23.0	19.0	28	1.8
900	31	1,062	20.3	16.5	27	2.4
850	31	1,554	17.1	12.6	28	2.1
800	31	2,070	14.2	8.8	27	2.1
750	31	2,613	11.1	4.8	26	2.0
700	31	3,187	7.8	1.6	27	2.3
650	31	3,795	4.7	-2.2	26	2.7
600	31	4,444	1.2	-7.7	27	2.1
550	31	5,140	-2.6	-11.3	27	1.4
500	31	5,891	-6.7	-17.6	30	1.3
450	31	6,706	-11.8	-23.0	34	1.3
400	31	7,598	-17.5	-29.8	34	1.8
350	31	8,589	-24.1	-37.4	34	3.3
300	31	9,692	-32.4	-43.8	34	4.4
250	31	10,951	-42.7		34	4.5
200	31	12,419	-54.5		35	6.2
175	30	13,260	-60.6		35	8.4
150	30	14,205	-66.8		36	7.7
125	30	15,293	-71.2		02	5.7
100	30	16,616	-69.3		06	4.3
80	30	17,959	-66.0		07	6.9
70	29	18,775	-63.4		08	8.6
60	29	19,728	-60.9		08	9.9
50	29	20,870	-57.9		09	12.2
40	29	22,287	-54.9		09	12.7
30	28	24,139	-51.7		09	13.4
25	27	25,326	-49.6		09	15.7
20	26	26,797	-47.0		09	17.7
15	25	28,716	-44.0		09	19.1
10	16	31,470	-39.9		09	19.8
7						

NASHVILLE, TENN.
995 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	180	21.1	20.3	16	.4
1000						
950	31	587	22.7	18.4	23	3.4
900	31	1,058	20.1	16.0	26	3.8
850	31	1,549	16.7	12.4	27	3.7
800	31	2,065	14.0	7.6	27	3.6
750	31	2,607	11.0	2.6	27	3.7
700	31	3,180	7.8	-1.1	26	3.9
650	31	3,788	4.9	-6.2	26	3.8
600	31	4,437	1.4	-11.3	27	4.4
550	31	5,133	-2.6	-16.0	27	4.4
500	31	5,883	-7.1	-21.9	27	5.1
450	31	6,697	-11.9	-26.9	28	5.6
400	31	7,588	-17.9	-32.1	29	5.9
350	31	8,577	-24.6	-38.4	29	7.6
300	31	9,678	-33.0	-45.3	29	11.0
250	31	10,934	-42.8		30	13.7
200	31	12,404	-53.9		29	15.0
175	31	13,251	-59.5		30	15.1
150	31	14,202	-65.1		31	11.6
125	31	15,304	-68.2		31	5.7
100	31	16,644	-67.1		34	2.4
80	31	18,002	-63.7		05	3.7
70	31	18,825	-61.9		07	5.7
60	30	19,783	-59.8		08	7.4
50	28	20,929	-57.0		08	9.2
40	28	22,352	-54.2		09	10.3
30	28	24,214	-50.2		09	11.4
25	28	25,409	-48.5		09	12.4
20	28	26,886	-46.2		09	13.8
15	22	28,802	-44.5		09	15.7
10	17	31,547	-39.8		09	17.4
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JULY 1973

* NOME, ALASKA 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	5	6.7	5.1	24	1.2
1000	30	98	7.3	5.2	25	1.9
950	31	515	6.3	2.8	21	3.4
900	31	959	5.5	.5	22	4.0
850	31	1,425	3.6	-3.3	22	4.6
800	31	1,915	1.1	-7.0	22	4.7
750	31	2,432	-1.2	-9.7	22	4.4
700	31	2,980	-3.7	-12.5	24	4.3
650	31	3,561	-7.1	-17.1	24	4.0
600	31	4,181	-10.7	-22.2	25	3.7
550	31	4,846	-14.7	-25.3	26	4.1
500	31	5,560	-19.7	-29.1	27	4.3
450	31	6,334	-25.1	-34.5	27	4.4
400	31	7,179	-31.6	-38.6	27	4.1
350	31	8,113	-38.4	-45.3	28	4.5
300	31	9,154	-45.6		31	3.9
250	31	10,352	-51.5		33	3.8
200	31	11,807	-48.6		34	4.0
175	31	12,688	-47.2		35	2.9
150	31	13,709	-47.1		34	2.0
125	31	14,915	-47.4		36	2.2
100	31	16,390	-47.3		01	2.0
80	29	17,865	-47.1		04	1.8
70	29	18,750	-47.1		06	2.3
60	28	19,770	-47.1		07	2.5
50	27	20,979	-46.9		07	3.1
40	27	22,462	-45.9		08	4.3
30	26	24,383	-44.5		08	4.7
25	26	25,607	-43.4		08	5.9
20	26	27,115	-41.8		08	6.2
15	25	29,082	-38.8		08	7.7
10	23	31,897	-33.4		08	9.0
7	17	34,423	-28.7		08	9.7

NORTH PLATTE, NEBR. 919 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	847	16.9	12.1	04	.9
1000						
950						
900	31	1,023	19.8	12.0	34	.5
850	31	1,517	19.3	8.7	22	2.1
800	31	2,037	17.1	5.3	23	2.4
750	31	2,585	13.8	2.4	24	2.3
700	31	3,162	9.6	-1.4	26	2.5
650	31	3,772	4.9	-4.6	27	2.9
600	31	4,421	.6	-10.2	28	4.1
550	31	5,114	-3.6	-16.0	28	5.3
500	31	5,860	-8.6	-19.3	28	6.5
450	31	6,669	-14.0	-25.2	27	6.7
400	31	7,553	-20.1	-32.3	27	8.2
350	30	8,535	-27.1	-38.9	27	11.3
300	30	9,624	-35.6	-46.9	26	14.2
250	30	10,867	-45.2		26	17.5
200	30	12,326	-54.3		26	21.2
175	30	13,174	-58.0		27	19.8
150	30	14,138	-61.2		27	15.7
125	30	15,265	-63.0		27	10.0
100	30	16,637	-63.4		28	5.7
80	30	18,014	-61.5		21	.6
70	30	18,847	-59.4		08	1.6
60	30	19,817	-57.3		08	4.0
50	30	20,975	-55.4		09	5.9
40	30	22,406	-53.3		09	8.0
30	30	24,275	-49.9		09	10.1
25	30	25,472	-47.9		09	11.3
20	29	26,953	-45.5		09	12.1
15	23	28,877	-43.2		09	13.8
10	5	31,591	-41.0			
7						

OAKLAND, CALIF. 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	6	13.0	10.9	26	1.4
1000	31	120	12.6	10.3	26	1.7
950	31	552	16.8	4.7	28	2.7
900	31	1,019	22.9	-.1	31	3.5
850	31	1,514	21.0	-2.8	32	2.8
800	31	2,035	17.5	-4.7	32	1.8
750	31	2,582	13.7	-8.6	32	1.4
700	31	3,158	9.6	-11.8	26	.8
650	31	3,768	5.7	-15.0	21	1.4
600	31	4,417	1.4	-18.5	22	2.8
550	31	5,112	-3.2	-22.7	24	4.0
500	31	5,859	-8.2	-27.1	25	6.0
450	31	6,668	-13.9	-32.1	26	7.3
400	31	7,551	-20.7	-38.2	26	9.7
350	31	8,527	-27.9	-44.2	26	11.9
300	31	9,613	-36.2	-50.9	26	14.8
250	31	10,855	-44.9		26	18.3
200	31	12,318	-53.7		26	18.8
175	31	13,169	-57.6		26	17.9
150	31	14,132	-61.8		25	15.2
125	31	15,253	-64.3		25	10.6
100	30	16,617	-64.2		25	4.0
80	30	17,984	-63.3		11	2.0
70	30	18,810	-61.3		10	4.1
60	29	19,770	-59.6		10	5.0
50	26	20,918	-57.0		09	7.3
40	26	22,340	-54.6		09	8.8
30	26	24,194	-51.6		09	11.7
25	24	25,383	-49.5		09	12.1
20	22	26,856	-46.9		09	12.8
15	15	28,779	-44.4		09	14.0
10	5	31,495	-41.1			
7						

OMAHA, NEBR. 968 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	30	403	19.3	17.1	21	1.0
1000						
950	30	561	21.1	16.6	23	2.2
900	30	1,031	20.5	12.9	24	4.2
850	30	1,523	18.1	8.6	25	4.3
800	30	2,041	15.0	6.3	26	3.8
750	30	2,584	11.6	2.7	28	3.8
700	30	3,157	7.8	-.7	30	4.5
650	30	3,765	4.3	-7.0	29	4.6
600	30	4,412	.5	-12.3	28	5.9
550	30	5,105	-3.7	-17.3	28	6.9
500	30	5,852	-8.1	-23.1	29	7.3
450	30	6,663	-13.3	-28.9	28	8.1
400	29	7,548	-19.3	-34.7	28	9.7
350	29	8,530	-26.6	-39.8	28	11.9
300	29	9,621	-35.1	-46.4	28	14.3
250	29	10,867	-44.6		27	18.2
200	29	12,331	-53.7		27	21.7
175	28	13,182	-57.6		27	19.8
150	28	14,147	-61.0		28	17.6
125	28	15,275	-62.2		27	11.9
100	28	16,653	-62.2		29	5.5
80	26	18,039	-60.8		32	1.1
70	26	18,873	-58.9		07	2.5
60	25	19,844	-57.3		08	3.8
50	25	21,002	-55.3		08	5.4
40	25	22,434	-52.9		09	7.6
30	25	24,306	-49.2		09	9.3
25	25	25,508	-47.1		09	11.3
20	21	26,994	-45.1		09	12.4
15	19	28,935	-42.0		09	13.6
10	13	31,707	-38.2		09	17.2
7						

+ PAGO PAGO, AMERICAN SAMOA 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	5	28.1	24.3	10	4.1
1000	31	116	26.0	20.7	10	4.5
950	31	567	22.7	18.2	08	5.2
900	31	1,036	19.8	14.7	08	4.6
850	31	1,528	17.0	10.0	07	4.8
800	31	2,044	14.8	5.7	07	4.4
750	31	2,588	12.0	1.6	06	4.6
700	31	3,163	8.7	-2.3	06	3.9
650	31	3,773	5.4	-6.0	04	3.2
600	31	4,423	2.0	-9.4	01	2.8
550	31	5,121	-1.9	-14.2	35	2.7
500	31	5,873	-5.9	-18.5	34	3.2
450	31	6,692	-10.8	-23.7	34	3.7
400	31	7,587	-16.9	-30.3	32	4.2
350	31	8,579	-23.8	-35.9	30	5.1
300	31	9,683	-32.4	-44.3	28	7.3
250	30	10,943	-42.6		28	8.4
200	30	12,410	-54.8		27	10.7
175	30	13,251	-61.1		26	11.0
150	30	14,194	-67.3		27	11.2
125	30	15,277	-73.3		28	10.0
100	30	16,573	-75.4		28	6.6
80	30	17,871	-73.1		28	7.5
70	30	18,659	-70.0		28	7.8
60	29	19,588	-65.2		28	7.8
50	29	20,710	-61.0		28	7.5
40	27	22,103	-58.0		29	8.0
30	27	23,935	-53.5		28	8.1
25	26	25,118	-51.1		28	4.9
20	23	26,587	-48.5		04	1.2
15	21	28,488	-45.5		07	2.9
10	15	31,228	-41.8		10	7.0
7						

* PEORIA, ILL. 992 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	30	200	19.1	16.0	14	.3
1000						
950	30	572	21.5	14.0	25	2.8
900	30	1,040	19.1	11.6	27	4.8
850	30	1,530	16.2	8.2	27	6.1
800	30	2,043	13.2	4.9	28	6.4
750	30	2,584	10.2	-.4	28	6.9
700	30	3,155	7.2	-6.7	28	6.6
650	30	3,761	3.7	-9.2	27	7.0
600	30	4,407	.2	-13.5	27	8.4
550	30	5,100	-3.8	-17.7	27	9.2
500	30	5,846	-8.1	-22.2	27	9.8
450	30	6,657	-13.5	-27.0	27	9.9
400	30	7,542	-19.8	-32.4	27	11.6
350	30	8,522	-26.9	-37.8	28	13.4
300	29	9,614	-35.2	-45.3	28	15.8
250	29	10,860	-44.7		28	18.3
200	29	12,320	-54.4		28	20.6
175	28	13,167	-58.6		28	20.4
150	28	14,128	-61.7		28	15.2
125	28	15,249	-64.2		28	10.1
100	27	16,621	-63.2		29	5.2
80	26	17,999	-61.6		34	1.9
70	26	18,830	-60.1		06	2.8
60	26	19,796	-58.4		07	4.4
50	26	20,950	-55.7		08	6.8
40	26	22,382	-52.9		09	8.6
30	26	24,251	-49.8		09	9.7
25	24	25,450	-47.8		09	10.8
20	23	26,930	-45.3		09	11.9
15	21	28,859	-43.1		08	14.0
10	15	31,623	-38.3		09	16.7
7	11	34,088	-34.5			

* PITTSBURGH, PA. 974 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	359	18.4	15.5	22	.8
1000						
950	31	577	19.2	14.7	25	3.0
900	31	1,041	17.2	12.6	27	4.7
850	31	1,527	14.1	8.8	28	5.0
800	31	2,038	11.5	3.9	28	6.1
750	31	2,576	9.0	-.2	28	7.3
700	31	3,145	6.3	-5.4	28	8.3
650	31	3,749	3.1	-10.4	28	9.2
600	31	4,394	-.2	-15.2	28	9.9
550	31	5,086	-4.0	-19.7	28	10.5
500	31	5,831	-8.5	-23.8	28	11.8
450	31	6,640	-13.8	-28.9	28	12.4
400	31	7,525	-20.1	-34.0	28	13.4
350	31	8,504	-27.2	-40.8	28	14.5
300	31	9,593	-35.4	-47.7	29	15.8
250	31	10,837	-45.1		29	18.0
200	30	12,298	-54.2		30	20.3
175	30	13,147	-58.2		30	20.8
150	30	14,110	-60.9		30	16.4
125	30	15,239	-62.7		29	10.7
100	30	16,614	-62.3		29	6.1
80	30	17,998	-60.5		35	2.0
70	30	18,833	-58.9		05	2.8
60	30	19,805	-57.2		07	4.4
50	30	20,964	-55.0		08	6.6
40	30	22,399	-52.5		09	8.2
30	29	24,271	-49.3		09	10.0
25	28	25,471	-47.1		09	10.8
20	25	26,949	-45.1		08	12.8
15	22	28,876	-42.5		09	13.9
10	21	31,638	-38.6		09	16.9
7	15	34,097	-35.0		09	19.1

+ PONAPE, CAROLINE IS. 1005 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	29	39	28.7	24.4	08	2.6
1000	29	81	27.2	23.6	08	2.9
950	29	535	23.8	21.4	09	5.1
900	29	1,007	20.7	18.3	10	6.5
850	29	1,500	17.5	14.1	09	7.5
800	29	2,018	15.4	10.1	09	7.4
750	29	2,564	12.8	6.4	10	6.7
700	29	3,141	9.6	1.5	10	6.9
650	29	3,754	6.4	-2.7	09	6.9
600	29	4,406	2.6	-5.9	09	7.3
550	29	5,106	-1.3	-10.2	09	6.3
500	29	5,860	-5.3	-16.3	09	4.9
450	29	6,680	-10.2	-20.8	09	3.8
400	29	7,578	-15.7	-27.2	08	2.0
350	29	8,575	-22.6	-34.2	05	1.3
300	29	9,684	-31.1	-43.1	30	1.5
250	29	10,950	-41.3		27	4.1
200	29	12,426	-53.6		26	6.5
175	29	13,271	-60.4		26	9.0
150	29	14,214	-68.0		27	10.7
125	29	15,291	-74.6		27	9.3
100	29	16,578	-76.3		09	.8
80	29	17,880	-71.1		09	7.0
70	28	18,677	-67.4		09	6.8
60	28	19,614	-64.1		09	5.7
50	27	20,741	-61.1		09	5.8
40	25	22,136	-58.3		09	6.7
30	25	23,963	-54.9		10	7.3
25	25	25,138	-51.9		10	7.7
20	25	26,592	-49.5		09	10.2
15	23	28,490	-47.4		10	18.1
10	19	31,189	-43.1		09	28.1
7	7	33,605	-40.0			

PORTLAND, MAINE 1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	20	19.0	16.2	26	1.0
1000	31	123	19.5	14.2	29	1.7
950	31	566	19.5	11.6	29	3.1
900	31	1,031	17.1	9.2	28	3.2
850	31	1,515	13.4	6.6	27	4.2
800	31	2,024	10.2	3.2	27	5.7
750	31	2,558	7.2	-1.3	27	7.2
700	31	3,123	4.6	-7.7	26	9.1
650	31	3,724	1.9	-12.2	26	10.5
600	31	4,365	-1.7	-16.2	26	11.5
550	31	5,053	-5.8	-20.4	26	12.7
500	31	5,793	-10.5	-24.0	26	14.4
450	31	6,596	-16.0	-29.4	26	15.6
400	31	7,473	-22.0	-33.8	26	16.3
350	31	8,445	-28.9	-38.9	25	16.3
300	31	9,527	-37.1	-45.8	25	18.7
250	31	10,763	-46.2		25	21.4
200	31	12,217	-54.6		26	22.9
175	31	13,067	-57.3		26	21.4
150	31	14,040	-58.2		26	17.0
125	31	15,185	-59.1		26	11.6
100	31	16,583	-59.0		27	6.1
80	31	17,987	-57.7		28	1.1
70	30	18,834	-56.7		08	.6
60	30	19,814	-55.5		08	2.9
50	29	20,982	-53.8		09	4.7
40	28	22,424	-51.8		09	7.3
30	26	24,301	-48.9		09	8.6
25	25	25,504	-46.9		09	9.7
20	22	26,994	-45.0		09	11.6
15	17	28,937	-41.7		09	13.4
10	10	31,738	-37.0			
7						

* QUILLAYUTE, WASH. 1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	58	10.3	9.3	12	.2
1000	31	158	11.0	10.0	06	.0
950	31	587	12.2	7.1	25	1.0
900	31	1,041	11.6	2.4	24	2.0
850	31	1,517	9.5	-.5	24	2.7
800	31	2,019	7.4	-5.4	25	3.0
750	31	2,547	5.0	-9.6	25	4.6
700	31	3,108	2.4	-12.3	25	6.1
650	31	3,703	-.7	-14.9	25	7.5
600	31	4,339	-4.4	-18.7	25	8.5
550	31	5,019	-8.7	-23.0	25	10.5
500	31	5,750	-14.1	-27.4	25	12.5
450	31	6,541	-19.5	-31.2	25	14.5
400	31	7,406	-25.7	-36.5	25	16.6
350	31	8,363	-32.8	-42.2	26	19.6
300	31	9,426	-41.3	-48.4	25	22.3
250	31	10,641	-50.0		25	23.8
200	31	12,082	-54.0		25	22.2
175	31	12,938	-54.4		25	19.9
150	31	13,926	-54.2		25	17.3
125	31	15,093	-54.9		25	12.9
100	30	16,519	-55.4		25	8.9
80	30	17,943	-55.1		24	4.3
70	30	18,796	-55.2		22	2.2
60	30	19,781	-54.7		17	1.1
50	29	20,949	-53.8		11	2.7
40	29	22,389	-51.8		09	5.1
30	27	24,263	-49.0		09	6.5
25	26	25,468	-47.5		09	7.8
20	26	26,950	-45.3		09	9.3
15	25	28,883	-42.3		09	11.0
10	24	31,652	-37.9		09	13.5
7	18	34,125	-33.1		09	16.2

RAPID CITY, S. DAK. 906 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	966	15.5	7.9	31	1.1
1000						
950						
900	28	1,034	17.3	7.6	30	.8
850	31	1,516	18.5	3.6	22	1.9
800	31	2,034	15.8	1.4	24	2.3
750	31	2,579	12.6	-1.0	27	3.3
700	31	3,154	8.8	-4.1	29	5.4
650	31	3,762	4.2	-6.1	28	6.2
600	31	4,408	-.4	-11.2	28	6.5
550	31	5,098	-5.3	-15.4	[illegible]	7.1
500	31	5,840	-10.2	-21.5	27	8.9
450	31	6,643	-15.6	-27.4	28	10.2
400	31	7,521	-21.9	-34.3	27	11.6
350	31	8,493	-29.2	-41.0	27	13.1
300	31	9,572	-37.7	-48.1	27	15.3
250	31	10,803	-47.5		27	17.2
200	31	12,251	-54.8		27	20.9
175	31	13,102	-56.6		27	20.2
150	31	14,075	-58.9		27	17.3
125	31	15,214	-60.2		27	11.8
100	31	16,603	-60.6		27	5.6
80	31	17,993	-60.0		27	1.6
70	31	18,832	-58.0		08	.4
60	31	19,805	-56.9		08	2.3
50	30	20,967	-55.0		08	4.6
40	29	22,401	-52.8		09	6.2
30	29	24,272	-49.6		09	9.1
25	28	25,471	-48.0		09	10.1
20	26	26,952	-45.5		09	11.3
15	23	28,876	-43.0		09	11.8
10	13	31,629	-39.3		09	15.7
7						

ST CLOUD, MINN. 978 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	30	316	15.0	13.1	31	.5
1000						
950	30	564	18.3	12.1	28	.9
900	30	1,027	16.7	8.9	28	3.3
850	30	1,512	14.0	5.5	27	5.5
800	30	2,022	11.7	1.1	28	6.8
750	30	2,560	8.7	-1.7	28	7.9
700	30	3,127	5.4	-6.6	28	8.8
650	30	3,729	2.0	-11.6	28	9.6
600	30	4,370	-2.0	-15.6	29	10.3
550	30	5,057	-6.1	-20.7	29	11.6
500	30	5,796	-11.0	-25.9	29	12.0
450	30	6,597	-16.3	-31.8	29	13.7
400	30	7,473	-22.5	-37.4	29	16.5
350	30	8,443	-29.6	-42.1	29	18.2
300	30	9,521	-38.0	-49.1	29	21.5
250	30	10,753	-47.0		28	24.7
200	30	12,205	-53.6		28	24.3
175	30	13,060	-55.5		28	21.7
150	30	14,038	-57.2		28	17.2
125	30	15,187	-58.7		28	12.6
100	30	16,589	-58.6		28	7.1
80	30	17,992	-58.3		29	3.3
70	30	18,835	-57.0		33	1.6
60	30	19,813	-56.0		03	1.7
50	28	20,980	-54.2		07	3.3
40	28	22,417	-52.4		08	5.1
30	28	24,293	-49.0		08	6.9
25	27	25,494	-47.2		08	8.1
20	26	26,979	-45.0		09	9.7
15	20	28,913	-42.7		09	10.2
10	8	31,691	-38.8			
7						

* ST PAUL IS., ALASKA 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	10	5.7	5.2	25	.9
1000	29	127	5.3	5.1	26	1.6
950	31	537	4.0	2.5	25	1.6
900	31	977	3.6	-.6	26	1.8
850	31	1,441	2.7	-2.8	25	1.4
800	31	1,930	1.2	-5.4	26	1.4
750	31	2,448	-1.3	-8.8	28	1.9
700	31	2,995	-4.0	-13.1	30	2.1
650	31	3,577	-6.8	-17.2	30	1.9
600	31	4,197	-10.4	-22.3	32	2.2
550	31	4,862	-14.7	-27.4	32	2.8
500	31	5,577	-19.4	-32.0	33	2.4
450	31	6,352	-24.7	-38.2	32	3.6
400	31	7,199	-30.8	-42.6	32	4.9
350	31	8,136	-37.6	-46.4	33	5.4
300	31	9,180	-45.3		32	6.9
250	31	10,380	-49.9		33	7.0
200	31	11,846	-47.7		32	6.6
175	31	12,729	-47.5		31	6.0
150	31	13,745	-48.6		31	5.7
125	31	14,943	-49.1		32	4.7
100	31	16,406	-49.4		32	2.9
80	31	17,868	-49.3		34	1.9
70	31	18,745	-49.1		03	1.8
60	31	19,757	-49.0		06	1.8
50	30	20,955	-49.0		07	2.6
40	30	22,423	-48.1		08	4.2
30	28	24,326	-46.1		08	6.1
25	28	25,542	-44.9		09	6.8
20	27	27,040	-43.5		09	7.3
15	23	28,993	-40.7		09	8.2
10	12	31,790	-35.7			
7	6	34,299	-31.5			

SALEM, ILL. 995 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	174	20.5	19.1	21	.7
1000						
950	31	575	22.8	14.8	27	2.3
900	31	1,045	20.1	11.9	28	3.5
850	31	1,535	17.0	8.6	28	4.3
800	31	2,050	14.0	4.9	27	4.8
750	31	2,593	11.3	-.1	27	5.3
700	31	3,166	8.3	-4.9	27	5.6
650	31	3,775	4.8	-8.0	27	6.3
600	31	4,423	.9	-11.8	27	6.8
550	31	5,117	-3.2	-16.1	27	7.2
500	31	5,866	-7.7	-22.5	27	8.0
450	31	6,678	-12.9	-26.8	27	7.8
400	30	7,568	-18.7	-32.0	27	8.3
350	30	8,553	-25.6	-38.6	28	9.8
300	30	9,650	-33.8	-46.1	29	10.7
250	30	10,903	-43.2		29	13.1
200	30	12,371	-53.9		29	17.3
175	30	13,219	-59.1		29	17.8
150	30	14,174	-63.6		29	13.8
125	30	15,285	-66.2		29	8.7
100	30	16,641	-65.0		30	3.5
80	30	18,007	-62.9		03	2.5
70	30	18,833	-61.0		06	4.1
60	30	19,796	-59.2		07	5.7
50	29	20,947	-56.3		08	7.5
40	29	22,375	-53.2		09	9.2
30	27	24,241	-50.4		09	9.7
25	27	25,436	-48.4		09	11.1
20	23	26,916	-46.0		09	12.8
15	20	28,843	-43.1		09	14.9
10	10	31,582	-39.2			
7						

SALEM, OREG. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	61	12.0	7.4	23	.3
1000	31	149	14.4	9.4	35	.5
950	31	583	14.2	7.6	01	2.6
900	31	1,040	13.8	5.5	36	2.0
850	31	1,521	12.6	.1	29	1.4
800	31	2,029	11.1	-6.1	28	2.3
750	31	2,565	8.7	-9.1	26	4.2
700	31	3,132	5.5	-11.4	26	5.6
650	31	3,734	2.2	-15.1	26	6.8
600	31	4,375	-1.7	-18.6	25	7.6
550	31	5,062	-6.3	-22.8	25	8.8
500	31	5,800	-11.3	-28.1	25	10.3
450	31	6,600	-17.0	-31.9	25	11.1
400	31	7,473	-23.3	-37.3	26	12.6
350	31	8,438	-31.0	-43.6	25	13.7
300	31	9,508	-39.7	-51.0	25	15.8
250	31	10,730	-49.0		26	17.3
200	31	12,171	-55.2		26	18.3
175	31	13,022	-55.9		25	18.7
150	31	14,002	-56.3		25	16.7
125	30	15,155	-57.9		26	13.1
100	29	16,561	-58.0		26	7.6
80	29	17,970	-57.6		25	2.8
70	29	18,814	-57.1		19	.7
60	28	19,794	-56.0		11	2.1
50	28	20,957	-54.6		09	3.9
40	28	22,393	-52.4		09	6.3
30	27	24,267	-49.3		09	7.9
25	25	25,465	-47.6		09	9.4
20	21	26,941	-45.7		09	10.5
15	19	28,874	-42.2		09	12.2
10	12	31,645	-38.3			
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SALT LAKE CITY, UTAH
872 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	1,288	18.6	7.5	16	2.9
1000						
950						
900						
850	31	1,508	21.6	5.2	16	3.4
800	31	2,031	19.0	2.0	18	2.5
750	31	2,582	15.4	-1.1	21	2.0
700	31	3,162	10.9	-4.7	23	2.3
650	31	3,775	6.1	-7.5	25	2.9
600	31	4,425	.9	-9.7	26	5.1
550	31	5,117	-4.7	-13.9	26	6.1
500	31	5,860	-10.1	-21.0	26	6.7
450	31	6,664	-15.4	-28.4	26	6.8
400	31	7,542	-21.9	-34.7	26	8.0
350	31	8,513	-29.0	-41.9	26	9.6
300	31	9,594	-37.5	-49.6	26	11.6
250	31	10,829	-46.4		25	14.3
200	31	12,282	-54.4		25	17.0
175	31	13,132	-57.2		26	17.5
150	31	14,100	-60.2		26	14.1
125	31	15,230	-62.8		27	9.5
100	31	16,602	-63.5		26	4.4
80	31	17,978	-61.4		31	1.0
70	31	18,810	-59.9		07	2.1
60	30	19,774	-58.3		09	4.1
50	30	20,927	-56.3		09	5.8
40	30	22,353	-53.8		09	7.5
30	30	24,217	-50.3		09	9.9
25	29	25,410	-48.6		09	10.8
20	28	26,805	-46.0		09	12.2
15	26	28,812	-43.5		09	13.9
10	12	31,577	-39.1		09	18.2
7						

SAN DIEGO, CALIF.
998 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	124	16.9	14.7	35	.2
1000	6	127	17.3	14.5		
950	31	543	16.9	10.2	01	.4
900	31	1,010	23.2	-.3	32	1.4
850	31	1,508	23.5	-1.2	30	2.7
800	31	2,034	21.0	-3.2	29	2.7
750	31	2,588	17.6	-5.4	27	2.7
700	31	3,172	13.3	-8.8	25	2.7
650	31	3,790	8.5	-11.0	23	2.8
600	31	4,445	3.4	-13.6	23	2.5
550	31	5,144	-1.6	-17.9	25	2.8
500	31	5,895	-7.1	-23.2	26	3.8
450	30	6,709	-12.6	-30.3	29	4.9
400	30	7,598	-18.5	-35.8	29	6.1
350	30	8,583	-25.8	-40.0	27	7.0
300	30	9,679	-34.0	-48.3	27	8.4
250	30	10,932	-43.3		26	8.4
200	30	12,400	-53.6		25	9.7
175	30	13,248	-59.1		24	9.7
150	30	14,201	-64.6		25	9.2
125	29	15,304	-68.2		26	5.4
100	28	16,640	-68.3		09	1.9
80	28	17,984	-66.1		09	5.4
70	28	18,798	-64.0		08	7.8
60	28	19,749	-61.1		09	9.3
50	28	20,890	-58.0		09	10.7
40	26	22,302	-55.4		09	11.6
30	25	24,152	-52.0		09	14.2
25	25	25,339	-49.7		09	16.1
20	24	26,809	-46.9		09	16.9
15	24	28,727	-44.6		09	16.0
10	20	31,464	-40.9		08	19.9
7	13	33,903	-36.1		09	24.2

SAN JUAN, P. R.
1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	6	26.6	22.2	13	2.0
1000	31	147	25.1	21.7	10	4.1
950	31	597	22.4	19.0	10	7.4
900	31	1,067	19.4	15.6	10	7.9
850	31	1,557	16.3	11.4	10	7.2
800	31	2,072	14.4	5.7	10	6.3
750	31	2,616	11.7	1.2	10	5.9
700	31	3,190	8.4	-2.7	10	5.4
650	31	3,799	5.0	-7.5	10	5.0
600	31	4,447	1.1	-13.0	09	5.2
550	31	5,142	-2.8	-17.4	09	4.2
500	31	5,891	-7.2	-22.3	10	3.4
450	31	6,704	-12.6	-26.3	10	1.8
400	31	7,592	-18.8	-31.6	19	.4
350	30	8,575	-25.9	-38.1	22	1.1
300	30	9,670	-34.4	-46.1	24	1.7
250	30	10,918	-44.4		27	2.7
200	30	12,375	-56.2		28	4.1
175	30	13,212	-62.1		28	4.3
150	30	14,153	-67.4		28	3.9
125	30	15,243	-70.4		26	3.3
100	30	16,565	-71.3		06	2.2
80	30	17,892	-68.4		08	9.4
70	30	18,698	-65.8		08	12.7
60	30	19,640	-63.3		09	14.6
50	29	20,770	-59.9		09	15.3
40	29	22,170	-57.6		09	17.2
30	29	24,005	-53.7		09	17.7
25	29	25,181	-51.1		09	20.5
20	24	26,646	-47.6		09	21.9
15	19	28,558	-44.4		09	24.5
10	7	31,296	-39.9			
7						

• SAULT STE MARIE, MICH.
988 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	221	14.2	12.8	32	.2
1000						
950	31	551	16.8	10.7	23	1.6
900	31	1,011	15.0	8.2	26	3.0
850	31	1,493	12.1	5.5	27	4.0
800	31	1,999	9.0	2.1	27	4.7
750	31	2,532	6.5	-4.1	27	5.8
700	31	3,095	3.4	-7.7	28	7.4
650	30	3,694	.1	-11.3	28	8.9
600	30	4,331	-3.5	-16.5	28	[illegible]
550	30	5,014	-7.5	-20.5	29	11.6
500	30	5,749	-12.2	-27.1	29	12.9
450	30	6,547	-17.4	-31.2	28	14.2
400	30	7,418	-23.8	-37.1	28	16.0
350	30	8,383	-30.7	-42.1	29	18.5
300	30	9,457	-38.6	-48.0	29	22.4
250	30	10,687	-46.9		29	27.1
200	30	12,144	-52.3		29	28.5
175	30	13,005	-53.5		29	24.7
150	30	13,994	-55.0		29	18.6
125	30	15,154	-56.5		29	12.9
100	30	16,569	-56.8		29	7.8
80	30	17,984	-56.1		31	3.1
70	30	18,834	-55.9		34	1.3
60	30	19,817	-55.0		04	1.7
50	30	20,987	-53.4		07	3.7
40	30	22,431	-51.3		08	5.6
30	28	24,317	-48.4		08	8.2
25	28	25,522	-46.5		08	9.3
20	25	27,013	-44.1		08	10.4
15	25	28,958	-40.6		09	12.6
10	22	31,744	-36.0		09	14.9
7	15	34,252	-31.3			

• SHREVEPORT, LA.
1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	79	22.4	21.3	20	1.3
1000	31	131	23.6	22.0	22	2.0
950	31	582	23.9	19.6	23	5.2
900	31	1,054	21.3	16.3	24	4.5
850	31	1,548	18.4	12.2	23	4.3
800	31	2,066	15.4	8.2	23	3.9
750	31	2,611	12.1	4.4	24	3.2
700	31	3,187	8.7	.0	25	3.2
650	31	3,797	5.4	-3.4	24	3.4
600	31	4,447	1.5	-5.7	24	3.4
550	31	5,144	-2.4	-11.2	24	2.7
500	31	5,895	[illegible]	-18.6	27	2.1
450	31	6,712	-11.0	-22.7	25	1.9
400	30	7,609	-16.5	-29.5	26	2.2
350	30	8,604	-23.2	-37.0	29	1.7
300	30	9,710	-31.6	-44.4	29	2.2
250	30	10,973	-41.8		28	3.1
200	30	12,447	-53.6		27	2.5
175	30	13,293	-60.0		28	2.7
150	30	14,241	-66.2		31	2.1
125	30	15,333	-70.9		03	1.8
100	30	16,653	-69.6		08	3.5
80	30	17,995	-66.1		08	7.2
70	30	18,810	-63.6		09	8.3
60	30	19,762	-61.0		08	9.2
50	30	20,902	-58.4		09	11.0
40	30	22,315	-55.8		09	11.8
30	28	24,163	-52.2		09	14.7
25	27	25,350	-50.0		09	16.4
20	27	26,819	-46.8		09	17.4
15	25	28,740	-43.7		09	16.7
10	22	31,472	-41.5		08	[illegible]
7	14	33,909	-37.2			

SPOKANE, WASH.
932 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	720	15.2	1.3	18	2.1
1000						
950						
900	31	1,017	19.0	-.3	23	1.8
850	31	1,506	16.8	-2.6	26	2.4
800	31	2,018	12.9	-4.6	25	3.5
750	31	2,556	9.0	-7.3	25	5.3
700	31	3,123	4.9	-10.0	25	7.2
650	31	3,724	1.3	-13.3	25	8.7
600	31	4,363	-2.7	-16.7	25	10.1
550	31	5,047	-7.0	-21.9	26	11.0
500	31	5,784	-12.0	-26.3	25	12.2
450	31	6,581	-17.7	-29.6	25	13.8
400	31	7,452	-24.1	-36.2	26	15.8
350	31	8,414	-31.4	-42.7	26	17.9
300	31	9,484	-39.8	-49.4	25	19.4
250	31	10,706	-49.0		25	21.2
200	31	12,148	-54.5		25	22.1
175	31	13,003	-54.1		26	20.4
150	31	13,992	-54.2		26	16.2
125	31	15,157	-55.5		26	12.3
100	31	16,577	-56.2		26	7.3
80	30	17,998	-55.8		25	2.7
70	30	18,850	-55.3		24	.8
60	30	19,835	-54.4		09	1.1
50	29	[illegible]	-53.1		08	3.4
40	29	22,453	-51.0		09	4.9
30	29	24,335	-48.1		09	7.4
25	29	25,541	-46.6		09	8.5
20	28	27,029	-44.4		09	9.0
15	27	28,971	-41.5		09	11.0
10	19	31,746	-37.5		09	14.7
7						

• SWAN ISLAND, W. I.
1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	10	27.0	24.0	09	3.7
1000	31	119	26.5	23.6	09	5.0
950	31	571	23.1	21.1	10	7.7
900	31	1,042	20.1	16.3	10	8.8
850	31	1,534	17.3	10.9	10	9.5
800	31	2,051	15.1	5.4	10	9.1
750	31	2,595	12.2	.6	10	8.9
700	31	3,170	8.6	-2.6	11	8.1
650	31	3,780	5.6	-7.2	11	7.6
600	31	4,430	2.1	-11.8	11	6.7
550	31	5,128	-2.0	-14.8	10	6.0
500	31	5,879	-6.8	-19.0	11	4.9
450	31	6,694	-11.7	-23.8	10	5.0
400	31	7,586	-17.7	-29.4	09	3.5
350	31	8,575	-24.5	-36.6	07	2.6
300	31	9,677	-32.8	-44.4	03	2.1
250	31	10,934	-42.8		30	1.5
200	31	[illegible]	-54.7		29	3.7
175	29	13,243	-61.4		27	4.4
150	29	14,184	-67.8		[illegible]	3.7
125	29	15,266	-72.4		02	3.0
100	28	16,580	-71.3		07	6.4
80	28	17,906	-68.8		08	10.2
70	25	18,716	-65.6		08	11.8
60	25	19,658	-63.4		08	13.7
50	25	20,786	-60.7		09	15.3
40	25	22,183	-57.9		09	17.7
30	25	24,016	-53.7		09	17.9
25	22	25,195	-51.0		09	19.5
20	21	26,659	-47.8		09	21.4
15	20	28,567	-44.9		09	23.4
10	15	31,320	-40.9		09	27.5
7	11	33,760	-37.5			

TAMPA, FLA.
1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	8	24.6	22.6	10	1.2
1000	31	145	25.4	22.8	13	1.1
950	31	597	23.0	20.0	22	1.3
900	31	1,067	20.2	15.4	23	1.1
850	31	1,559	17.1	11.3	22	1.1
800	31	2,075	14.5	7.4	22	.8
750	31	2,618	11.4	4.0	20	.6
700	31	3,192	8.2	-.5	21	.3
650	31	3,801	4.8	-2.5	32	.3
600	31	4,450	1.2	-6.5	01	.7
550	31	5,146	-2.5	-12.4	02	1.4
500	31	5,896	-6.9	-17.3	02	2.0
450	31	6,712	-11.5	-23.1	03	2.4
400	31	7,605	-17.5	-29.0	03	3.1
350	31	8,595	-24.5	-35.3	02	3.9
300	31	9,696	-32.9	-43.8	03	5.4
250	31	10,952	-42.9		04	6.6
200	31	12,418	-54.8		04	8.4
175	31	13,261	-60.9		04	9.8
150	31	14,205	-66.8		04	11.2
125	31	15,294	-71.0		05	9.9
100	31	16,614	-70.0		07	8.0
80	31	17,956	-66.2		07	9.6
70	31	18,770	-64.1		08	10.7
60	31	19,720	-61.6		08	13.4
50	30	20,859	-58.7		09	15.4
40	29	22,272	-55.5		09	16.2
30	29	24,121	-51.8		09	17.4
25	28	25,313	-49.2		09	17.9
20	27	26,786	-46.2		09	19.5
15	27	28,706	-44.3		09	21.4
10	20	31,442	-40.4		09	24.9
7						

TOPEKA, KANS.
984 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	268	20.1	18.1	11	.9
1000						
950	31	571	22.3	16.9	20	3.8
900	31	1,041	20.6	13.7	22	4.9
850	31	1,534	18.0	9.1	23	4.4
800	31	2,051	15.1	5.4	25	3.7
750	31	2,595	12.0	.5	27	3.9
700	31	3,169	8.1	-2.9	27	4.4
650	31	3,777	4.6	-6.8	28	4.3
600	31	4,425	.9	-9.9	27	5.2
550	31	5,120	-3.3	-15.0	28	5.7
500	31	5,868	-7.9	-21.0	28	6.5
450	31	6,679	-13.0	-26.6	28	7.2
400	31	7,567	-18.7	-32.1	28	8.1
350	31	8,551	-25.9	-37.9	28	9.6
300	31	9,646	-34.2	-45.5	28	12.3
250	31	10,897	-43.8		27	15.9
200	30	12,361	-53.7		28	17.0
175	30	13,209	-58.7		27	17.1
150	30	14,167	-63.1		27	14.2
125	30	15,282	-65.2		28	9.3
100	30	16,642	-64.5		29	4.2
80	30	18,012	-62.6		03	1.0
70	30	18,840	-60.6		08	3.3
60	30	19,803	-58.8		09	5.8
50	30	20,956	-55.7		09	6.6
40	30	22,384	-53.8		09	8.7
30	28	24,245	-50.6		09	10.7
25	26	25,439	-48.6		09	12.1
20	24	26,916	-45.7		09	12.9
15	20	28,852	-43.4		09	13.8
10	11	31,610	-39.1		09	17.8
7						

• TRUK, CAROLINE IS.
1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	2	28.5	24.4	10	1.4
1000	31	96	27.2	23.2	10	2.5
950	31	550	24.1	21.1	10	4.7
900	31	1,023	21.3	17.5	10	6.1
850	31	1,517	18.2	14.0	10	6.2
800	31	2,035	15.6	10.9	10	6.4
750	31	2,582	12.7	7.0	10	5.8
700	31	3,159	9.7	2.2	10	6.0
650	31	3,772	6.5	-.4	09	6.6
600	31	4,425	2.7	-3.9	09	6.9
550	31	5,125	-1.2	-8.9	09	6.1
500	31	5,880	-5.4	-13.3	09	5.4
450	31	6,700	-10.0	-18.4	09	[illegible]
400	31	7,599	-15.7	-25.5	09	3.3
350	31	8,596	-22.3	-34.7	10	1.9
300	31	9,708	-30.7	-42.7	05	.5
250	31	10,975	-41.2		33	1.6
200	31	12,450	-53.7		30	3.1
175	31	13,294	-60.8		29	4.1
150	31	14,236	-68.1		28	5.5
125	31	15,313	-74.6		27	5.3
100	31	16,599	-76.6		08	1.6
80	31	17,898	-71.1		09	8.8
70	31	18,697	-67.0		09	8.9
60	29	19,634	-64.0		09	7.7
50	28	20,760	-61.6		09	6.7
40	28	22,158	-58.1		09	7.4
30	25	23,991	-54.1		09	7.5
25	24	25,169	-52.1		09	8.6
20	20	26,619	-49.4		09	11.8
15	14	28,520	-46.9		09	19.8
10	9	31,230	-42.2			
7						

• TUCSON, ARIZ.
923 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	789	23.1	13.4	15	2.4
1000						
950						
900	31	1,011	25.6	10.8	17	1.9
850	31	1,512	23.4	7.7	21	.9
800	31	2,039	20.0	5.3	35	.4
750	31	2,591	16.0	2.8	34	.7
700	31	3,173	11.5	.1	34	.3
650	31	3,788	7.1	-2.8	03	.2
600	31	4,442	2.8	-7.3	03	1.4
550	31	5,140	-1.9	-10.6	02	1.4
500	31	5,891	-7.1	-15.4	31	1.0
450	31	6,706	-11.9	-23.1	28	1.9
400	31	7,597	-18.0	-28.9	27	3.5
350	31	8,586	-24.7	-35.9	27	4.6
300	31	9,686	-33.1	-43.9	25	5.9
250	31	10,941	-43.1		25	7.4
200	31	12,407	-54.5		24	9.2
175	31	13,251	-60.2		25	9.5
150	31	14,198	-66.1		26	6.5
125	30	15,296	-69.5		29	1.5
100	30	16,624	-70.4		09	2.8
80	30	17,959	-67.1		09	5.8
70	30	18,771	-64.4		08	7.9
60	30	19,719	-61.9		09	9.6
50	30	20,855	-59.1		09	11.8
40	30	22,266	-56.0		09	13.2
30	30	24,112	-52.0		09	14.2
25	30	25,298	-50.2		09	14.9
20	29	26,762	-47.5		09	16.9
15	28	28,679	-44.3		09	17.4
10	22	31,421	-41.0		08	21.3
7	12	33,868	-35.4		09	26.5

• VANDENBERG AFB, CALIF.
1003 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	100	11.7	11.3	32	1.6
1000	29	122	11.7	11.2	33	1.6
950	30	553	16.3	7.0	36	3.6
900	30	1,019	22.3	.2	36	3.2
850	30	1,514	21.3	-2.1	35	3.0
800	30	2,036	18.6	-4.2	32	2.6
750	30	2,585	15.0	-7.0	29	3.0
700	30	3,165	11.5	-10.3	27	3.6
650	30	3,780	7.9	-13.2	26	4.4
600	30	4,435	3.8	-17.0	26	4.6
550	30	5,135	-1.2	-21.1	26	4.6
500	30	5,887	-6.7	-26.1	27	5.3
450	30	6,700	-12.6	-30.8	27	7.4
400	30	7,588	-19.2	-36.0	27	9.7
350	30	8,570	-26.5	-40.7	27	11.0
300	30	9,662	-34.7	-48.7	27	12.4
250	30	10,910	-44.0		26	13.1
200	30	12,376	-53.9		26	13.4
175	30	13,224	-58.6		26	13.4
150	30	14,181	-63.7		26	11.9
125	30	15,289	-67.0		26	7.8
100	30	16,635	-67.0		22	1.2
80	29	17,985	-65.0		10	3.4
70	29	18,802	-63.1		09	5.9
60	28	19,756	-60.8		10	7.0
50	28	20,898	-58.0		09	8.6
40	29	22,315	-55.0		09	10.0
30	27	24,166	-52.1		09	12.5
25	27	25,353	-49.7		09	14.1
20	25	26,821	-47.5		09	14.2
15	25	28,735	-45.0		09	14.5
10	21	31,462	-41.3		09	18.9
7	12	33,888	-36.4			

VICTORIA, TEXAS
1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	33	23.6	22.5	13	.6
1000	31	123	25.3	24.8	18	2.4
950	31	574	23.3	20.6	19	7.4
900	31	1,046	21.2	14.4	19	7.4
850	31	1,540	18.6	9.8	19	6.5
800	31	2,059	16.2	4.4	18	5.8
750	31	2,605	13.1	.6	18	4.7
700	31	3,181	9.5	-2.5	18	3.5
650	31	3,793	6.1	-7.3	18	3.0
600	31	4,444	2.4	-12.6	18	2.1
550	31	5,142	-2.0	-17.0	18	1.8
500	31	5,893	-6.5	-22.9	14	1.3
450	31	6,710	-11.2	-28.2	10	1.1
400	31	7,604	-17.0	-33.7	10	.9
350	31	8,595	-23.8	-39.9	10	1.1
300	31	9,700	-32.0	-46.8	10	1.8
250	31	10,961	-42.0		10	3.2
200	31	12,433	-53.9		10	3.5
175	31	13,278	-60.4		10	4.4
150	30	14,223	-67.1		09	3.8
125	30	15,309	-72.2		07	5.9
100	30	16,621	-71.1		09	8.4
80	29	17,957	-67.3		08	8.8
70	27	18,766	-64.8		09	10.0
60	27	19,713	-62.3		09	11.4
50	26	20,848	-59.5		09	13.5
40	26	22,255	-56.6		09	14.8
30	25	24,098	-52.3		09	17.2
25	24	25,283	-50.3		09	19.1
20	23	26,750	-47.2		09	19.9
15	22	28,665	-44.5		09	20.6
10	13	31,391	-41.2		09	25.8
7						

• WAKE IS., PACIFIC AREA
1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	5	27.6	23.9	09	5.4
1000	31	131	26.4	23.0	09	6.5
950	31	583	22.5	20.8	10	7.7
900	31	1,053	19.4	16.4	10	8.0
850	31	1,543	16.4	12.9	10	7.4
800	31	2,059	14.0	8.2	10	6.3
750	31	2,602	11.6	3.5	10	6.0
700	31	3,176	8.6	-4.3	09	5.5
650	31	3,786	5.5	-9.1	09	4.5
600	31	4,436	1.5	-13.1	09	3.9
550	31	5,131	-2.8	-18.4	09	2.9
500	31	5,880	-7.3	-22.8	10	1.6
450	31	6,693	-12.5	-27.9	12	1.1
400	31	[illegible]	-18.7	[illegible]	23	.8
350	31	8,566	-25.8	-39.0	23	1.2
300	31	9,662	-33.9	-46.6	25	3.1
250	31	10,913	-44.1		25	5.1
200	31	12,371	-56.0		26	6.9
175	31	13,208	-62.3		26	8.0
150	30	14,144	-67.9		26	6.4
125	30	15,232	-70.0		26	2.7
100	29	16,560	-70.5		08	2.9
80	29	17,892	-68.2		09	8.4
70	29	18,697	-66.6		09	11.8
60	29	19,636	[illegible]		09	14.1
50	28	20,761	-60.8		09	[illegible]
40	28	22,157	-58.0		09	[illegible]
30	25	23,988	-53.3		09	19.4
25	24	25,172	-51.1		09	[illegible]
20	23	26,631	-48.6		09	22.7
15	21	28,537	-46.4		09	23.9
10	13	31,252	-42.1		09	[illegible]
7	8	33,666	-38.5			

• WALLOPS IS., VA. NASA
1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	4	21.3	19.6	22	.5
1000	31	141	22.2	18.3	26	1.4
950	31	588	21.0	14.7	28	3.3
900	31	1,055	18.2	11.4	29	3.2
850	31	1,542	14.9	8.4	28	3.7
800	31	2,054	12.4	4.3	28	4.8
750	31	2,593	9.8	-.5	28	4.1
700	31	3,164	6.8	-4.3	28	5.5
650	31	3,769	3.6	-8.5	27	[illegible]
600	31	4,415	.0	[illegible]	28	[illegible]
550	31	5,108	-3.7	-18.2	27	7.3
500	31	5,854	-8.5	-23.4	27	7.9
450	31	6,664	-13.3	[illegible]	27	[illegible]
400	31	7,550	-19.3	-33.4	27	[illegible]
350	31	8,532	-26.5	[illegible]	28	9.4
300	31	9,624	-34.9	-47.2	28	10.1
250	31	10,870	-44.6		29	11.4
200	31	12,329	-55.3		30	13.6
175	31	13,172	-59.7		31	13.7
150	31	14,128	-63.2		30	[illegible]
125	30	15,241	-65.8		[illegible]	[illegible]
100	30	16,599	-64.4		[illegible]	[illegible]
80	30	17,970	-62.2		[illegible]	[illegible]
70	30	18,798	[illegible]		[illegible]	[illegible]
60	30	19,761	-58.9		08	[illegible]
50	29	20,913	-56.6		[illegible]	[illegible]
40	28	22,335	-54.3		09	9.2
30	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
25	[illegible]	[illegible]	-48.2		[illegible]	[illegible]
20	28	26,871	-45.9		09	[illegible]
15	27	28,797	-43.6		09	[illegible]
10	19	31,558	-39.0		09	[illegible]
7	10	34,024	-35.2			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	WASHINGTON DULLES INT. AP 1006 MB						WAYCROSS, GA. 1011 MB						WINNEMUCCA, NEV. 871 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	85	19.0	18.0	28	.5	31	44	22.8	22.2	29	.2	31	1,312	13.9	1.3	08	.9
1000	29	145	20.1	17.7	27	.7	31	136	23.6	22.0	29	.5						
950	31	585	21.0	15.0	28	2.7	31	586	23.3	18.8	29	1.5						
900	31	1,052	18.4	12.1	29	3.0	31	1,058	20.9	15.8	28	1.2						
850	31	1,540	15.1	9.4	28	4.2	31	1,551	17.5	12.7	28	1.2	31	1,521	21.1	1.7	02	1.4
800	31	2,052	12.4	4.9	27	5.2	31	2,067	14.4	9.2	28	.8	31	2,043	18.6	-.5	35	1.8
750	31	2,592	9.7	.1	27	6.2	31	2,611	11.3	5.9	26	.7	31	2,593	14.7	-3.0	33	1.5
700	31	3,162	6.5	-4.4	27	7.5	31	3,185	8.1	1.8	26	.8	31	3,171	10.0	-5.5	25	1.1
650	31	3,766	3.3	-9.3	27	8.3	31	3,794	5.1	-3.6	29	1.3	31	3,782	5.1	-7.5	23	3.3
600	31	4,412	.0	-15.4	27	8.8	31	4,444	1.6	-9.1	28	1.5	31	4,429	.0	-10.9	23	5.8
550	31	5,105	-3.4	-19.5	27	8.8	31	5,140	-2.1	-14.1	30	1.3	31	5,119	-5.3	-15.0	23	6.8
500	31	5,852	-8.1	-24.9	28	9.5	31	5,892	-6.5	-19.6	34	1.5	31	5,861	-10.2	-22.8	24	7.3
450	31	6,662	-13.2	-29.7	28	10.3	31	6,709	-11.2	-24.9	35	2.0	31	6,664	-15.8	-28.7	25	7.7
400	31	7,549	-19.5	-33.7	28	10.3	31	7,602	-17.3	-31.4	36	2.8	31	7,541	-22.2	-36.2	25	8.2
350	31	8,530	-26.4	-38.2	28	11.5	31	8,593	-24.0	-37.3	36	3.6	31	8,511	-29.8	-42.7	25	9.3
300	31	9,623	-34.8	-47.6	28	12.7	31	9,697	-32.2	-45.5	36	5.1	31	9,588	-38.2	-50.0	25	11.2
250	31	10,870	-44.6		29	15.0	31	10,956	-42.5		36	5.9	30	10,817	-47.1		25	13.6
200	31	12,329	-54.9		30	17.0	30	12,429	-54.0		01	8.4	30	12,270	-54.1		25	16.2
175	31	13,174	-59.1		30	16.9	29	13,274	-59.9		01	9.3	29	13,121	-56.7		25	16.6
150	31	14,133	-62.2		30	12.5	29	14,222	-66.3		02	10.1	28	14,092	-59.2		25	15.0
125	31	15,252	-64.8		29	8.1	28	15,316	-70.0		04	8.5	27	15,223	-61.8		26	11.5
100	31	16,618	-63.5		31	4.6	28	16,643	-68.7		05	5.8	27	16,603	-62.3		25	5.0
80	31	17,994	-61.6		03	2.3	28	17,988	-65.7		07	8.2	27	17,982	-61.8		24	.9
70	31	18,825	-60.0		07	3.2	28	18,805	-63.2		08	9.5	27	18,813	-59.9		09	1.7
60	31	19,792	-58.0		08	5.5	28	19,759	-60.7		08	11.4	27	19,779	-58.4		10	3.8
50	31	20,947	-56.0		08	7.1	28	20,902	-57.5		09	13.2	27	20,932	-56.4		09	5.7
40	30	22,375	-53.2		09	8.9	28	22,322	-54.6		09	14.3	27	22,358	-53.8		09	7.4
30	29	24,246	-49.5		09	10.8	28	24,179	-51.1		09	14.9	26	24,220	-51.1		09	9.5
25	28	25,447	-47.6		09	11.7	28	25,369	-49.3		09	16.5	24	25,412	-48.8		09	10.8
20	24	26,928	-45.6		09	12.9	26	26,841	-46.4		09	17.4	22	26,885	-46.5		09	11.4
15	24	28,858	-42.6		09	15.3	23	28,762	-44.0		09	19.2	18	28,814	-43.5		09	13.4
10	11	31,619	-37.7				15	31,511	-39.9		09	22.1	9	31,569	-38.6			

Standard pressure surface (mb)	WINSLOW, ARIZ. 853 MB						YAKUTAT, ALASKA 1016 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,487	17.1	7.9	18	.7	29	12	9.6	8.9	10	.9
1000							29	147	9.7	8.4	12	1.7
950							29	572	7.3	6.0	14	2.2
900							29	1,015	4.6	3.5	15	2.5
850	28	1,520	18.9	7.5	22	.7	29	1,480	2.9	.2	16	2.6
800	31	2,040	20.8	4.2	26	2.9	29	1,969	.9	-3.0	16	1.7
750	31	2,595	17.4	1.3	27	2.4	29	2,487	-1.3	-7.3	15	2.4
700	31	3,179	12.8	-1.5	26	1.7	29	3,034	-4.3	-9.8	13	2.2
650	31	3,796	7.7	-4.2	22	1.4	29	3,615	-7.8	-13.7	11	2.5
600	31	4,450	2.4	-7.4	22	1.1	29	4,233	-11.4	-20.4	10	2.5
550	31	5,147	-3.1	-11.4	23	1.1	29	4,896	-15.5	-26.1	11	2.1
500	31	5,894	-8.2	-18.0	25	3.1	29	5,608	-20.3	-31.9	10	1.9
450	31	6,704	-13.6	-24.8	25	4.2	29	6,380	-26.0	-36.9	12	2.0
400	31	7,590	-19.5	-32.5	26	5.3	29	7,222	-32.3	-42.1	12	2.2
350	30	8,574	-25.9	-38.4	26	8.9	29	8,152	-39.6	-47.1	18	.7
300	30	9,669	-33.9	-45.9	26	12.0	29	9,186	-47.7		21	1.8
250	30	10,922	-43.7		26	14.4	29	10,374	-52.4		22	2.5
200	30	12,387	-54.2		26	16.1	29	11,829	-47.8		21	2.7
175	30	13,233	-59.4		26	15.2	29	12,713	-47.1		22	3.1
150	30	14,186	-64.6		27	11.7	29	13,734	-47.0		21	2.9
125	30	15,291	-67.5		28	6.2	28	14,941	-47.2		21	2.9
100	30	16,631	-67.9		21	.8	28	16,417	-47.4		19	2.9
80	30	17,979	-65.8		08	3.3	28	17,891	-47.9		18	2.3
70	30	18,794	-63.6		08	6.0	28	18,772	-48.1		15	2.2
60	30	19,747	-60.9		09	7.6	28	19,788	-48.1		13	1.7
50	30	20,887	-58.4		09	9.6	28	20,991	-48.0		10	2.6
40	29	22,302	-55.2		09	11.4	28	22,465	-47.2		10	3.7
30	28	24,155	-51.5		09	12.5	26	24,382	-45.2		09	4.5
25	28	25,344	-49.6		09	13.7	24	25,604	-43.8		09	5.8
20	26	26,813	-46.9		09	14.7	24	27,109	-42.3		09	7.5
15	23	28,723	-44.5		09	15.3	21	29,061	-39.5		09	8.1
10	7	31,487	-41.0				16	31,876	-34.8		08	9.0

Standard pressure surface (mb)	YAP, CAROLINE IS. 1008 MB						YUCCA FLAT, NEV. 881 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	14	27.9	24.4	12	1.6	31	1,198	16.1	-4.4	05	.1
1000	31	84	26.6	23.6	12	2.0						
950	31	537	23.6	21.2	11	3.0						
900	31	1,009	20.8	17.6	11	3.5						
850	31	1,502	18.0	14.2	11	3.4	31	1,504	25.0	1.7	22	1.4
800	31	2,020	15.5	11.0	10	3.6	31	2,033	21.9	-1.3	20	4.7
750	31	2,566	12.6	8.1	11	4.2	31	2,588	17.7	-3.9	21	4.6
700	31	3,143	9.5	4.5	11	4.6	31	3,172	12.8	-6.3	20	3.9
650	30	3,757	6.1	1.2	11	4.8	31	3,789	7.7	-8.4	18	3.8
600	30	4,409	2.3	-2.0	10	5.2	31	4,441	2.1	-11.5	18	3.4
550	30	5,108	-1.4	-7.3	11	4.6	31	5,137	-3.2	-16.0	20	2.7
500	30	5,863	-5.6	-12.1	11	4.6	31	5,884	-8.5	-22.1	24	4.2
450	30	6,683	-10.0	-17.7	11	4.6	31	6,693	-14.0	-28.8	25	6.1
400	30	7,582	-15.6	-23.8	09	4.1	31	7,576	-20.2	-35.4	26	8.0
350	30	8,580	-22.3	-31.2	08	4.0	31	8,555	-27.4	-42.1	27	9.8
300	30	9,692	-30.5	-40.3	07	4.1	30	9,643	-35.7	-49.7	26	12.5
250	30	10,960	-41.0		06	4.5	30	10,887	-44.6		26	19.2
200	30	12,437	-53.6		04	7.0	30	12,351	-53.4		26	15.7
175	30	13,282	-60.6		03	8.7	30	13,202	-57.8		26	15.1
150	30	14,224	-68.2		03	8.9	30	14,163	-62.5		26	13.3
125	30	15,299	-75.3		05	5.9	30	15,280	-65.4		27	7.9
100	30	16,579	-76.8		07	5.8	30	16,635	-65.9		26	2.9
80	30	17,881	-71.3		09	11.9	30	17,994	-63.8		09	1.5
70	30	18,678	-67.9		09	12.4	30	18,817	-62.3		09	3.5
60	30	19,612	-64.9		08	11.8	29	19,774	-59.9		09	5.6
50	29	20,734	-61.2		08	11.4	29	20,918	-58.0		09	7.9
40	29	22,130	-58.2		09	11.3	28	22,336	-55.1		09	9.3
30	29	23,959	-54.2		09	11.6	27	24,186	-52.0		09	10.8
25	29	25,134	-51.9		10	12.2	26	25,374	-50.0		09	11.8
20	29	26,589	-49.7		09	13.5	25	26,842	-47.0		09	13.6
15	24	28,494	-46.8		09	20.8	24	28,761	-44.6		09	14.0
10	19	31,207	-42.7		09	28.1	18	31,486	-41.6		09	16.6
7							6	33,913	-37.7			

Note: All observations scheduled at 1200 G.c.t. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

- Observations for these stations are scheduled at 0000 G.c.t.

† Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun.

ALBUQUERQUE, N. MEX.

Date	Sun's zenith distance								
	A M				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
July									
2-----	0.60	----	----	----	1.22	0.96	----	----	----
3-----	----	----	----	----	1.21	----	----	----	----
4-----	.65	0.74	0.88	1.03	1.28	1.02	(0.89)	(0.74)	(0.69)
5-----	.74	.81	.94	1.05	1.30	1.06	.86	----	----
6-----	.76	.82	.95	1.09	1.28	----	----	----	----
7-----	.64	.73	.85	1.04	1.26	----	----	----	----
8-----	----	----	----	(1.00)	1.22	1.06	----	----	----
10----	.66	.74	----	----	----	----	----	----	----
12----	----	----	----	.95	1.28	----	----	----	----
13----	.54	.67	.86	1.06	1.29	----	----	----	----
14----	----	----	.84	----	----	----	----	----	----
15----	----	----	----	----	----	1.07	----	----	----
19----	----	----	----	1.08	1.30	1.01	.84	----	----
20----	.70	.79	.90	1.06	1.34	1.16	1.00	.88	.80
21----	.70	.81	.92	1.09	----	----	----	----	----
22----	.64	----	----	----	1.33	1.07	.95	.83	.76
23----	.81	.93	1.03	1.19	1.38	1.16	.98	.83	.73
24----	.82	.92	1.02	1.16	1.34	----	----	----	----
25----	----	----	----	----	1.23	1.04	----	----	----
26----	.74	.81	.93	1.06	1.26	----	----	----	----
27----	.72	.80	.91	1.08	1.27	----	----	----	----
29----	.75	.83	.94	1.10	1.31	1.06	.89	.76	.67
30----	.70	.79	.89	1.03	1.26	----	.89	.76	----
31----	.70	.81	.92	1.07	1.24	----	----	----	----
Averages	0.70	0.80	0.92	1.07	1.28	1.06	0.92	0.81	0.74

TUCSON, ARIZ

Date	Sun's zenith distance								
	A M				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.64	3.71	2.78	1.86	*	1.86	2.78	3.71	4.64
July									
1----	0.50	0.61	0.73	0.93	----	0.90	0.73	0.59	0.45
2----	----	----	----	----	1.23	.95	.70	.50	.41
3----	----	----	.78	.97	1.27	----	----	----	----
4----	----	----	----	.89	1.22	----	----	----	----
5----	----	----	----	1.00	1.23	.96	----	----	----
6----	.64	.75	.87	1.05	----	1.00	.86	.77	.68
7----	----	----	----	.97	1.28	----	----	----	----
8----	----	----	.82	----	----	----	----	----	----
9----	.55	----	----	----	1.26	----	----	----	----
10---	----	----	----	----	1.27	----	----	----	----
11---	----	----	----	----	1.23	----	----	----	----
16---	----	----	----	----	----	----	.89	.80	----
17---	.74	.82	.94	1.10	1.32	----	----	----	----
18---	.70	----	.91	1.07	1.30	1.03	.93	.78	.70
19---	.69	.79	.91	1.05	1.35	1.13	.98	.85	.73
20---	.84	.94	1.06	1.22	1.39	1.23	1.08	.96	.86
21---	.84	.94	1.03	1.19	1.37	1.20	1.06	.95	.85
22---	.98	1.06	1.18	1.33	1.48	1.27	1.13	1.03	.94
23---	.85	.97	1.08	1.24	1.46	1.29	1.13	1.01	.92
24---	.87	.97	1.07	1.25	1.42	1.22	1.06	.94	.83
25---	.78	.89	1.01	1.15	1.35	1.08	.89	.76	.66
26---	.61	.72	.85	1.03	1.28	.97	.74	.54	----
30---	----	----	----	----	----	.95	----	.61	[illegible]
31---	.40	----	.66	.83	1.06	.90	.68	.58	.46
Averages	0.71	0.86	0.93	1.07	1.30	1.07	0.92	0.78	0.69

OMAHA, NEBR.

	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
					NO DATA RECEIVED				

MADISON, WIS.

	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
July									
1-----	0.52	0.62	0.75	M 0.84	----	----	----	----	----
4-----	----	----	----	----	----	----	0.94	----	----
7-----	H .61	H .70	H .83	H 1.03	H 1.23	H 1.05	H 0.90	----	----
10----	.71	----	----	----	----	----	----	----	----
11----	S .65	S .77	S .90	----	----	----	----	----	----
15----	M .57	M .63	----	----	----	----	----	----	----
27----	----	----	----	S 1.08	S 1.21	----	----	----	----
Averages	0.61	0.68	0.83	0.98	1.22	1.05	0.92	----	----

( )	Clouds Present
*	Values corresponding to true solar noon
BD	Blowing Dust
BN	Blowing Sand
D	Dust
DI	Intense Dust
DM	Moderate Dust
DS	Slight Dust
F	Fog
GF	Ground Fog
H	Haze

HI	Intense Haze
HM	Moderate Haze
HS	Slight Haze
I	Intense Haze-indeterminable
K	Smoke
KI	Intense Smoke
KM	Moderate Smoke
KS	Slight Smoke
M	Moderate Haze-indeterminable
N	Sand
S	Slight Haze-indeterminable

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska. JULY 1973

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langlmys. . .	283	284	62	146	283	291	248	284	272	289	96	183	203	289	246	257	192	181	172	188	262	149	225	255	231	181	59	133	194	129	161	21

The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (· 3900 Å) at Ames, Iowa.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .														NO DATA RECEIVED																		

These data are from an U-V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder

This instrument has not been checked by the NOAA, National Weather Service

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
														NO DATA RECEIVED																		

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e. g , 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick. The code λ s designates the type of measurement made

DESCRIPTION OF CHARTS

CHART I. A. NORMAL DAILY AVERAGE TEMPERATURE (°F. 1931-60) FOR MONTH. B. TEMPERATURE DEPARTURE FROM 30-YEAR MEAN (°F. 1931-60) FOR MONTH. Chart I-A is reproduced from Environmental Data Service Publication "Climatic Maps of the United States." Chart I-B is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin," a publication of Environmental Data Service.

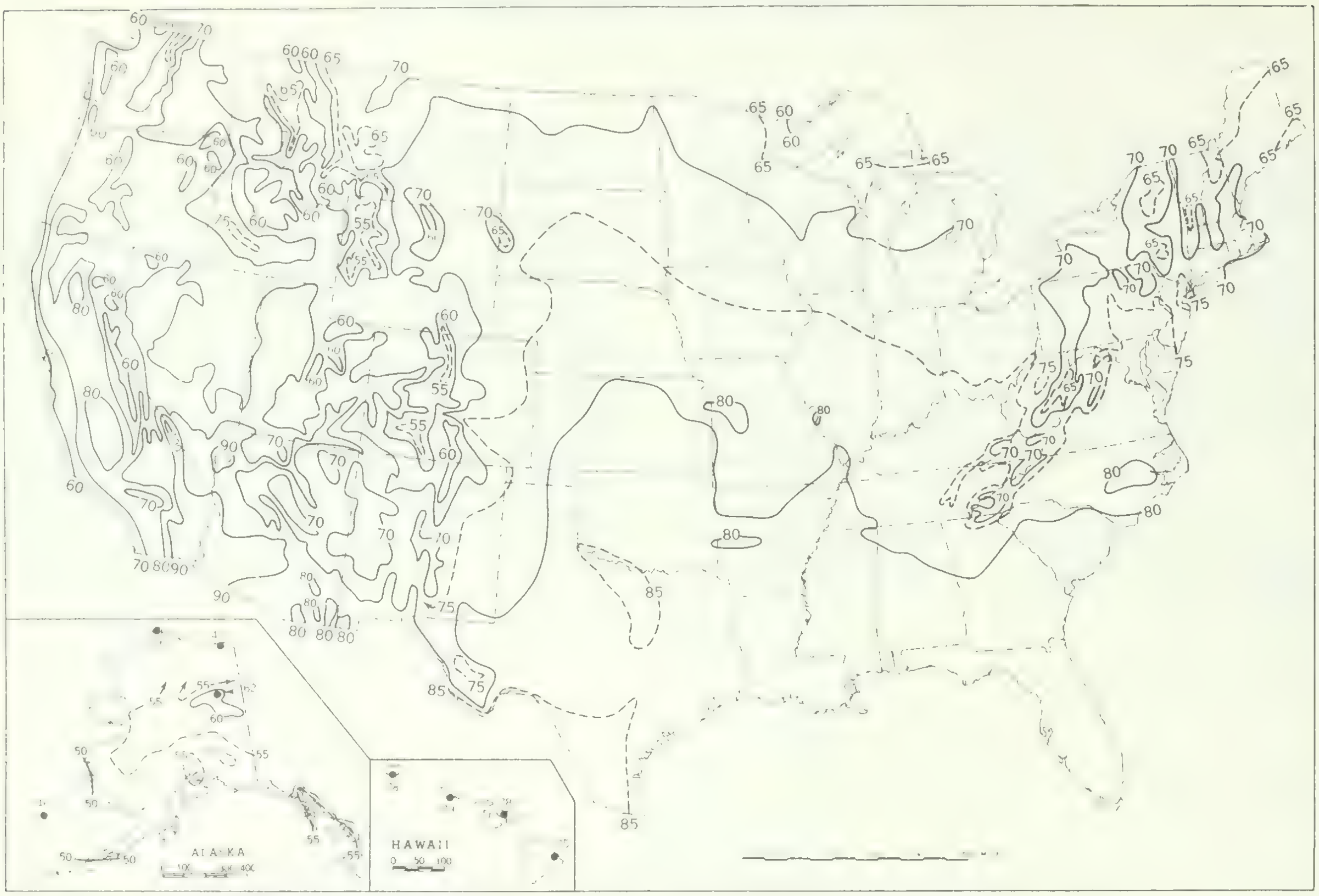
CHART II. A. TOTAL PRECIPITATION. Chart II. A. is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin."

CHART II. B. PERCENTAGE OF NORMAL PRECIPITATION. Chart II. B. is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin."

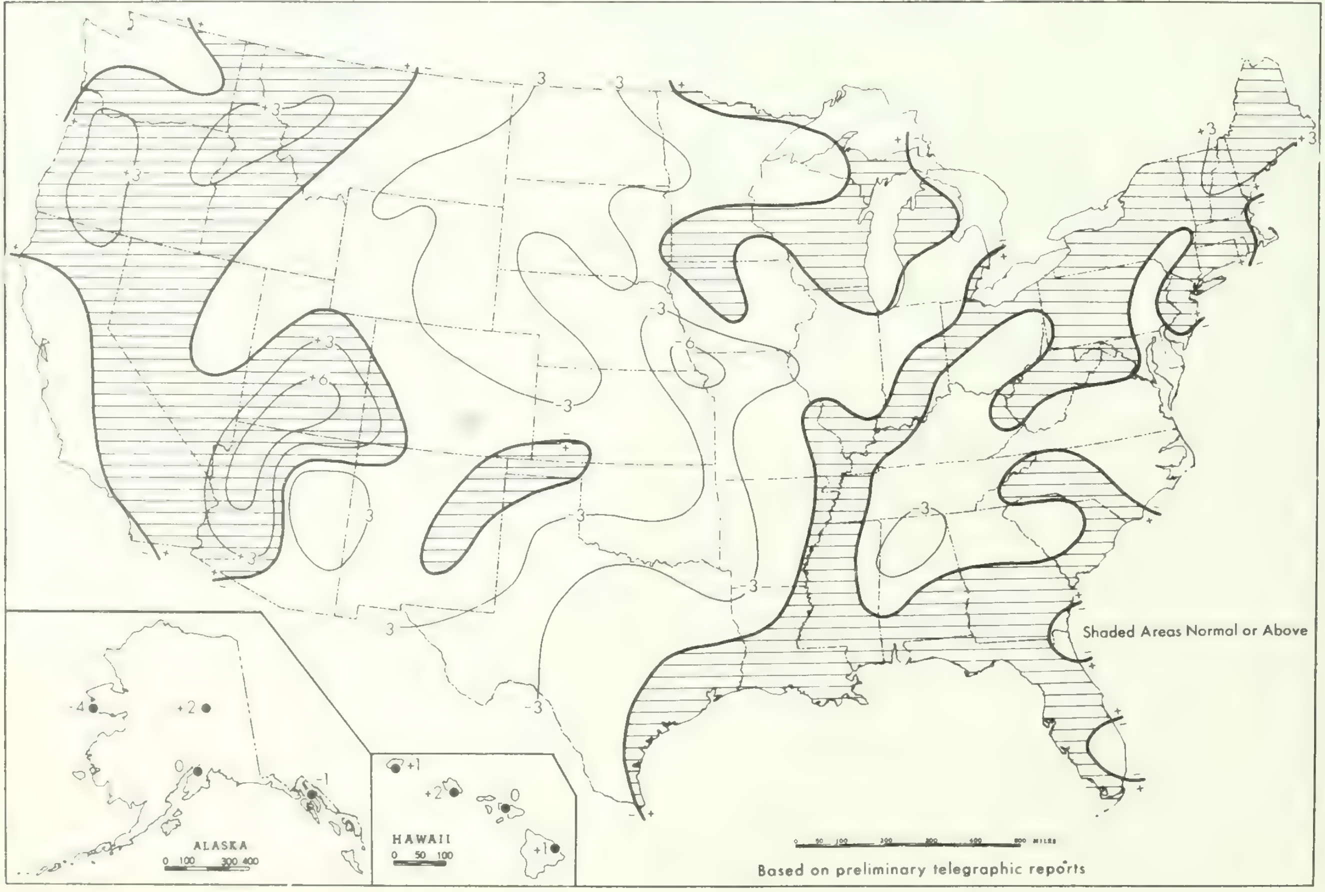
CHART III. TRACKS OF CENTERS OF ANTICYCLONES AT SEA LEVEL.

CHART IV. TRACKS OF CENTERS OF CYCLONES AT SEA LEVEL. Centers which can be identified for 24 hours or more are tracked in these charts. Semi-permanent features such as the Great Basin and Pacific Highs and Colorado and Mexico Lows are not shown. The 7:00 a.m., e.s.t., positions are shown by open circles, with the intermediate positions at 6-hour intervals shown by solid dots. The date is given above the circle and the central pressure to whole millibars below. A dashed track indicates a regeneration rather than actual movement to the next position. Solid squares indicate position of stationary center for period shown beside it.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), July.


60
70
65
75
80
85
90
55
ALASKA
HAWAII
0 50 100
0 100 300 400

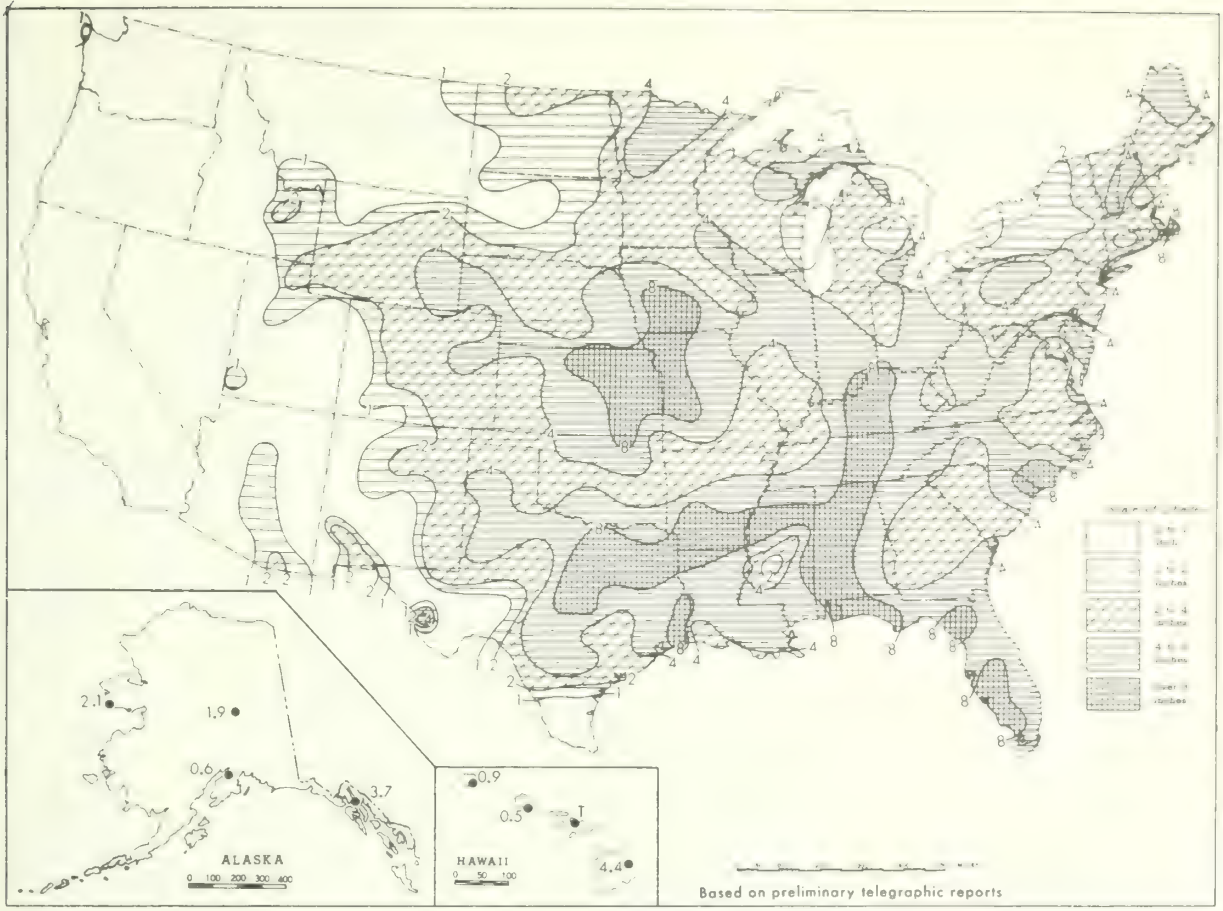
B. Temperature Departure from 30 - Year Mean (°F 1931-60), July 1973


+3
-3
+6
-6
+
-4
+2
0
-1
+1
+2
0
+1
ALASKA
0 100 300 400
HAWAII
0 50 100
0 50 100 200 300 400 500 MILES

Shaded Areas Normal or Above

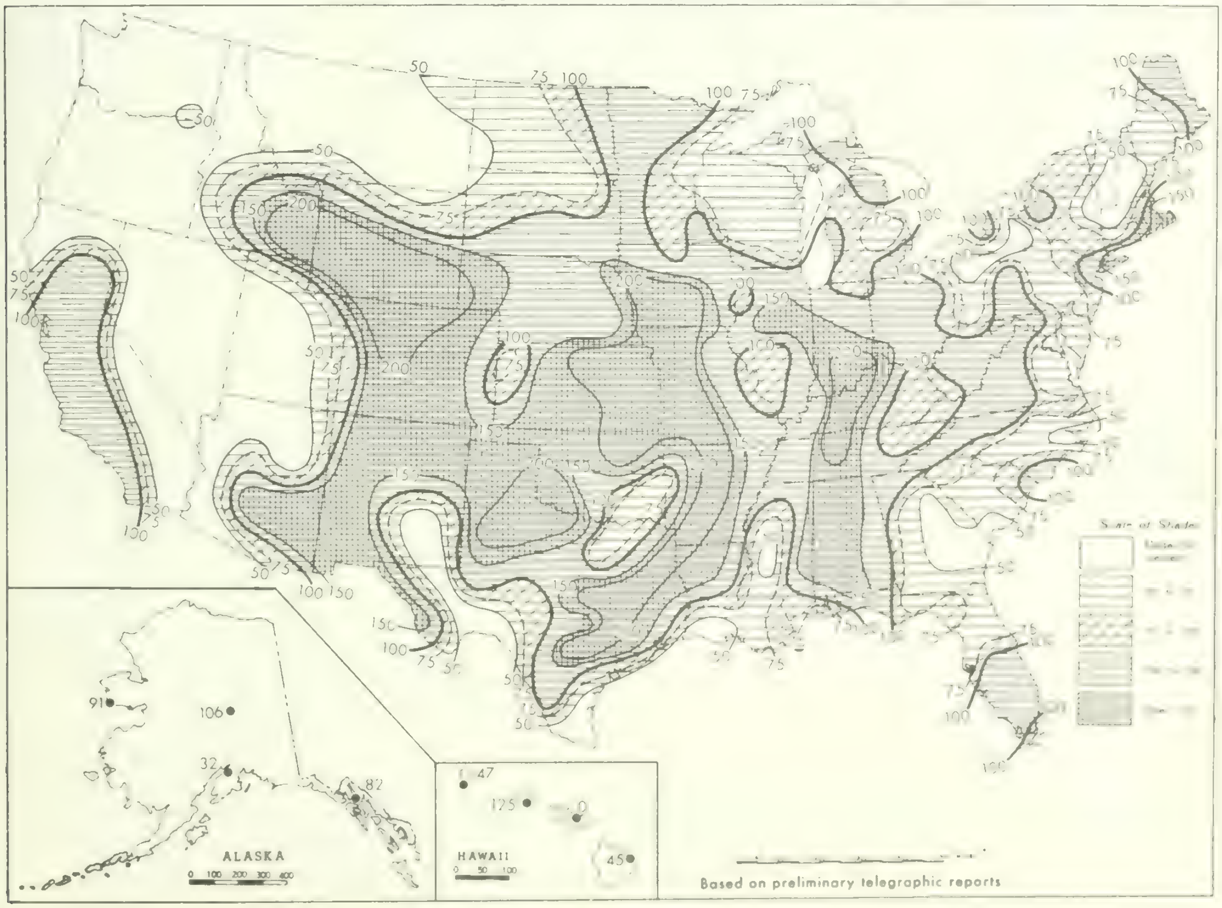
Based on preliminary telegraphic reports

Chart II. A. Total Precipitation (Inches), July 1973


ALASKA
0 100 200 300 400
2.1
1.9
0.6
3.7
HAWAII
0 50 100
0.9
0.5
T
4.4

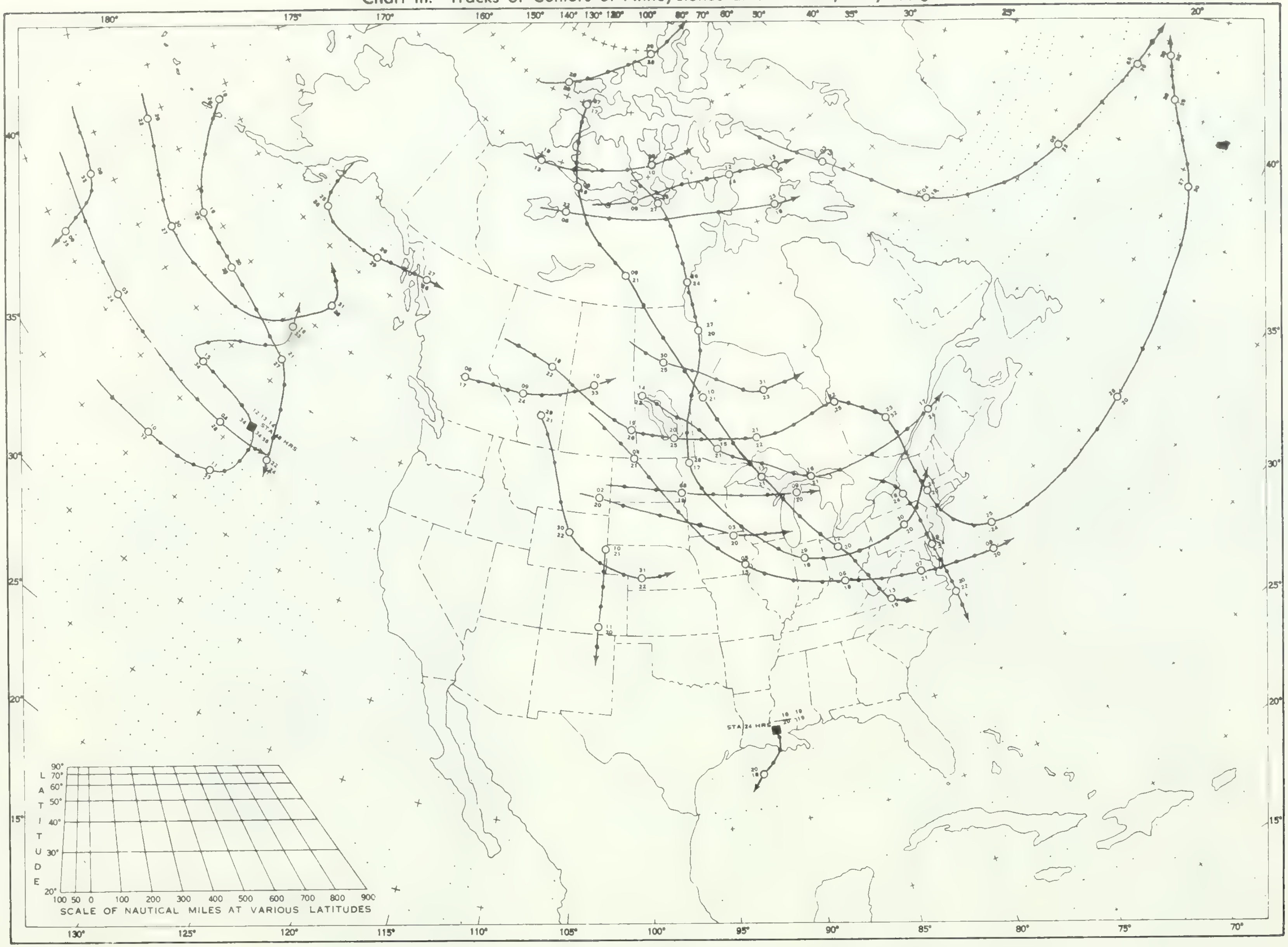
Based on preliminary telegraphic reports

B. Percentage of Normal Precipitation, July 1973


Scale of Shades
ALASKA
0 100 200 300 400
91
106
32
82
HAWAII
0 50 100
47
125
0
45

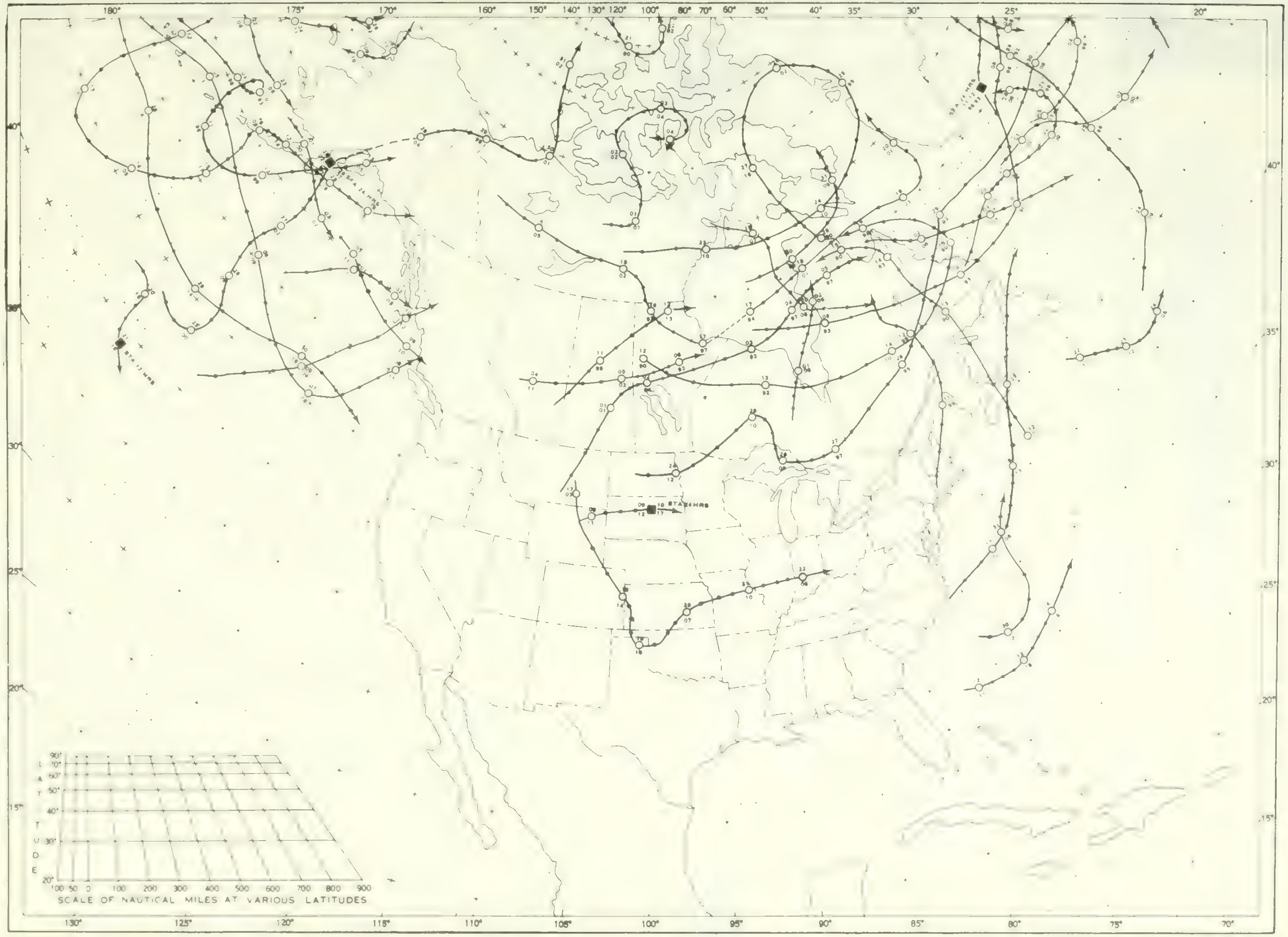
Based on preliminary telegraphic reports

Chart III. Tracks of Centers of Anticyclones at Sea Level, July 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
STA 24 HRS
STA 48 HRS
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, July 1973



180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
40°
35°
30°
25°
20°
15°
STA 24 HRS
STA 17 HRS
STA 24 HRS
90°
70°
60°
50°
40°
30°
20°
L A T I T U D E
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

AUGUST
1973

Volume 24

No. 8

ville, N.C.

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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

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I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina 28801.

William H. Haggard

Director, National Climatic Center

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

AUGUST 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

Dr. Richard E. Felch, Climatologist

HIGHLIGHTS:

1. Most of the Nation was warmer than average, except for the Southeast, South Central, and Pacific Coast.
2. Although there were scattered areas of heavy precipitation, most of the Nation experienced below normal rainfall.

TEMPERATURE--August temperatures over the Nation mostly averaged above normal, but below normal temperatures occurred in the south-central and southeastern States, and along the Pacific Coast.

Average temperatures varied greatly, August began with subnormal temperatures except along the coasts and the Pacific northwest, but ended with an intense heat wave which roasted areas from the Rockies to the Atlantic.

The month began with a large Canadian high bringing cool, dry air southward to the Gulf, setting many record lows: Omaha, Nebr., 53°, and Fort Smith, Ark., 57° on the 3d. As the high moved eastward temperatures warmed markedly, but a second cold airmass kept temperatures below normal over the Rockies and Plains States for the third consecutive week. Temperatures averaged 3° to 6° below normal in much of this area, while from the Mississippi eastward and over the western mountains they were 3° to 6° above normal.

The midmonth temperature pattern reversed itself, except over the western mountains, the Atlantic Coast, and New England. A large high over the northern Appalachians brought warm air as far north as the Dakotas and Canada: Philip, S.D., 105° and Glasgow, Mont., 102°, on the 16th. Dakotans endured extreme temperatures for several days.

The Plains continued above normal through the rest of August; temperatures averaged from 6° to 16° above normal across the northern Plains, the corn belt, and southern Kentucky-Virginia northward. A large high over the southeast pumped hot, humid air northward. In the Upper Great Lakes area, temperatures averaged 16° above normal. Milwaukee, Wis., weathered its hottest day in 18 years with a record 99° on the 27th; Bismarck, N.D., hit 107°, and Pierre, S.D., 110°. Meanwhile, temperatures over the far western States averaged 3° to 6° below normal as cool Canadian air moved southward. However, the large high over the Southeast blocked the cooler air's eastward advance.

PRECIPITATION--August rainfall was below normal except for a few scattered areas. Notable areas above normal include: New England, the Ohio River Valley, the southeastern Seaboard and Florida, southern Texas, Minnesota and Wisconsin, and a narrow area extending from Oklahoma through Utah and Nevada. Rainfall amounts in the last area, however, were generally small. While Reno, Nev., received over 250 percent of normal, that is only 0.40 inches. Duluth, Minn., received 8.46, 224 percent of normal.

August began with the most heavy precipitation in New England and along the Atlantic Coast , although some scattered thunderstorms occurred over the rest of the Nation. The Passaic River brought death and destruction when it reached record heights at Chatham, N.J. Thunderstorm activity was locally heavy; for example, Florence, S.C., had 5.54 on the 3d.

A slowly moving front brought thundershowers to the Nation's eastern half during the week ending the 12th. One storm dumped 2.10 inches of rain at Randolph, Iowa,in 45 minutes; another, 2.81 inches at Baileyville, Kans., in 1-1/2 hours.

At midmonth, the western half was dry, with thunderstorm activity in the east. During the last decade of the month, the weather was dominated by a massive high located over the Southeast. Rainfall was spotty during the week of the 20th; the Gulf States, the southern Great Plains, and Texas received no rain. Heavy rainfall was associated with thunderstorm activity: Peterson, Iowa, had 9.61 on the 22d, 8.00 inches of it in 6 hours, and Sheldon measured 5.59 inches. Shower activity was heavy at month's end along a slowly moving cold front located over the Dakotas and Wyoming.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

AUGUST 1973

STATE	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Frisco City	99	12	2 Stations	50	22+	Frisco City	7.86	Eufaula Wildlife Ref	.84
Alaska	Rikas Landing	85	21+	Anaktuvuk Pass	14	22+	Yakutat WSO AP	14.92	Farewell FAA AP	.76
Arizona	Willow Beach	117	13	2 Stations	32	28+	Sunrise Mountain	3.81	4 Stations	.00
Arkansas	5 Stations	102	24+	Calico Rock	49	4+	Madison	5.62	Arkansas Post	.20
California	Death Valley	121	2	Bodie	14	24	Woodfords	2.04	283 Stations	.00
Colorado	2 Stations	104	24+	Grand Lake 1 NW	23	1	Wolf Creek Pass 1 E	5.51	Doherty Ranch	.00
Connecticut	Hartford WSO AP	98	30	2 Stations	42	25+	Mansfield Hollow Lake	5.68	Hartford-Brainard Fld	1.10
Delaware	Wilmington WSO AP	100	28	Middletown 1 WSW	50	24	Lewes 1 SW	10.37	Wilmington WSO AP	2.44
Florida	3 Stations	99	17+	Fountain 3 SSE	58	22	Kendall 2 E	23.20	Gainesville 2 WSW	2.93
Georgia	6 Stations	97	30+	Blairsville Exp Sta	51	22	Jesup 8 S	11.79	U of Ga Plt Science Farm	.48
Hawaii	2 Stations	94	22+	Haleakala Summit 338.4,Maui	34	6+	Mount Waialeale 1047,Kauai	15.22	13 Stations	.00
Idaho	Riggins Ranger Station	107	1	Warren	24	28	Tetonia Exp Station	3.43	2 Stations	.00
Illinois	3 Stations	98	27+	Peru 2 W	49	21	Effingham	6.66	Shawneetown New Town	.33
Indiana	Ogden Dunes	98	27	LaGrange Sewage Plant	45	22	Noblesville	8.58	Cypress Dam 48	.32
Iowa	Hawarden	102	26	2 Stations	43	2	Peterson 1 W	10.58	Sioux City 4 N	.43
Kansas	Webster Dam	109	26	3 Stations	49	3+	Hiawatha	7.60	Dexter	.02
Kentucky	Golden Pond 8 N	99	29	Falmouth 5 WNW	45	23	Golden Pond 8 N	4.91	Nolin River Reservoir	.47
Louisiana	Winnsboro	98	13	Winnfield 2 W	57	22	Carville 2 SW	9.55	Koran	.36
Maine	3 Stations	94	31+	Bridgewater	36	25	Greenville	8.62	Machias	2.21
Maryland	Baltimore WSO CI	101	29+	2 Stations	42	24+	Vienna	13.44	Glenn Dale Bell Sta	2.00
Massachusetts	Chester 2	103	31	2 Stations	38	24+	Turners Falls	7.03	Springfield	1.74
Michigan	Lansing WSO AP	99	28	Champion Van Riper Pk	33	24	Tahquamenon Falls Park	7.07	Harbor Beach 3 NW	.57
Minnesota	3 Stations	103	27+	2 Stations	34	24+	Aitkin	9.40	Lamberton SW Exp Sta	.60
Mississippi	Columbia	100	10	2 Stations	52	23	White Oak	11.70	Greenville	.27
Missouri	2 Stations	103	26+	Alton	45	2	Oregon	7.12	Jefferson City L U	.08
Montana	Ingomar 11 NE	105	5	2 Stations	25	19	Roy 24 NE Mobridge	4.12	Libby 1 NE Ranger Sta	.12
Nebraska	Gavins Point Dam	107	27	2 Stations	42	30+	Falls City	8.67	2 Stations	.02
Nevada	2 Stations	112	13+	Rand Ranch Palisade	25	30	Ely	2.06	Mina	.00
New Hampshire	4 Stations	95	31+	Mount Washington	32	23	Concord WSO AP	6.88	2 Stations	2.58
New Jersey	Chatsworth	101	28	Pemberton 3 E	45	23	Bound Brook 2 W	9.44	Freehold	.97
New Mexico	Jal	104	23	Sandia Crest	24	31	Mayhill Ranger Station	4.16	Ochoa	.00
New York	Mineola	101	30	5 Stations	34	23	Westfield 3 SW	7.61	Mineola	.54
North Carolina	2 Stations	98	30+	Banner Elk	46	24	Morehead City 2 WNW	11.33	Cullowhee	.75
North Dakota	3 Stations	107	27	2 Stations	39	20	Amenia	6.07	Sentinel Butte 20 S	.00
Ohio	Toledo Blade	102	29	2 Stations	39	23	Huntsville 3 N	7.04	Portsmouth	.53
Oklahoma	Okeene	109	26	Jay	48	3+	Burbank	5.62	2 Stations	.00
Oregon	Ontario KSRV	107	2	Seneca	23	18	Brightwood	2.62	2 Stations	.00
Pennsylvania	Phila. 10th Chestnut	102	28	Clermont 4 NW	32	23	Norristown	10.41	New Park	.93
Puerto Rico & VI	Magueyes Island, P.R.	97	15	Adjuntas Substation, P.R.	55	3	Pico Del Este, P.R.	23.02	Central San Francisco,P.R.	1.05
Rhode Island	Newport	95	30	Kingston	49	23	Providence WSO AP	5.17	Newport	2.90
South Carolina	Ridgeland 5 NE	98	28	4 Stations	56	23+	Mc Clellanville	14.02	Woodruff	.71
South Dakota	Highmore 1 W	111	27	Pactola Dam	39	13+	Vale	5.69	White Lake	.15
Tennessee	5 Stations	97	30+	2 Stations	47	24+	Gatlinburg 2 SW	5.51	Shelbyville 3	.51
Texas	2 Stations	109	25+	Candelaria	47	24	Angleton 2 W	14.53	36 Stations	.00
Utah	2 Stations	106	13+	Hardware Ranch	25	25	Beaver	3.42	Moroni	.08
Vermont	Vernon	96	31	West Burke	35	26+	Mount Mansfield	5.78	Rochester	1.86
Virginia	Bohannon 1 NE	102	12	Monterey	45	23	Nelsonia	11.56	Grundy	1.28
Washington	Lower Granite Dam Near	109	13	Satus Pass 2 SSW	26	31	Monroe	1.92	13 Stations	.00
West Virginia	2 Stations	99	29+	Canaan Valley	36	23	Hacker Valley	7.80	Branchland	.35
Wisconsin	Clintonville	103	27	Drummond 6 W	35	2+	Grantsburg	9.72	Racine 5 W	.38
Wyoming	3 Stations	102	20+	Bondurant 3 NW	22	30+	Tower Falls	2.75	Muddy Gap	.00

+ And also on an earlier date or dates.

NOTE: Dates in the above table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See indivdual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

METRIC UNITS

AUGUST 1973

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	995.6	1017.7	30.5	19.7	25.1	-2.2	32.8	31+	15.6	22	7	0	20.0	77	137	14	41	12	9	0	0	0.6	5	16.5	NW	13	10	9	12	5.5	70
HUNTSVILLE	190	995.3	1017.8	31.0	19.9	25.4	-1.3	33.9	30+	15.6	23	10	0	19.4	74	24	-60	8	6	6	0	0	0.3	2	11.6	29	12	18	8	5	3.8	
MOBILE	64	1009.1	1016.8	32.6	22.3	27.4	-0.1	35.0	21	18.9	23+	22	0	21.1	75	139	-25	31	19	15	0	0	0.9	4	10.3	4	29+	5	10	16	6.5	
MONTGOMERY	56	1010.2	1017.3	32.9	21.4	27.2	-0.4	34.4	28+	17.8	23+	26	0	20.6	73	69	-35	32	6	12	0	0	0.0	30	10.7	SW	1	6	19	6	5.5	56
ALASKA																																
ANCHORAGE	35	1008.5	1013.3	15.3	8.8	12.1	-1.2	18.9	19+	1.1	15	0	0	8.9	82	86	21	32	14	0	0	0	0.9	20	12.5	17	21	2	3	26	8.6	45
ANNETTE	34	1014.2	1018.3	16.8	9.2	13.0	-1.7	22.2	20	4.4	31	2	0	7.2	71	119	-72	40	15	0	0	0	1.1	20	9.4	12	27	3	9	19	7.6	
BARROW	9	1008.5	1009.2	6.6	2.1	4.3	1.1	14.4	20	-2.2	12	0	5	3.3	93	56	33	15	17	0	15	T	0.5	18	11.2	18	1	0	2	29	9.6	
BARTER ISLAND	12	1009.1	1011.1	7.3	1.7	4.3	-0.2	16.1	2+	-2.8	14	0	10	3.3	94	22	-5	10	9	0	T	0	2.2	9	11.6	27	13	2	6	23	8.3	
BETHEL	38	1006.8	1012.3	14.1	7.0	10.6	-0.7	21.7	3	1.1	13	1	0	7.2	83	87	-20	26	18	0	0	0	2.4	21	13.4	19	19	2	3	26	8.8	
BETTLES	196			14.8	6.4	10.1		22.2	3	-1.7	12	2	3			59		17	18	0	T	0			9.4	23	28+	0	9	22	8.5	
BIG DELTA	386			15.7	6.7	11.2		27.2	20	-1.1	31	2	1			45			14	0	0	0										
COLD BAY	29	1010.8	1014.5	12.3	7.7	10.0	-0.7	17.8	23	3.9	29	0	0	8.3	93	55	-53	15	20	0	0	0	3.7	19	22.8	15	18	0	0	31	9.8	
FAIRBANKS	133	995.3	1012.1	17.1	8.4	12.8	0.4	26.7	20	2.2	31	5	0	7.2	72	56	0	19	10	0	0	0	0.8	25	10.3	22	20	0	6	25	8.7	
HOMER	20			15.2	6.2	10.7		20.0	16	0.6	14	0	0			53	-18	21	12		0	0						2	9	20	7.6	
JUNEAU	4	1015.6	1016.4	15.1	6.8	11.0	-1.3	22.8	20	1.1	31+	1	0	8.9	90	169	41	38	21	0	0	0	2.0	10	12.5	12	13	1	6	24	8.5	28
KING SALMON	15	1011.5	1013.4	16.4	8.6	12.6	0.0	26.1	19	2.8	15	5	0	7.8	75	97	9	25	17	0	0	0	2.1	21	13.0	9	31+	3	4	24	8.5	
KODIAK	4	1010.2	1014.3	14.3	7.3	10.8	-1.9	20.6	20	2.2	30	0	0	6.7	77	62	-47	33	11	0	0	0	1.1	30	13.0	4	31	4	8	19	7.4	
KOTZEBUE	3	1009.1	1009.6	11.9	6.6	9.3	-1.1	22.2	4	1.7	30+	1	0	6.7	85	83	28	17	19	0	T	0	1.6	23	14.3	31	27	3	4	24	8.6	
MC GRATH	105	999.7	1012.4	15.9	5.9	10.9	-1.3	23.9	19	-0.6	31	2	3	5.6	73	88	-8		20	0	0	0	1.2	21	9.4	19	19	0	4	27	9.0	
NOME	4	1008.8	1009.7	10.4	4.4	7.4	-2.1	16.7	3	-2.8	30+	0	6	5.6	85	101	4	25	14	0	0	0	1.5	19	12.5	13	18	2	5	24	8.6	32
ST. PAUL ISLAND	7	1010.2	1010.9	9.4	6.1	7.7	-0.9	11.1	31	4.4	28+	0	0	7.2	95	61	-23	21	15	0	0	0	3.2	21	15.6	17	23+	0	2	29	9.6	
SUMMIT	732			11.4	4.5	8.0		17.8	19	0.6	15+	0	0			78		16	20	0	T	0			10.7	23	9+	0	2	29	9.4	
TALKEETNA	105			15.7	6.6	11.2	-1.4	21.1	23+	-1.7	15+	3	3			181	46	47	20	0	0	0			8.9	16	20					
UNALAKLEET	5			13.1	5.7	9.4		18.9	6+	0.0	14														13.0	23	29+					
YAKUTAT	9	1014.6	1015.5	13.9	7.0	10.5	-1.6	20.6	17	0.6	18+	0	0	8.3	87	379	102	65	22	0	0	0	1.4	12	11.2	11	22	4	4	23	8.2	
ARIZONA																																
FLAGSTAFF	2135	791.7	1016.2	27.5	8.7	18.1	0.4	31.1	19+	4.4	31	0	0	8.9	62	32	-40	7	8	12	0	0	1.0	22	9.8	SW	27	13	16	2	4.0	69
PHOENIX	340	971.2	1008.7	41.2	27.0	34.1	3.3	43.9	18	22.2	28	31	0	11.7	27	T	-28	T	0	3	0	0	0.3	26	22.8Y	N	30	22	8	1	2.1	92
TUCSON	788	924.5	1009.7	36.3	22.2	29.3	0.9	39.4	18	18.9	31	31	0	13.3	40	14	-59	8	6	11	0	0	0.8	19	14.8	SE	29	18	11	2	3.1	86
WINSLOW	1492	853.4	1013.7	33.2	14.2	23.7	-1.7	37.8	12	10.0	30	22	0	9.4	48	36	-1	10	7	10	0	0	1.2	20	13.0	19	19	11	17	3	4.1	
YUMA	59	1001.4	1008.6	40.8	25.8	33.3	0.2	43.9	18	20.0	28	31	0	14.4	36	9	-4	9	3	7	0	0	1.6	19	26.8	SE	19	22	7	2	2.2	88
ARKANSAS																																
FORT SMITH	136	1000.0	1016.3	33.7	19.0	26.3	-1.6	37.2	24	13.9	3+	24	0	17.8	65	11	-63	6	5	6	0	0	0.4	19	15.6	N	15	17	11	3	3.7	77
LITTLE ROCK	78	1007.5	1016.8	33.1	20.7	26.9	-0.5	37.2	20	16.7	23+	23	0	18.9	65	32	-40	28	5	5	0	0	1.3	18	13.0	N	9	17	13	1	3.3	93
CALIFORNIA																																
BAKERSFIELD	145	994.9	1012.0	36.3	20.8	28.6	0.9	40.6	19+	13.9	24	26	0	12.2	39	0	0	0	0	0	0	0	1.7	34	8.9	32	3	27	4	0	1.1	
BISHOP	1252	873.7		34.4	11.8	23.2	-0.3	38.9	16	5.0	27	24	0			T	-3	T	1		0	0										
BLUE CANYON	1609	841.5		25.0	14.1	19.6	0.3	30.0	15	7.2	27+	0	0			7	5	6	2		0	0			10.3	21	21	26	4	1	1.3	
EUREKA U	13			14.9	10.4	12.7	-1.1	17.8	24	8.3	22	0	0			2	-1	2	2		0	0			8.9	NW	31+	5	8	18	7.5	48
FRESNO	100	1000.0	1011.7	34.8	16.8	25.8	-0.2	40.0	15	10.6	24	24	0	12.2	46	T	0	T	0	0	0	0	1.7	29	8.0	NW	23	27	2	2	1.3	94
LONG BEACH	8	1012.5	1013.8	27.8	18.2	23.0	0.6	36.1	19	15.0	28+	3	0	13.9	62	T	-1	T	0	0	0	0	1.3	22	7.2	28	19+	16	13	2	3.7	
LOS ANGELES	30	1009.5	1013.3	23.9	17.3	20.6	0.0	29.4	19	15.6	31+	0	0	16.1	79	1	0	1	1	1	0	0	2.5	25	12.5Y	W	22	12	12	7	4.6	
LOS ANGELES U	82			27.8	18.3	23.1	0.3	34.4	19	16.1	31+	1	0			0	-1	0	0		0	0			6.3	SW	26+	20	9	2	2.9	81
MT SHASTA R	1080	892.3	1014.5	28.6	9.3	18.9	-0.3	34.4	2	2.8	24	9	0			3	-2	3	1		0	0										
OAKLAND	2	1014.9	1015.3	19.8	12.5	16.2	-1.7	26.7	28	10.0	16	0	0	12.8	86	0	-1	0	0	0	0	0	3.7	29	10.3	27	23	22	8	1	3.0	
RED BLUFF	104	999.3	1011.6	34.7	16.5	25.6	-1.6	40.0	14	12.2	24+	24	0	8.9	39	0	-2	0	0	0	0	0	1.5	17	8.5	SE	26+	26	4	1	1.2	98
SACRAMENTO	5	1011.2	1012.2	33.2	13.7	23.4	0.1	38.9	14	10.6	23	20	0	10.0	51	0	-1	0	0	0	0	0	3.4	20	8.9	SW	26	30	1	0	0.5	99
SANDBERG R	1377			28.5	16.4	22.4	-0.5	35.0	13	6.7	26	7	0	7.2	42	T	-2	T	0		0	0	1.8	30	13.0	33	10					
SAN DIEGO	4	1012.2	1013.3	24.2	18.6	21.4	-0.7	28.3	20+	17.2	31+	0	0	15.0	71	T	-2	T	0	0	0	0	2.1	27	9.4	S	19	10	13	8	5.1	62
SAN FRANCISCO	2	1014.6	1015.3	20.4	11.4	15.9	-1.2	28.3	28	9.4	18	0	0	11.1	80	T	-1	T	0	0	0	0	4.8	29	13.0	27	22	19	11	1	2.8	
SAN FRANCISCO U	16			16.6	11.3	13.9	-1.3	23.3	28	10.0	15	0	0			0	-1	0	0													55
SANTA MARIA	72			22.0	11.3	16.7	-0.2	25.0	20	6.1	23	0	0			T	-1	T	1		0	0						18	12	1	3.4	
STOCKTON	7	1011.5	1012.5	32.6	14.6	23.6	-0.9	38.3	14	11.1	24+	19	0	10.6	51	0	0	0	0	0	0	0	3.4	30	10.3	24	23	29	2	0	1.0	
COLORADO																																
ALAMOSA	2297	778.2		26.5	6.9	16.7	-0.5	29.4	19+	2.8	31	0	0			17	-8	6	10		0	0						10	17	4	4.6	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station ∅	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
COLORADO	M	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
COLORADO SPRINGS	1873	814.8	1014.0	29.1	13.8	21.4	0.8	33.3	17	10.6	30+	7	0	6.7	43	23	- 32	7	9	17	0	0	1.0	4	13.4	17	25+	11	16	4	4.3	
DENVER	1610	838.5	1012.2	31.6	14.5	23.1	1.1	34.4	27+	11.1	1	14	0	7.2	41	33	0	25	8	10	0	0	2.2	20	18.3	NW	11	12	14	5	4.5	80
GRAND JUNCTION	1476	853.4	1011.9	33.1	17.3	25.2	1.1	37.2	13+	12.8	29	22	0	7.2	36	16	- 11	13	4	7	0	0	3.1	14	13.9	NE	1	13	10	5	4.1	73
PUEBLO	1428	856.8	1012.0	34.1	15.3	24.7	1.1	38.3	17	12.8	3+	24	0	11.1	49	45	- 2	29	10	13	0	0	0.3	31	18.3	NW	6	15	14	2	3.5	87
CONNECTICUT																																
BRIDGEPORT	2	1016.6	1017.3	28.4	20.2	24.3	1.9	33.3	30+	12.2	23	4	0	17.8	70	52	- 61	21	8	4	0	0	1.4	23	16.5	28	31	12	9	10	5.7	
HARTFORD	52	1010.2	1016.5	30.8	18.5	24.7	2.9	36.7	30	11.7	23	11	0	17.2	67	114	12	44	6	3	0	0	0.6	22	14.8	NW	31	8	7	16	6.5	62
DELAWARE																																
WILMINGTON	23	1014.2	1017.2	30.1	21.1	25.6	2.1	37.8	28	13.3	23	7	0	20.0	75	62	- 80	43	6	3	0	0	0.4	26	12.5	1	31	8	12	11	5.7	
DIST.OF COLUMBIA																																
WASHINGTON DULLES	88	1005.8	1017.2	30.3	19.0	24.7		35.0	29+	11.1	23	10	0	19.4	77	81		46	8	3	0	0	0.5	23	7.6	36	22+	11	9	11	5.4	
WASHINGTON NATIONAL	3	1014.9	1017.3	31.4	21.8	26.6	1.9	36.7	29	15.6	23	12	0	19.4	68	112	- 12	95	7	3	0	0	0.4	20	9.4	W	20	12	7	12	5.3	55
FLORIDA																																
APALACHICOLA U	4			31.8	23.8	27.8	0.3	33.3	21+	20.0	23	14	0			86	-111	42	9	14	0	0			11.2	E	31	9	16	6	5.0	90
DAYTONA BEACH	9	1016.3	1017.7	31.2	22.5	26.8	- 0.2	32.8	11+	20.0	22	9	0	22.8	82	193	31	42	17	15	0	0	1.3	12	10.3	14	31	3	15	13	7.1	
FORT MYERS	5	1016.3		32.3	23.3	27.8	- 0.3	34.4	12	21.1	22	20	0	22.2	77	220	33	63	18	20	0	0	1.8	10	10.3	18	12+	1	15	15	7.3	
JACKSONVILLE	8	1016.6	1017.6	32.1	21.8	26.9	- 1.0	35.0	4	18.9	23+	18	0	22.2	82	190	16	39	17	19	0	0	0.7	11	15.2	NE	21	2	20	9	6.5	51
KEY WEST	1	1014.9	1015.7	31.2	25.6	28.4	- 0.3	32.2	28+	23.3	21+	7	0	23.9	78	217	107	65	20	22	0	0	3.2	11	15.6	SE	12	3	8	20	7.4	78
LAKELAND U	65			31.7	22.2	26.9	- 0.8	33.9	10	19.4	22	19	0			179	- 1	36	21		0	0						2	19	10	6.5	58
MIAMI	2	1015.9	1016.3	30.3	24.5	27.4	- 0.6	32.2	25+	21.7	22	2	0	23.9	84	371	194	69	26	17	0	0	2.0	10	12.5	10	5	1	11	19	7.7	
ORLANDO	33	1012.9	1017.3	32.6	22.8	27.7	- 0.6	34.4	17+	20.6	23+	24	0	22.2	79	186	10	39	16	20	0	0	1.3	9	13.9	23	1	0	18	13	6.9	
PENSACOLA	34	1012.5	1016.8	32.5	23.4	28.0	0.5	35.6	21	19.4	22	21	0	22.8	77	105	- 72	58	9	13	0	0	1.0	5	7.6	16	16	5	14	12	6.2	
TALLAHASSEE	17	1014.6	1017.1	32.5	21.7	27.1	- 0.2	35.0	21	17.2	23	23	0	22.2	82	274	98	65	18	17	0	0	0.4	7	12.1	18	14	6	18	7	5.7	
TAMPA	6	1016.6	1016.8	32.3	23.0	27.7	- 0.1	34.4	19	19.4	22	21	0	21.7	76	240	30	69	16	25	0	0	1.5	10	10.3	4	20	2	18	11	6.6	62
WEST PALM BEACH	5	1015.9	1016.6	31.4	23.8	27.6	- 0.7	33.3	23+	20.6	22	14	0	22.2	76	191	20	50	19	16	0	0	2.1	11	9.8	6	28	1	12	18	7.6	
GEORGIA																																
ATHENS	244	988.8	1017.4	30.7	19.7	25.2	- 0.9	33.9	30+	16.7	23+	8	0	20.6	81	78	- 14	37	5	7	0	0	0.1	6	7.6	23	11	7	15	9	5.9	
ATLANTA	308	981.0	1017.4	30.2	20.2	25.2	- 0.4	32.8	28	16.7	22	6	0	19.4	76	34	- 57	13	6	9	0	0	0.1	12	15.2	SE	31	4	14	13	6.4	57
AUGUSTA	41	1011.9	1017.2	31.8	20.2	26.0	- 0.8	35.0	29	16.7	22	14	0	20.0	76	67	- 32	18	14	13	0	0	0.2	18	11.2	19	11	5	17	9	6.4	
COLUMBUS	117	1003.4		31.7	21.4	26.6	- 0.5	33.3	30+	17.8	22	15	0	21.1	79	177	59	69	12	12	0	0	0.7	5	11.2	14	5	8	14	9	5.3	
MACON	108	1004.7	1017.5	33.0	21.3	27.2	- 0.2	35.6	1	18.3	22	25	0	21.7	79	180	74	46	9	10	0	0	0.3	7	12.5	SE	31	8	13	10	5.6	76
ROME	194			31.6	18.8	25.2	- 0.6	35.0	29+	15.0	24+	14	0			25	- 71	12	7		0	0										
SAVANNAH	14	1015.9	1017.8	31.4	21.9	26.7	- 0.6	34.4	13	17.2	22	12	0	22.2	81	164	- 4	44	14	13	0	0	0.2	12	11.6	E	21	5	11	15	6.8	45
HAWAII																																
HILO	8	1016.3	1017.4	29.2	20.0	24.6	0.3	31.1	5	17.8	14	0	0	20.6	82	90	-201	16	27	0	0	0	0.2	6	7.6	E	23+	2	12	17	7.1	45
HONOLULU	2	1016.6	1017.1	31.2	23.4	27.3	1.0	32.8	21+	21.1	11+	5	0	18.9	62	8	- 14	2	11	0	0	0	5.6	6	13.4	NE	6	2	20	9	6.5	60
KAHULUI	15	1014.2	1016.5	30.3	21.3	25.8	- 0.3	32.2	5	17.2	10	1	0	17.8		1	- 8	1	1	0	0	0	6.0	5	13.4	NE	25	9	14	8	5.4	70
LIHUE	31	1013.2	1018.4	29.2	23.2	26.2	0.4	30.0	25+	21.1	11+	0	0	21.1	74	34	- 29	5	19	0	0	0	5.5	5	11.6	NE	1	1	18	12	6.6	61
IDAHO																																
BOISE	865	913.6	1011.4	31.3	14.2	22.8	0.5	37.2	2	7.2	26	16	0	3.9	31	1	- 3	1	2	0	0	0	1.1	32	10.7	W	23	19	7	5	3.3	83
LEWISTON	431			32.4	15.1	23.8	1.7	40.0	1	8.3	18	19	0			1	- 10	1	1		0	0			17.4Y		16	20	8	3	2.6	
POCATELLO	1358	863.2	1012.5	30.5	11.5	21.0	- 0.2	35.6	15	4.4	29	11	0	4.4	37	3	- 11	1	5	5	0	0	2.5	24	16.5	S	23	19	8	4	3.3	80
ILLINOIS																																
CAIRO U	96			30.7	20.9	25.8	- 0.8	34.4	29	17.2	22+	10	0			63	- 16	21	5		0	0			14.8	SE	29	15	13	3	3.6	83
CHICAGO O HARE	201	992.6	1016.5	28.4	18.8	23.7	1.8	35.0	27	13.9	3	4	0	18.3	73	17	- 65	9	5	3	0	0	1.2	20	10.3	3	14+	11	13	7	4.9	
CHICAGO MIDWAY	185	994.6	1016.9	29.8	19.8	24.8	1.4	36.1	27+	14.4	3	13	0	17.2	67	22	- 59	13	7	3	0	0	1.2	19	9.8	SW	8	11	15	5	4.9	72
MOLINE	177	994.9	1016.1	29.8	18.1	23.9	0.8	35.0	27	11.1	3	9	0	17.8	71	58	- 31	26	8	5	0	0	1.5	19	11.6	SW	8	10	17	4	4.8	64
PEORIA	199	993.2	1016.8	29.1	18.3	23.7	0.2	34.4	27	11.7	21	6	0	18.3	74	23	- 50	13	7	6	0	0	1.3	18	11.2	S	29	12	10	9	5.2	53
ROCKFORD	221	989.8	1016.4	28.6	17.2	22.9	0.4	34.4	27	12.2	3	5	0	17.8	77	48	- 57	36	6	2	0	0	1.2	18	9.4	18	7	11	11	9	5.4	
SPRINGFIELD	179	994.6	1016.5	30.2	18.7	24.4	0.4	35.6	27+	12.8	21+	11	0	18.3	71	42	- 27	19	7	4	0	0	1.6	19	16.1	SE	29	12	11	8	4.7	65
INDIANA																																
EVANSVILLE	116	1003.7	1017.5	31.1	19.4	25.3	0.1	34.4	28+	13.9	23	13	0	19.4	72	72	- 6	67	4	3	0	0	0.5	20	13.0	W	9	16	11	4	3.8	81

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm. or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C.	C	C	C	C.		C				C.	%	Mm.	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s.							%
INDIANA																																
FORT WAYNE	241	988.2	1017.6	28.2	16.7	22.5	0.0	33.3	27+	9.4	23	6	0	17.8	77	95	18	34	9	6	0	0	1.0	23	13.0	N	20	12	9	10	5.4	69
INDIANAPOLIS	241	988.8	1017.5	29.4	17.7	23.6	0.4	33.3	30+	11.7	23	7	0	19.4	79	70	- 7	27	7	4	0	0	0.8	23	18.8	SW	31	11	15	5	4.7	57
SOUTH BEND	236	989.2	1016.7	28.5	18.2	23.4	1.2	35.6	28	11.7	22	4	0	17.2	71	33	- 57	14	9	5	0	0	1.3	23	9.8	23	30	8	13	10	5.5	
IOWA																																
BURLINGTON	211			28.8	18.2	23.5	- 0.2	32.8	27+	12.8	1	3	0	19.4	78	90	- 1	51	7	5	0	0	1.5	19	9.8	22	9	11	13	7	4.9	
DES MOINES	286	981.4	1015.3	30.4	19.5	24.9	1.6	34.4	27+	14.4	1	11	0	17.8	68	35	- 58	11	12	10	0	0	1.9	18	12.1	SW	7	14	12	5	4.1	75
DUBUQUE	322			27.8	17.0	22.4	1.0	33.9	27	12.8	3+	4	0			39	- 56	13	8		0	0										
SIOUX CITY	334	974.9	1013.9	31.3	18.8	25.1	1.1	37.2	26	11.7	1	14	0	18.3	69	27	- 41	11	7	5	0	0	2.9	16	12.1	S	31	14	13	4	4.1	75
WATERLOO	265	984.4	1015.6	28.8	17.7	23.2	1.2	33.3	27+	10.6	2	6	0	16.7	68	69	- 18	29	8	9	0	0	1.9	18	10.3	18	6	10	12	9	4.8	
KANSAS																																
CONCORDIA	448	961.7	1013.3	31.9	19.3	25.7	- 0.4	37.2	25	13.9	1	14	0	17.8	66	62	- 18	31	9	10	0	0	3.5	17	17.0	N	15	19	10	2	2.9	90
DODGE CITY	787	924.8	1012.7	35.3	19.7	27.5	1.3	41.1	25	14.4	2	27	0	13.3	47	62	2	25	8	12	0	0	4.2	18	14.8	S	31	20	11	0	2.6	91
GOODLAND	1114	888.3	1012.1	33.1	15.4	24.3	0.6	37.8	25	11.7	2	23	0	13.3	58	29	- 28	6	9	11	0	0	2.9	18	15.6	19	5+	21	9	1	2.7	
TOPEKA	267	984.1	1015.2	30.9	19.1	25.1	- 0.7	35.6	25	13.3	3	12	0	19.4	74	72	- 37	39	9	9	0	0	2.1	17	13.4	SE	10	18	10	3	2.7	78
WICHITA	403	967.8	1014.3	33.7	19.4	26.6	- 0.6	40.0	25	14.4	3	24	0	17.2	59	17	- 56	6	5	5	0	0	3.7	18	16.5	NW	13	19	10	2	2.7	85
KENTUCKY																																
COVINGTON	265	986.8	1017.9	28.7	17.7	23.2	- 0.2	33.3	30	11.1	23	4	0	17.8	76	67	1	22	9	8	0	0	0.8	22	14.3	7	19	10	15	6	5.0	
LEXINGTON	294	983.4	1018.3	29.4	18.2	23.8	- 0.6	33.9	30	11.1	23	7	0	18.9	76	91	9	34	5	4	0	0	0.6	21	12.1	19	10	9	15	7	5.1	
LOUISVILLE	145	1000.0	1017.2	30.1	19.8	25.0	0.4	34.4	30	13.9	23	10	0	18.9	70	23	- 52	16	5	3	0	0	0.6	18	11.2	N	20+	13	11	7	4.5	49
LOUISIANA																																
ALEXANDRIA	28	1012.9	1017.2	31.6	20.4	26.0	- 1.8	35.0	21	15.6	23	15	0	20.6	79	43	- 46	12	11	10	0	0	0.3	9	7.6	19	28+	13	10	8	4.9	
BATON ROUGE	20	1014.2	1016.9	32.4	21.9	27.2	- 0.8	35.6	21	18.3	22	21	0	21.1	74	125	- 9	49	12	10	0	0	0.9	7	13.0	30	1	5	16	10	6.0	
LAKE CHARLES	3	1015.6	1016.5	31.3	21.6	26.4	- 1.4	34.4	21	17.8	23	10	0	21.7	80	84	- 38	25	12	15	0	0	1.3	8	9.8	16	26+	[illegible]	11	13	6.0	
NEW ORLEANS	1	1015.6	1016.4	32.1	23.1	27.6	- 0.1	34.4	10+	17.8	23	18	0	21.7	74	86	- 50	28	13	12	0	0	1.3	4	11.2	17	26	7	13	11	6.0	47
SHREVEPORT	77	1007.5	1016.6	31.9	19.4	25.7	- 3.1	35.6	21	16.1	23	19	0	20.0	76	20	- 45	11	3	4	0	0	0.7	16	11.2	33	14	11	16	4	4.7	78
MAINE																																
CARIBOU	190	991.5		24.2	14.0	19.1	2.1	30.0	31	5.0	25	0	0			75	- 18	22	16		0	0						4	8	19	7.3	
PORTLAND	13	1013.9	1016.1	26.7	16.6	21.6	2.3	33.3	9	8.9	25	3	0	17.8	83	88	27	69	6	2	0	0	0.8	21	12.5	NW	28	4	11	16	6.3	61
MARYLAND																																
BALTIMORE	45	1011.9	1017.5	30.0	19.8	24.9	1.1	37.2	28	12.8	23	9	0	19.4	76	85	- 47	33	9	2	0	0	0.8	24	11.6	SW	13	12	8	11	5.3	55
MASSACHUSETTS																																
BLUE HILL OBS R	192			27.2	17.8	22.6	1.8	33.3	30+	10.6	23	3	0			110	8	33	9		0	0			17.4	NNW	31					61
BOSTON	5	1015.2	1016.4	28.2	19.4	23.8	1.7	37.2	30	13.9	23	10	0	17.2	72	71	- 22	31	11	2	0	0	0.9	25	15.2	NW	31	7	14	10	5.9	64
WORCESTER	301	980.7	1017.2	26.8	17.3	22.1	1.9	32.2	31+	8.9	23	3	0	16.7	73	109	1	41	8	6	0	0	1.8	28	9.8	17	2	7	11	13	6.4	
MICHIGAN																																
ALPENA	210	991.5	1016.4	26.0	14.5	20.3	2.2	33.9	29	6.1	22	4	0	15.6	77	144	67	68	11	8	0	0	0.7	23	11.6	SW	30	10	10	11	5.7	57
DETROIT	189			27.4	18.3	22.9	0.2	35.6	28	10.6	22	3	0	16.1	68			30		6	0	0	1.2	26	9.8	S	21					
DETROIT METRO	194	992.9	1016.7	28.5	16.9	22.7	1.2	35.6	28	9.4	23	4	0	17.2	75	42	- 30	30	4	4	0	0	1.2	28	15.2	W	9	11	16	4	4.8	69
FLINT	235	988.8	1016.4	27.3	16.1	21.7	0.8	34.4	27	7.2	22	4	0	16.7	75	45	- 36	21	5	4	0	0	1.4	24	12.5	25	9	8	18	5	4.9	
GRAND RAPIDS	239	988.5	1017.1	28.6	16.7	22.6	1.3	35.0	26	8.9	22	6	0	16.1	71	37	- 32	14	9	8	0	0	1.4	22	15.6	NW	17	9	12	10	5.6	65
HOUGHTON LAKE	350	975.6	1017.1	26.1	14.9	20.5	1.9	33.3	27	5.6	22	2	0	16.1	77	58	- 10	19	8	8	0	0	1.4	25	7.6	26	10+	8	15	8	5.8	
LANSING	256	985.8	1016.8	29.5	16.1	22.8	1.6	37.2	28	8.9	4	7	0	16.7	71	45	- 33	22	6	5	0	0	1.4	24	12.1	SW	30+	9	15	7	5.0	67
MARQUETTE	[illegible]			25.1	16.2	20.6	1.8	36.7	27	8.9	24	3	0			74	- 3	22	12		0	0			9.8	SW	30	8	10	13	6.3	53
MUSKEGON	191	994.2	1017.0	26.8	17.2	22.0	0.7	31.7	8	10.6	22	0	0	16.7	76	76	3	43	7	7	0	0	1.7	22	11.2	19	30+	11	13	7	4.7	
SAULT STE MARIE	[illegible]	949.2	1015.3	25.6	14.7	20.1	2.3	33.9	28	6.7	22	1	0	16.1	80	115	41	30	13	7	0	0	0.5	25	14.8	NW	5	5	14	12	6.9	[illegible]
MINNESOTA																																
DULUTH	435	964.1	1014.8	24.1	13.1	18.6	0.9	32.2	28	5.6	2	1	0	14.4	80	215	118	58	15	10	0	0	1.0	14	11.6	S	19+	8	11	12	6.1	51
INTERNATIONAL FALLS	359	[illegible]	1013.5	26.7	13.5	20.1	2.8	32.8	28+	7.2	1	2	0	15.0	75	107	14	68	12	9	0	0	0.9	18	11.7	16	24	5	15	11	6.3	
MINNEAPOLIS	254	984.4	1014.3	28.0	18.0	23.0	1.9	33.9	27	12.8	2+	3	0	16.1	69	77	- 3	29	11	10	0	0	1.9	18	13.4	SW	6	9	9	13	5.8	[illegible]
ROCHESTER	395	969.2	1015.7	26.7	16.2	21.4	0.4	32.2	27+	9.4	2+	2	0	16.7	77	145	49	64	11	9	0	0	2.5	19	10.3	19	31+	10	10	11	5.5	
ST CLOUD	313	977.7		27.1	15.5	21.3	0.9	32.8	28+	7.8	1	3	0			108	14	45	11		0	0						9	13	9	5.4	

See footnotes at end of table.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
MISSISSIPPI	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
JACKSON	94	1005.4	1017.2	32.7	20.7	26.7	- 1.1	36.7	11	16.1	23	22	0	20.0	70	60	- 24	22	8	13	0	0	0.6	9	11.6	NW	14	14	13	4	4.3	58
MERIDIAN	88	1006.4	1017.4	32.2	20.2	26.2	- 1.1	34.4	28+	15.6	22	18	0	19.4	72	64	- 26	30	8	8	0	0	0.3	4	9.4	27	13	10	15	6	5.0	
MISSOURI																																
COLUMBIA REGIONAL	270	984.8	1016.6	31.0	18.3	24.7	0.2	36.7	25	13.9	2+	13	0	17.8	69	24	- 73	16	4	2	0	0	1.3	17	13.4	NW	13	14	10	7	4.2	85
KANSAS CITY	309	979.0	1014.9	30.7	19.4	25.1	- 0.4	36.1	25	14.4	1	12	0	17.8	66	41	- 56	20	6	5	0	0	2.1	19	11.2	SW	30	18	10	3	3.2	87
ST JOSEPH	247			31.3	18.9	25.1	- 0.2	35.0	26+	10.0	1	13	0												15.6	30	11	16	13	2	3.3	
ST LOUIS	163	997.0	1016.9	30.7	19.2	24.9	0.1	35.0	25+	14.4	22+	15	0	19.4	76	62	- 14	31	8	5	0	0	1.7	18	12.5	SE	29	11	17	3	4.5	73
SPRINGFIELD	386	972.2	1016.5	32.6	17.7	25.2	- 0.4	37.2	24	11.7	3+	21	0	17.8	68	25	- 59	17	4	4	0	0	1.7	18	13.4	NW	12	21	8	2	2.9	84
MONTANA																																
BILLINGS	1087	890.3	1011.3	30.6	14.2	22.4	0.2	36.7	16+	10.6	31+	12	0	7.2	43	31	8	13	9	6	0	0	1.0	26	17.9	NW	22	15	10	6	3.9	77
GLASGOW	696	930.6	1010.5	30.7	14.7	22.7	2.8	38.9	16+	8.9	25+	14	0	7.8	44	31	- 7	14	10	7	0	0	0.4	6	14.3	15	16	10	15	6	4.7	
GREAT FALLS	1116	887.6	1011.7	30.0	13.5	21.8	2.4	37.8	15	4.4	19	13	0	4.4	38	22	- 10	12	9	2	0	0	2.0	25	16.1	NW	13	11	9	11	5.2	77
HAVRE	788	920.8		31.1	11.8	21.4	2.0	39.4	1	6.1	7	16	0			17	- 11	6	6	9	0	0			23.2	NW	13	13	10	8	4.4	86
HELENA	1167	880.1	1012.9	28.6	10.0	19.3	0.3	35.6	1	2.8	28	7	0	3.3	39	14	- 8	5	7	8	0	0	1.4	28	14.3	W	27+	11	9	11	5.2	73
KALISPELL	904	909.9	1012.7	29.7	7.7	18.7	1.4	36.1	4+	0.6	25+	13	0	3.9	42	14	- 13	7	6	4	0	0	1.1	21	11.6	15	23	15	10	6	4.4	
MILES CITY	801	919.4	1010.1	31.7	15.8	23.8	1.2	39.4	17	9.4	9	14	0	10.0	46	44	12		5	6	0	0	0.5	35								
MISSOULA	972	903.5	1013.4	29.6	9.7	19.7	1.4	37.2	1	4.4	28+	12	0	5.6	45	8	- 10	4	5	6	0	0	1.0	29	20.1	SW	13	15	8	8	4.3	83
NEBRASKA																																
GRAND ISLAND	561	948.5	1013.1	32.1	18.7	25.4	1.3	37.8	26	13.3	14	17	0	16.1	61	35	- 25	28	5	6	0	0	3.3	18	13.0	18	31+	18	12	1	3.2	
LINCOLN	360	972.2	1013.7	31.4	18.7	25.1	1.3	37.2	26	11.7	2	11	0	17.2	65	19	- 64	10	6	8	0	0	2.7	18	12.5	S	31	17	10	4	3.2	82
NORFOLK	471			31.8	18.8	25.3	1.3	38.3	26	12.2	1	15	0			33	- 33	23	3		0	0						14	16	1	3.6	
NORTH PLATTE	846	917.0	1012.7	31.2	15.1	23.2	- 0.4	34.4	26+	8.3	2	15	0	14.4	63	72	18	43	7	7	0	0	2.3	14	17.4	NE	1	17	11	3	3.5	81
OMAHA	298	979.3	1014.0	31.8	18.8	25.3	0.8	37.8	26	11.7	2	16	0	18.9	72	32	- 69	17	7	4	0	0	2.9	18	13.4	NE	16+	14	13	4	3.9	83
SCOTTSBLUFF	1206	879.4	1012.0	31.9	13.4	22.7	0.2	37.2	20	10.0	1	13	0	11.7	56	2	- 23	2	3	6	0	0	0.6	10	13.0	35	12	17	9	5	3.9	
VALENTINE	789			33.3	16.4	24.9	2.2	40.0	17	10.6	2	21	0			49	- 9	23	6		0	0			20.1	NW	7	18	8	5	3.6	82
NEVADA																																
ELKO	1539	844.9	1012.3	30.8	10.3	20.6	1.2	36.1	9	5.0	29+	14	0	0.0	29	7	0	4	3	3	0	0	1.4	25	13.0	29	31	18	8	5	3.2	
ELY	1906	810.7	1011.7	29.1	8.8	18.9	0.0	32.8	16	1.1	28	7	0	- 1.7	30	52	40	23	7	12	0	0	3.4	21	16.5	S	23	14	10	7	4.2	83
LAS VEGAS	659	935.3	1009.6	38.8	22.9	30.9	0.2	42.2	19+	15.6	29	31	0	4.4	22	2	- 10	1	3	5	0	0	2.1	20	16.1	SW	21	21	8	2	2.5	
RENO	1342	866.2	1013.3	31.7	7.6	19.7	1.1	36.7	14+	0.0	23	19	1	3.3	39	12	8	11	3	3	0	0	1.3	27	17.0	W	2	21	8	2	2.4	97
WINNEMUCCA	1311	868.9	1013.1	33.1	8.8	20.9	1.2	38.3	13+	2.2	24+	24	0	0.6	30	1	- 3	1	1	1	0	0	1.2	27	13.4	SE	2	18	8	5	3.3	81
NEW HAMPSHIRE																																
CONCORD	104	1004.1	1016.4	28.9	15.8	22.4	2.7	35.0	30+	6.7	23	7	0	17.2	75	175	100	94	11	4	0	0	0.4	25	8.9	S	3	7	15	9	5.9	66
MT WASHINGTON OBS	1909			13.3	8.0	10.7	1.9	18.3	10	0.0	23	0	1			131	- 38	40	11	4	0	0			45.6Y	W	28	2	6	23	8.5	28
NEW JERSEY																																
ATLANTIC CITY	20	1014.6	1017.2	29.7	19.1	24.4	1.2	36.1	28	11.7	24	9	0	17.8	71	52	- 72	15	7	1	0	0	0.7	21	9.8	20	10	9	11	11	5.5	60
ATLANTIC CITY J	3			27.1	20.8	23.9	0.8	35.6	28	13.9	24	3	0			27	-104	13	8						12.5	E	21+					
NEWARK	2	1015.6	1016.7	30.6	22.3	26.4	2.9	37.8	28	15.6	23	12	0	18.9	66	85	- 27	63	6	3	0	0	0.9	23	13.0	31	31	6	10	15	6.4	
TRENTON U	17			29.7	20.4	25.1	1.8	36.7	31+	13.3	23	10	0			53	- 69	24	5		0	0			12.5	N	31	9	10	12	5.8	51
NEW MEXICO																																
ALBUQUERQUE	1619	840.5	1012.3	33.4	17.6	25.6	1.0	36.1	23+	13.3	31	24	0	8.9	40	30	- 4	9	10	12	0	0	0.5	16	19.7	E	13	17	11	3	3.5	80
CLAYTON	1515			31.4	14.7	23.1	0.1	35.0	24	7.8	2	12	0			33	- 20	13	6		0	0						24	6	1	2.4	
ROSWELL	1112	890.6	1012.0	33.4	17.3	25.3	- 1.1	37.8	24	14.4	27+	25	0	11.7	45	32	- 5	22	2	5	0	0	2.3	18	17.4	NW	6	15	12	4	3.5	84
NEW YORK																																
ALBANY	84			29.2	16.3	22.7	1.6	33.9	30	7.8	23	6	0			73	- 5	41	8	4	0	0			8.0	W	31+	6	13	12	6.3	58
BINGHAMTON	485	960.0	1018.2	25.7	16.2	20.9	1.8	31.7	9	6.1	23	0	0	16.7	80	61	- 30	20	11	7	0	0	1.2	24	13.0	W	31	5	11	15	6.8	44
BUFFALO	215	991.9	1017.2	26.6	17.6	22.1	1.9	30.6	30+	9.4	23	0	0	16.7	74	76	- 2	33	10	7	0	0	2.1	23	15.2	SW	31	7	12	12	6.4	68
NEW YORK U	40	1013.9	1017.1	29.7	21.0	25.3	1.4	36.7	30+	15.0	23	6	0	17.8	68	78	- 35	63	8	1	0	0	0.6	26	12.1	NW	31					58
NEW YORK KENNEDY	4	1016.3	1016.9	28.3	19.7	24.1	0.4	36.7	28	15.0	23	4	0	18.3	76	21	-105	6	5	1	0	0	1.4	20	14.3	32	31	7	15	9	5.8	
NEW YORK LA GUARDIA	3	1015.9	1017.1	28.9	21.7	25.3	1.2	36.1	28	15.6	23	7	0	18.3	69	59	- 70	23	9	4	0	0	0.5	21	14.8	NW	31	9	12	10	5.7	
ROCHESTER	167	997.0	1017.0	28.8	16.7	22.8	1.8	35.0	9	7.2	23	8	0	16.7	73	49	- 20	32	8	3	0	0	1.9	25	15.6	W	27	5	14	12	6.1	70
SYRACUSE	125	1001.7	1016.5	28.3	17.7	23.1	1.8	35.0	9	7.8	23	5	0	18.9	79	75	- 7	30	9	4	0	0	1.1	24	9.4	NW	28	5	12	14	6.5	59

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation ground	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No of days: Max 32.2 °C or above	No of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb.	C.	C	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
ASHEVILLE	652	944.1	1018.9	29.4	17.5	23.4	1.5	33.3	9	12.8	24	4	0	18.9	81	116	-9	80	11	9	0	0	0.4	36	17.9	34	20	4	15	12	6.5	46
CAPE HATTERAS R	2	1017.3	1017.6	29.2	22.8	26.0	0.7	32.8	30	18.9	20	1	0	22.8	85	77	-86	27	12	7	0	0	1.6	28	11.2	23	3	6	10	15	6.9	60
CHARLOTTE	224	990.9	1017.7	29.9	19.8	24.9	-1.1	34.4	29	16.1	21	7	0	20.0	79	59	-49	18	10	7	0	0	0.3	31	13.4	SW	11	8	10	13	6.2	74
GREENSBORO	273	986.8	1018.1	29.7	19.1	24.4	-0.1	34.4	29	13.9	23	8	0	20.0	81	69	-48	34	9	3	0	0	0.0	15	10.3	W	14	11	10	10	5.4	57
RALEIGH	132	1002.0	1017.5	30.1	19.4	24.8	-0.2	34.4	29	15.6	21	6	0	21.1	86	117	-15	49	9	7	0	0	0.2	18	10.3	35	12	8	11	12	5.9	60
WILMINGTON	9	1016.3	1017.5	31.8	21.6	26.7	0.4	35.6	14	17.8	22	13	0	21.7	80	163	-11	43	16	12	0	0	0.6	20	12.1	SW	3	5	13	13	6.5	60
NORTH DAKOTA																																
BISMARCK	502	952.3	1010.9	31.6	12.9	22.2	1.5	41.7	27	6.1	29	14	0	12.2	59	8	-36	2	8	9	0	0	0.9	12	14.3	NW	18	13	11	7	4.8	70
FARGO	273	980.0	1012.1	28.1	16.1	22.1	1.2	35.6	27	8.3	20	7	0	16.1	72	98	23	42	10	8	0	0	2.0	14	23.2	W	6	10	13	8	5.5	65
WILLISTON	579	943.8	1010.6	31.1	14.3	22.7	2.6	37.8	16	8.3	29+	13	0	10.6	52	16	-21	9	7	7	0	0	0.0	15	14.3	NW	31	15	7	9	4.6	71
OHIO																																
AKRON	368	973.9	1017.9	28.1	16.9	22.5	0.6	34.4	28	7.2	23	3	0	17.2	76	51	-28	17	9	6	0	0	0.9	26	9.4	21	9	10	12	9	5.5	
CINCINNATI ABBE OB	232			29.7	18.4	24.1	-0.2	34.4	28	11.1	23	7	0			29	-54	9	8		0	0			7.6	SE	30					66
CLEVELAND	237	988.8	1017.6	27.9	17.9	22.9	1.6	33.9	27	9.4	23	5	0	17.8	76	79	-4	39	8	6	0	0	0.9	25	11.6	S	9	9	14	8	5.0	59
COLUMBUS	247	988.5	1017.9	28.8	18.1	23.4	0.6	34.4	28	11.1	22	6	0	17.2	72	126	54	55	11	9	0	0	0.3	27	18.8	SW	30	8	16	7	5.5	43
DAYTON	305	982.4	1017.8	29.2	18.1	23.6	0.4	35.0	28	10.6	22	8	0	18.3	75	100	27	32	11	8	0	0	0.8	23	15.2	SW	9	14	8	9	5.3	63
MANSFIELD	395			28.2	18.0	23.1	0.2	33.3	28	9.4	23	4	0	18.3	77	102	20	44	9	5	0	0	1.4	24	14.3	33	11	8	16	7	5.4	
TOLEDO	204	992.6	1017.2	28.3	15.3	21.8	0.2	35.6	28+	6.1	23	7	0	16.7	76	30	-55	13	7	5	0	0	1.3	26	14.8	W	9	10	15	6	4.9	62
YOUNGSTOWN	359	975.6	1017.8	26.9	16.4	21.7	0.6	33.9	28	6.1	23	2	0	17.2	79	72	-17	27	9	6	0	0	0.6	25	9.4	27	30	7	15	9	5.8	
OKLAHOMA																																
OKLAHOMA CITY	392	969.5	1015.0	33.0	20.0	26.5	-1.7	37.8	24	14.4	4	24	0	18.3	66	35	-29	16	4	5	0	0	3.2	17	19.7	NW	15	23	7	1	2.4	81
TULSA	198	991.9	1015.6	32.2	20.3	26.3	-1.3	36.1	24	14.4	3+	19	0	19.4	69	119	42	71	5	4	0	0	3.0	17	15.2	SE	15	21	9	1	2.7	86
OREGON																																
ASTORIA	2	1018.3	1019.0	18.6	9.8	14.2	-1.9	21.1	11+	3.9	19	0	0	8.9	75	12	-26	9	5	0	0	0	1.8	28	9.4	30	2	6	7	18	7.1	
BURNS	1265			28.4	9.6	19.0	-0.6	33.9	2	3.3	26	8	0			8	1	7	2		0	0						20	6	5	3.1	
EUGENE	109	1003.4	1016.8	26.3	9.2	17.8	-1.1	31.7	1	3.9	22	0	0	10.0	67	20	10	18	3	0	0	0	1.4	33	7.6	17	24+	10	13	8	5.1	
MEACHAM	1234	877.4	1013.8	23.6	10.0	16.8	0.3	31.1	12	3.3	18	0	0			6	-8	4	3		0	0			7.6	31	5	22	7	2	2.1	
MEDFORD	396	967.8	1014.9	32.8	11.7	22.2	0.7	39.4	14	7.2	25+	18	0	6.7	42	1	-4	1	1	0	0	0	1.5	33	8.9	1	22	24	6	1	1.7	
PENDLETON	452	961.7	1013.5	30.4	13.7	22.1	-0.1	38.3	12	7.2	18	10	0	2.2	30	2	-5	2	1	1	0	0	2.4	27	13.9	26	5	24	5	2	2.3	
PORTLAND	6	1015.9	1017.3	25.3	12.4	18.8	-0.4	34.4	12	7.2	18	1	0	10.0	63	36	19	27	4	1	0	0	2.6	33	11.2	N	12	11	11	9	5.1	62
SALEM	60	1009.8	1017.1	26.0	9.1	17.6	-1.4	32.8	12	3.9	22	2	0	8.9	61	20	9	18	3	1	0	0	1.5	34	9.4	19	24	14	12	5	4.3	
SEXTON SUMMIT R	1169	885.2	1015.2	23.1	9.8	16.4	-0.9	29.4	14+	3.9	22	0	0			3	-4	3	1		0	0	4.5	36	14.3	36	2	24	4	3	1.6	
PACIFIC AREA																																
GUAM TAGUAC R	110			30.1	22.7	26.4	0.1	31.1	8+	21.1	31+	0	0			169	-157	43	25		0	0			8.9	E	20+					43
JOHNSTON	2	1013.5	1014.0	28.7	25.1	26.9	-0.6	29.4	14+	22.8	6	0	0	22.2	75	17	-41	6	12	0	0	0	6.8	9	13.4	E	27+	1	15	15	7.1	68
KOROR R	29			31.6	24.5	28.1	0.8	32.8	31+	23.3	27+	14	0			288	-112	69	24	3	0	0			7.6	NW	22+	0	6	25	8.5	64
KWAJALEIN	2	1009.1	1009.7	30.2	25.2	27.7	0.0	31.1	31+	23.9	19+	0	0	24.4	81	191	-53	25	26	1	0	0	5.2	8	13.9	9	9	2	6	23	8.5	
MAJURO	3			29.4	24.8	27.1	0.3	30.6	4	23.3	30+	0	0			352	55	82	24		0	0			13.9	E	9	0	7	24	8.5	71
PAGO PAGO	4	1012.5	1012.8	28.9	23.7	26.3		30.6	26+	19.4	12	0	0	22.8	81	218		113	23	3	0	0	4.2	10	14.3	NE	26	2	16	13	6.7	69
PONAPE R	37			31.0	23.3	27.2	0.8	32.8	3+	22.2	28+	10	0			453	39	83	28	2	0	0			14.3	NE	4	0	5	26	8.8	50
TRUK MOEN ISLAND	2			30.9	24.4	27.7	0.8	32.8	14	22.8	30+	2	0			335	9	81	26	0	0	0			11.6	E	7	0	2	29	9.6	51
WAKE	3	1013.2	1013.5	30.7	23.7	27.2	-0.8	32.2	29+	21.1	5	4	0	22.2	78	188	9	39	27	2	0	0	5.1	8	13.0	E	21	3	11	17	7.5	40
YAP R	13			30.9	23.6	27.2	-0.2	32.2	20+	21.7	26	2	0			130	-243	25	19	1	0	0			11.6	SE	4	0	9	22	8.5	64
PENNSYLVANIA																																
ALLENTOWN	118	1003.4	1017.2	29.4	18.7	24.1	1.8	36.1	28	10.0	23	7	0	18.3	75	60	-54	39	8	6	0	0	0.7	24	14.3	34	31	14	5	12	5.4	
ERIE	223	993.9	1017.4	25.2	16.6	20.9	1.2	31.7	8	8.3	23	0	0	17.2	82	101	25	30	10	6	0	0	1.3	23	14.3	25	30	12	8	11	5.5	
HARRISBURG	103	1004.7	1017.3	29.6	19.4	24.5	1.1	37.8	28	11.1	23	8	0	18.3	71	56	-37	21	10	3	0	0	0.2	23	13.4	W	10	11	8	12	5.6	56
PHILADELPHIA	2	1015.9	1016.9	30.8	21.2	26.0	2.9	37.2	28	13.9	23	12	0	20.0	73	52	-66	15	8	4	0	0	0.8	23	13.0	NW	31	13	7	11	5.3	57
PITTSBURGH	347	974.6	1017.9	28.2	17.6	22.9	1.3	33.3	28	8.3	23	7	0	17.2	73	86	2	42	9	5	0	0	1.2	27	10.3	36	13+	9	12	10	5.9	54
SCRANTON	283	983.7	1017.5	27.1	16.9	22.0	0.9	33.9	28	6.7	23	5	0	16.1	73	66	-25	40	9	4	0	0	0.6	18	13.4	NW	31	12	7	12	5.5	65
WILLIAMSPORT	160	998.6	1017.6	27.1	16.3	21.7	-0.3	36.1	28	7.2	23	5	0	18.3	84	50	-42	12	11	2	0	0	0.4	27	13.0	22	31	5	14	12	6.4	
RHODE ISLAND																																
BLOCK ISLAND	34			25.6	18.8	22.2	1.3	32.8	31	13.3	21	1	0			97	-1	93	6		0	0										
PROVIDENCE	16	1014.2	1016.6	28.8	18.9	23.9	2.5	34.4	31+	12.8	23	7	0	18.3	75	131	31	107	5	2	0	0	0.6	26	8.0	33	31	7	9	15	6.3	60

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
SOUTH CAROLINA	M.	Mb	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CHARLESTON	12	1015.9	1017.6	31.8	22.7	27.2	0.7	34.4	13	18.9	21	16	0	21.7	77	169	1	73	12	12	0	0	0.4	16	19.7Y	SE	6	5	14	12	6.5	61
CHARLESTON I	3			30.2	23.2	26.7	- 0.5	33.9	13	18.9	22	6	0			202	48	58	15		0	0			13.9	N	21					
COLUMBIA	65	1009.8	1017.7	32.4	21.5	27.0	0.1	35.6	11	17.2	21	18	0	21.7	79	176	30	69	14	10	0	0	0.2	22	11.2	33	20	6	11	14	6.5	57
GRNVLLE-SPRTNBRG	292	983.7	1017.7	30.3	19.6	24.9	- 0.7	33.9	30+	16.1	22	7	0	18.9	74	52	- 63	36	9	3	0	0	0.1	33	15.2	N	20	7	14	10	5.8	49
SOUTH DAKOTA																																
ABERDEEN	395	965.1	1011.0	32.4	15.9	24.2	2.3	41.1	27	8.9	1	16	0	15.0	62	30	- 25	12	7	9	0	0	1.5	13	13.0	30	14	10	13	8	4.8	
HURON	390	965.5	1010.9	31.6	16.7	24.2	1.5	39.4	26	10.0	10	13	0	15.6	63	41	- 12	20	7	9	0	0	2.2	16	15.2	W	6	13	11	7	4.4	69
RAPID CITY	964	903.5	1011.5	32.0	14.9	23.5	1.3	40.0	20	11.1	1	13	0	9.4	47	19	- 12	10	7	9	0	0	0.8	35	17.0	NW	18	17	7	7	4.1	65
SIOUX FALLS	432	963.1	1013.4	32.1	17.6	24.8	2.7	42.2	26	9.4	1	16	0	16.1	63	27	- 65	13	10	12	0	0	2.4	17	11.2	17	31+	15	8	8	4.5	
TENNESSEE																																
BRISTOL	459	965.1	1018.2	28.4	17.5	23.0	- 0.8	34.4	29	12.8	23	3	0	18.9	84	66	- 30	58	10	5	0	0	0.2	36	8.9	19	10	9	11	11	5.7	
CHATTANOOGA	203	993.2	1017.5	31.2	19.5	25.3	- 1.2	35.0	30	15.6	4	10	0	19.4	74	66	- 30	24	9	7	0	0	0.3	35	9.8	NW	20	13	12	6	4.7	67
KNOXVILLE	299	983.1	1017.5	29.6	19.5	24.6	- 0.7	33.9	28	14.4	23	5	0	19.4	77	59	- 29	37	7	6	0	0	0.7	36	13.4	NE	20	6	16	9	5.5	79
MEMPHIS	79	1007.1	1017.1	31.5	21.3	26.4	- 0.5	34.4	28	17.8	23+	15	0	20.6	71	124	49	69	6	7	0	0	0.6	15	11.2	33	13	21	7	3	3.5	80
NASHVILLE	180	995.9	1017.3	31.6	19.6	25.6	- 0.6	35.6	29	13.9	23	14	0	19.4	74	45	- 27	24	4	5	0	0	0.2	21	11.2	NW	13	19	8	4	3.6	73
OAK RIDGE R	276			29.4	18.7	24.1	- 0.4	33.3	30	14.4	23	5	0			57	- 60	46	6		0	0			12.1Y		20	7	14	10	5.8	
TEXAS																																
ABILENE	544	952.9	1014.2	34.9	21.2	28.1	- 0.3	39.4	23	15.6	2	27	0	16.7	55	8	- 30	4	3	4	0	0	3.8	17	19.2	NE	15	14	14	3	4.0	80
AMARILLO	1098	892.7	1012.5	33.8	18.2	26.0	- 0.4	39.4	24	15.6	3+	26	0	13.9	51	59	- 7	23	5	5	0	0	4.5	19	19.2	W	7	23	7	1	2.4	89
AUSTIN	182	993.9	1015.6	33.9	22.2	28.1	- 1.2	37.2	23+	18.9	15	30	0	20.0	68	2	- 48	1	3	3	0	0	1.7	16	15.2	SE	14	11	15	5	4.5	59
BROWNSVILLE	6	1014.2	1014.8	32.1	22.9	27.5	- 1.4	36.7	1	21.1	24+	17	0	22.8	81	71	1	33	12	11	0	0	1.7	12	8.5	SE	26	5	12	14	6.6	69
CORPUS CHRISTI	12	1013.9	1015.3	32.6	23.8	28.2	- 0.8	36.7	1	22.2	23+	20	0	23.3	80	143	73	42	13	10	0	0	2.7	11	13.9	S	12	8	10	13	6.0	65
DALLAS	147			33.8	22.8	28.3	- 1.1	38.3	14	19.4	3	26	0	19.4	60	36	- 13	21	3	2			3.0	16	10.3	16	28	17	13	1	3.0	
DEL RIO	313	978.7	1013.9	35.5	21.9	28.7	- 1.2	38.9	23	19.4	4	31	0	18.3	59	27	- 11	22	4	2	0	0	3.9	12	11.2	12	12	11	13	7	4.7	
EL PASO	1194	883.2	1011.9	35.3	17.1	26.2	- 0.7	38.3	25+	13.3	26+	28	0	11.1	44	19	- 12	8	5	4	0	0	1.0	13	15.2	E	2	22	7	2	2.8	85
FORT WORTH	164	995.6	1015.8	34.1	22.4	28.3	- 1.4	37.2	23+	17.8	2	26	0	20.6	66	T	- 42	T	1	2	0	0	2.4	16	8.9	19	8	20	10	1	2.9	
GALVESTON U	2			30.3	25.2	27.8	- 0.7	32.2	22+	21.7	29	3	0			260	149	102	13		0	0			10.7	S	29+					56
HOUSTON INTERCON	29	1012.5	1016.4	31.9	20.9	26.4	- 1.7	33.9	23+	17.8	23	15	0	22.8	87	95	- 7	31	14	15	0	0	1.2	8	14.3	18	10	10	9	12	5.6	59
LUBBOCK	992	905.2	1013.7	32.3	18.4	25.4	- 0.6	38.3	24	15.6	27+	18	0	13.3	51	9	- 34	4	5	8	0	0	2.8	16	13.4	24	7	23	6	2	2.4	92
MIDLAND	869	917.0	1013.3	33.4	18.7	26.1	- 1.8	37.8	24+	15.6	25	22	0	12.2	46	6	- 31	3	4	3	0	0	3.8	16	10.3	32	9	18	9	4	3.7	
PORT ARTHUR	5	1015.9		31.3	21.6	26.4	- 1.5	34.4	21	18.3	23	12	0	22.8	84	182	42	86	13	12	0	0	1.0	9	12.1	E	26	6	12	13	5.7	50
SAN ANGELO	580	949.2	1014.1	35.7	20.4	28.1	- 1.4	40.6	23	15.6	4	30	0	15.6	52	9	- 23	9	2	2	0	0	3.0	18	15.6	11	11	16	10	5	3.8	
SAN ANTONIO	240	988.2	1015.6	33.1	22.6	27.8	- 0.9	36.1	23	18.3	3	27	0	20.6	69	33	- 27	32	6	4	0	0	2.0	13	13.4	SE	10	9	18	4	4.6	71
VICTORIA	32	1011.5	1015.4	33.2	23.2	28.2	- 0.3	35.0	22+	21.7	26+	26	0	22.8	79	65	- 15	43	15	12	0	0	1.5	11	13.9Y	S	1	7	8	16	6.6	
WACO	153	998.0	1015.4	35.5	22.7	29.1	- 0.6	38.3	23	17.8	5	31	0	18.9	59	9	- 34	8	3	2	0	0	3.2	16	11.2	12	9	16	14	1	3.4	
WICHITA FALLS	303	979.0	1014.6	36.0	20.8	28.4	- 1.4	41.7	23	16.7	4	29	0	18.9	60	1	- 44	1	2	5	0	0	3.7	15	15.6	36	10	21	9	1	2.3	
UTAH																																
MILFORD	1533	846.9		32.4	12.3	22.3	0.0	36.7	2	2.8	28	17	0			17	- 2	9	5		0	0			15.2	SW	31+	16	11	4	3.8	76
SALT LAKE CITY	1286	871.0	1011.4	33.0	16.5	24.8	1.2	37.8	13	10.6	28	22	0	6.7	36	29	7	11	7	9	0	0	2.2	15	15.2	SE	20	20	6	5	3.0	86
WENDOVER	1291	870.0	1011.7	32.0	16.6	25.3	0.2	37.2	13	11.7	31	18	0	2.2	26	11	2	5	4		0	0										
VERMONT																																
BURLINGTON	101	1003.7	1016.0	27.4	17.1	22.3	3.0	32.8	30	7.2	23	1	0	17.8	79	137	52	46	11	8	0	0	1.3	18	15.2	E	18	3	14	14	6.7	45
VIRGINIA																																
LYNCHBURG	279	984.8	*	29.4	18.8	24.1	0.3	35.6	29	15.0	21	7	0			113	1	69	10		0	0			13.0	NE	21	11	10	10	5.0	62
NORFOLK	7	1016.3	1017.4	30.0	21.6	25.8	0.6	34.4	28+	17.8	26	9	0	20.6	76	201	50	54	13	9	0	0	0.4	15	13.0	30	12	12	10	9	5.0	63
RICHMOND	50	1010.8	1017.3	30.9	19.7	25.3	0.8	35.6	12	15.6	24+	11	0	20.6	81	110	- 30	46	8	4	0	0	0.4	18	10.3	NW	14+	11	9	11	5.4	72
ROANOKE	350	977.0	1018.1	29.8	19.0	24.4	0.3	35.6	29	15.0	24	10	0	19.4	77	85	- 33	43	11	3	0	0	0.2	27	8.0	36	21	9	12	10	5.5	
WALLOPS ISLAND	3			28.3	20.7	24.5		35.0	30	17.2	23	4	0			220		110	10		0	0			15.2Y	SSE	11					
WASHINGTON																																
OLYMPIA	59	1010.5	1017.7	22.9	7.6	15.3	- 2.2	30.6	12	0.6	18	0	0	9.4	72	15	- 8	13	2	2	0	0	1.2	22	9.4	34	13+	8	12	11	5.8	
QUILLAYUTE	55	1011.2	1018.6	17.9	8.1	13.0	- 2.4	22.8	12	2.2	18	0	0	10.0	83	26	- 27	15	9	0	0	0	1.3	26	7.6	NW	26	4	10	17	7.1	40
SEATTLE	6			21.3	12.3	16.8	- 1.7	28.3	12	8.9	21+	0	0			14	- 5	7	4		0	0			8.9Y	NW	18					
SEATTLE-TACOMA	122	1001.4	1017.5	21.5	11.3	16.4	- 1.4	29.4	12	7.8	21	0	0	11.1	76	7	- 17	4	4	2	0	0	0.8	24	7.6	SW	16	9	11	11	5.6	65
SPOKANE	718	929.9	1012.2	28.6	12.6	20.6	0.6	35.6	3	6.1	25+	10	0	2.8	34	5	- 6	4	2	0	0	0	3.0	22	12.5	SW	16	18	11	2	2.9	85

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb	C.	C	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WASHINGTON																																
STAMPEDE PASS R	1206	880.8		16.2	6.5	11.4	- 1.7	28.3	12	1.1	31	0	0			22	- 30	6	13		0	0						14	9	8	4.7	
WALLA WALLA	289			30.1	16.3	23.2	0.0	38.9	12	10.6	31+	12	0			4	- 4	2	4		0	0			11.2	SE	31	24	5	2	2.2	84
YAKIMA	321	975.3	1013.0	31.1	10.3	20.7	0.4	38.3	12	3.9	19	14	0	5.0	39	T	- 5	T	1	0	0	0	2.0	31	13.9	32	16	23	6	2	2.5	
WEST INDIES																																
SAN JUAN P.R.	4	1013.5	1016.0	31.6	25.2	28.4	1.3	33.3	22+	23.3	16+	8	0	22.2	72	178	- 3	54	22	7	0	0	4.1	9	15.2	SE	14	3	22	6	6.0	58
WEST VIRGINIA																																
BECKLEY	763	931.9	1018.2	25.8	16.2	21.1	0.1	31.1	31+	9.4	23	0	0	17.2	82	71	- 44	22	13	5	0	0	0.6	21	11.2	26	20	4	11	16	6.9	
CHARLESTON	286	984.4	1018.0	28.9	18.3	23.7	0.4	34.4	30	11.7	22	6	0	18.9	81	53	- 48	16	8	4	0	0	0.4	21	10.7	31	20	6	11	14	6.4	
ELKINS	594	949.2		26.1	14.4	20.3	- 0.2	31.7	29	10.0	23+	0	0			88	- 19	21	12		0	0						1	15	15	7.4	
HUNTINGTON	252	987.8	1017.5	29.8	18.9	24.4	1.1	35.6	30	11.1	23	10	0	19.4	79	43	- 29	20	8	3	0	0	0.5	22	7.2	23	10+	7	10	14	6.5	
PARKERSBURG U	187			29.2	18.4	23.8	0.3	35.0	30+	10.6	23	7	0			53	- 43	31	7		0	0			10.7	W	20					55
WISCONSIN																																
GREEN BAY	208	990.5	1015.9	27.9	16.2	22.1	1.6	35.6	27	10.0	21	5	0	17.2	76	65	- 5	23	12	7	0	0	1.5	22	13.4	S	30+	6	12	13	6.1	65
LA CROSSE	198	991.9	1016.2	27.8	16.9	22.3	0.3	35.0	27	10.0	2	4	0	17.8	80	219	127		12	10	0	0	1.2	16								
MADISON	262	985.1	1016.2	27.7	15.2	21.4	0.6	34.4	27	8.3	22+	6	0	16.1	75	64	- 21	27	8	4	0	0	1.5	20	11.2	SW	7	12	8	11	5.4	63
MILWAUKEE	205	991.5	1016.3	27.4	17.6	22.5	2.6	37.2	27	12.2	3	7	0	16.7	74	24	- 54	11	7	2	0	0	1.8	21	13.0	SW	8	10	13	8	5.1	64
WYOMING																																
CASPER	1627	838.8	1012.1	31.1	11.8	21.5	0.3	36.1	20	6.7	29	10	0	6.7	44	9	- 10	5	4	5	0	0	2.7	24	16.1	27	6	15	15	1	3.5	
CHEYENNE	1867	815.4	1014.0	27.6	12.8	20.2	0.4	31.7	16	8.3	29	0	0	6.1	45	7	- 30	5	3	8	0	0	1.8	27	15.2	NW	24	10	14	7	4.7	69
LANDER	1696	830.3	1012.3	29.8	12.3	21.1	0.6	34.4	19	7.2	28	5	0	4.4	37	8	- 4	4	5	7	0	0	1.5	25	17.9	NW	3	13	15	3	3.8	84
SHERIDAN	1208	878.4		30.3	12.0	21.2	0.3	35.6	20+	8.3	28+	13	0	7.2	45	12	- 11	5	7	8	0	0	0.8	28	26.4	NW	18	13	12	6	4.2	72

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
⊙ Station pressures apply to elevations shown in the "Elevations" table of the annual issue of this publication

Conversion formulae to English Units are as follows:

1 foot = 0.3048 meters
$F. = \frac{9}{5} \times C. + 32$

1 inch = 25.4 millimeters
1 mile per hour = 0.447 meters per second.

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	0	0	0
HUNTSVILLE	0	0	0
MOBILE	0	0	0
MONTGOMERY	0	0	0
ALASKA			
ANCHORAGE	342	558	502
ANNETTE	289	603	442
BARTER ISLAND	781	1522	1584
BETHEL	425	780	713
BETTLES	453	708	637
BIG DELTA	391	554	503
COLD BAY	459	996	887
FAIRBANKS	302	413	452
HOMER	416	801	785
JUNEAU	404	747	620
KING SALMON	318	602	673
KODIAK	412	859	651
KOTZEBUE	500	983	818
MC GRATH	409	627	576
NOME	604	1202	952
ST. PAUL ISLAND	586	1220	1141
SUMMIT	571	990	911
TALKEETNA	394	623	542
YAKUTAT	430	824	735
ARIZONA			
FLAGSTAFF	45	84	145
PHOENIX	0	0	0
TUCSON	0	[illegible]	0
WINSLOW	0	0	0
YUMA	0	0	0
ARKANSAS			
FORT SMITH	0	0	0
LITTLE ROCK	0	0	0
CALIFORNIA			
BAKERSFIELD	0	0	0
BISHOP	6	6	5
BLUE CANYON	61	74	85
EUREKA U	308	595	518
FRESNO	0	0	0
LONG BEACH	0	[illegible]	0
LOS ANGELES			
LOS ANGELES U	0	[illegible]	30
MT SHASTA R	56	70	101
OAKLAND	117	173	154
RED BLUFF	0	0	0
SACRAMENTO	0	0	0
SANDBERG R	33	37	17
SAN DIEGO	0	0	6
SAN FRANCISCO	129	229	177
SAN FRANCISCO U	239	438	379
SANTA MARIA	86	181	214
STOCKTON	0	0	0
COLORADO			
ALAMOSA	91	165	151
COLORADO SPRINGS	1	33	22
DENVER	0	8	0
GRAND JUNCTION	0	0	0
PUEBLO	0	2	0
CONNECTICUT			
BRIDGEPORT	0	0	0
HARTFORD	0	0	12
DELAWARE			
WILMINGTON	0	0	0
DIST.OF COLUMBIA			
WASHINGTON DULLES	0	0	0
WASHINGTON NATIONAL	0	0	0
FLORIDA			
APALACHICOLA U	0	0	0
DAYTONA BEACH	0	0	0
FORT MYERS	0	0	0
JACKSONVILLE	0	0	0
KEY WEST	0	0	0
LAKELAND U	0	0	0
MIAMI	0	0	0
ORLANDO	0	0	0
PENSACOLA	0	0	0
TALLAHASSEE	0	0	0
TAMPA	0	0	0
WEST PALM BEACH	0	[illegible]	0
GEORGIA			
ATHENS	0	0	0
ATLANTA	0	0	0
AUGUSTA	0	0	0
COLUMBUS	0	0	0
MACON	0	0	0
ROME	0	0	0
SAVANNAH	0	0	0
IDAHO			
BOISE	13	17	12
LEWISTON	[illegible]	7	17
POCATELLO	18	30	20
ILLINOIS			
CAIRO U	0	0	0
CHICAGO O HARE	0	0	25
CHICAGO MIDWAY	1	1	8
MOLINE	[illegible]	0	11
PEORIA	0	0	8
ROCKFORD	3	3	22
SPRINGFIELD	0	0	8
INDIANA			
EVANSVILLE	0	0	0
FORT WAYNE	7	7	12
INDIANAPOLIS	0	0	5
SOUTH BEND	4	4	30
IOWA			
BURLINGTON	0	0	8
DES MOINES	0	0	13
DUBUQUE	2	2	38
SIOUX CITY	0	0	10
WATERLOO	1	[illegible]	33
KANSAS			
CONCORDIA	0	[illegible]	5
DODGE CITY	0	0	0
GOODLAND	0	4	0
TOPEKA	0	0	0
WICHITA	0	0	0
KENTUCKY			
COVINGTON	1	1	0
LEXINGTON	1	1	0
LOUISVILLE	0	0	0
LOUISIANA			
ALEXANDRIA	0	0	0
BATON ROUGE	0	0	0
LAKE CHARLES	0	0	0
NEW ORLEANS	0	0	0
SHREVEPORT	0	0	0
MAINE			
CARIBOU	44	53	206
PORTLAND	[illegible]	[illegible]	82
MARYLAND			
BALTIMORE	0	0	0
MASSACHUSETTS			
BLUE HILL OBS R	10	14	20
BOSTON	2	2	8
WORCESTER	8	14	34
MICHIGAN			
ALPENA	35	77	185
DETROIT			
DETROIT METRO	18	18	21
FLINT	18	26	50
GRAND RAPIDS	7	[illegible]	35
HOUGHTON LAKE	25	51	153
LANSING	5	16	36
MARQUETTE U	37	96	139
MUSKEGON	8	11	52
SAULT STE MARIE	22	114	221
MINNESOTA			
DULUTH	66	138	171
INTERNATIONAL FALLS	20	46	178
MINNEAPOLIS	3	4	40
ROCHESTER	15	18	56
ST CLOUD	11	25	55
MISSISSIPPI			
JACKSON	0	0	0
MERIDIAN	[illegible]	0	0
MISSOURI			
COLUMBIA REGIONAL	0	0	0
KANSAS CITY	0	0	0
ST JOSEPH	0	0	5
ST LOUIS	0	0	0
SPRINGFIELD	0	0	[illegible]
MONTANA			
BILLINGS	3	7	25
GLASGOW	7	15	45
GREAT FALLS	27	33	60
HAVRE	22	30	68
HELENA	47	70	90
KALISPELL	72	119	198
MILES CITY	0	3	25
MISSOULA	47	65	110
NEBRASKA			
GRAND ISLAND	[illegible]	2	6
LINCOLN	0	1	0
NORFOLK	[illegible]	4	17
NORTH PLATTE	0	10	15
OMAHA	0	0	6
SCOTTSBLUFF	0	18	[illegible]
VALENTINE	0	7	18
NEVADA			
ELKO	19	24	87
ELY	42	60	85
LAS VEGAS	0	0	0
RENO	36	43	67
WINNEMUCCA	26	27	48
NEW HAMPSHIRE			
CONCORD	9	24	61
MT WASHINGTON OBS	422	867	1060
NEW JERSEY			
ATLANTIC CITY	0	0	0
ATLANTIC CITY U	0	0	0
NEWARK	0	0	0
TRENTON U	0	0	0
NEW MEXICO			
ALBUQUERQUE	0	0	0
CLAYTON	0	[illegible]	0
ROSWELL	0	0	0
NEW YORK			
ALBANY	3	5	31
BINGHAMTON	27	32	61
BUFFALO	14	16	45
NEW YORK U			
NEW YORK KENNEDY	0	0	0
NEW YORK LA GUARDIA	0	0	0
ROCHESTER	14	16	35
SYRACUSE	12	14	29
NORTH CAROLINA			
ASHEVILLE	0	0	0
CAPE HATTERAS R	0	0	0
CHARLOTTE	0	0	0
GREENSBORO	0	0	0
RALEIGH	0	0	0
WILMINGTON	0	0	0
NORTH DAKOTA			
BISMARCK	4	16	53
FARGO	3	35	46
WILLISTON	1	15	57
OHIO			
AKRON	12	14	25
CINCINNATI ABBE OB	0	0	0
CLEVELAND	9	12	26
COLUMBUS	[illegible]	3	8
DAYTON	2	2	7
MANSFIELD	8	9	10
TOLEDO	16	19	23
YOUNGSTOWN	17	25	31
OKLAHOMA			
OKLAHOMA CITY	0	0	0
TULSA	0	0	0
OREGON			
ASTORIA	225	389	314
BURNS U	62	81	98
EUGENE	77	106	92
MEACHAM	144	232	220
MEDFORD	12	12	32
PENDLETON	16	17	19
PORTLAND	47	53	104
SALEM	85	115	96
SEXTON SUMMIT R	151	258	212
PENNSYLVANIA			
ALLENTOWN	2	2	[illegible]
ERIE	18	27	67
HARRISBURG	1	1	0
PHILADELPHIA	0	0	0
PITTSBURGH	8	18	28
SCRANTON	11	13	25
WILLIAMSPORT	16	21	14
RHODE ISLAND			
BLOCK ISLAND	2	2	20
PROVIDENCE	3	5	10
SOUTH CAROLINA			
CHARLESTON			
CHARLESTON U	[illegible]	[illegible]	0
COLUMBIA	0	0	0
GRNVLLE-SPRTNBRG	0	0	0
SOUTH DAKOTA			
ABERDEEN	0	2	33
HURON	0	5	22
RAPID CITY	0	16	30
SIOUX FALLS	0	1	28
TENNESSEE			
BRISTOL	0	0	0
CHATTANOOGA	0	0	0
KNOXVILLE	0	0	0
MEMPHIS	0	0	0
NASHVILLE	0	0	0
OAK RIDGE R	0	0	0
TEXAS			
ABILENE	0	0	0
AMARILLO	0	[illegible]	0
AUSTIN	0	0	0
BROWNSVILLE	0	0	0
CORPUS CHRISTI	0	0	0
DALLAS	0	0	0
DEL RIO	0	0	0
EL PASO	0	0	0
FORT WORTH	0	0	0
GALVESTON U	0	0	0
HOUSTON INTERCON	0	0	0
LUBBOCK	0	0	0
MIDLAND	[illegible]	0	0
PORT ARTHUR	[illegible]	0	0
SAN ANGELO			
SAN ANTONIO	0	[illegible]	0
VICTORIA	0	0	[illegible]
WACO	0	0	0
WICHITA FALLS	[illegible]	0	0
UTAH			
MILFORD	8	8	7
SALT LAKE CITY	[illegible]	1	5
WENDOVER	0	2	0
VERMONT			
BURLINGTON	17	27	69
VIRGINIA			
LYNCHBURG	0	0	0
NORFOLK	0	0	0
RICHMOND	0	0	0
ROANOKE	[illegible]	0	0
WALLOPS ISLAND	0	0	-
WASHINGTON			
OLYMPIA	170	267	192
QUILLAYUTE	291	508	389
SEATTLE	100	142	113
SEATTLE-TACOMA	114	184	162
SPOKANE	47	64	68
STAMPEDE PASS R	390	655	577
WALLA WALLA U	9	9	17
YAKIMA	42	55	57
WEST VIRGINIA			
BECKLEY	13	18	28
CHARLESTON	1	1	0
ELKINS	12	24	56
HUNTINGTON	0	0	0
PARKERSBURG U	0	[illegible]	0
WISCONSIN			
GREEN BAY	11	15	76
LA CROSSE	7	8	27
MADISON	25	29	53
MILWAUKEE	5	15	51
WYOMING			
CASPER	0	36	30
CHEYENNE	4	84	53
LANDER	3	38	23
SHERIDAN	[illegible]	27	59

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

COOLING DEGREE DAYS

(Base 65°F.)

State and station	Current season: This month	Current season: Period January through this month	Normals January through this month
ALABAMA			
BIRMINGHAM	385	1354	
HUNTSVILLE	405	1333	
MOBILE	518	2106	
MONTGOMERY	499	1818	
ALASKA			
ANCHORAGE	0	0	
ANNETTE	0	0	
BARROW	0	0	
BARTER ISLAND	0	0	
BETHEL	0	0	
BETTLES	0	9	
BIG DELTA	0	14	
COLD BAY	0	0	
FAIRBANKS	2	39	
HOMER	0	0	
JUNEAU	0	0	
KING SALMON	3	3	
KODIAK	0	0	
KOTZEBUE	0	0	
MC GRATH	2	4	
NOME	0	0	
ST. PAUL ISLAND	0	0	
SUMMIT	0	0	
TALKEETNA	0	0	
UNALAKLEET			
YAKUTAT	0	0	
ARIZONA			
FLAGSTAFF	40	143	
PHOENIX	885	3088	
TUCSON	615	2006	
WINSLOW	310	956	
YUMA	941	3048	
ARKANSAS			
FORT SMITH	457	1354	
LITTLE ROCK	485	1596	
CALIFORNIA			
BAKERSFIELD	580	2182	
BISHOP	281	983	
BLUE CANYON	142	437	
EUREKA U	0	1	
FRESNO	423	1622	
LONG BEACH	267	784	
LOS ANGELES	134	322	
LOS ANGELES U	272	828	
MT SHASTA R	96	411	
OAKLAND	1	105	
RED BLUFF	412	1636	
SACRAMENTO	293	1136	
SANDBERG R	269	837	
SAN DIEGO	176	433	
SAN FRANCISCO	2	91	
SAN FRANCISCO U	0	58	
SANTA MARIA	0	83	
STOCKTON	303	1290	
COLORADO			
ALAMOSA	8	52	
COLORADO SPRINGS	180	429	
DENVER	270	609	
GRAND JUNCTION	393	1060	
PUEBLO	363	939	
CONNECTICUT			
BRIDGEPORT	342	849	
HARTFORD	362	931	
DELAWARE			
WILMINGTON	413	1222	
DIST.OF COLUMBIA			
WASHINGTON DULLES	358	1033	
WASHINGTON NATIONAL	469	1358	
FLORIDA			
APALACHICOLA U	536	2028	
DAYTONA BEACH	482	2138	
FORT MYERS	538	2615	
JACKSONVILLE	488	1951	
KEY WEST	571	3222	
LAKELAND U	490	2250	
MIAMI	516	2923	
ORLANDO	529	2621	
PENSACOLA	547	2136	
TALLAHASSEE	496	1938	
TAMPA	529	2423	
WEST PALM BEACH	526	2832	
GEORGIA			
ATHENS	393	1290	
ATLANTA	388	1252	
AUGUSTA	436	1527	
COLUMBUS	469	1676	
MACON	500	1790	
ROME	391	1374	
SAVANNAH	473	1848	
HAWAII			
HILO	358	2120	
HONOLULU	512	2957	
KAHULUI	425	2282	
LIHUE	445	2593	
IDAHO			
BOISE	269	838	
LEWISTON	316	902	
POCATELLO	174	469	
ILLINOIS			
CAIRO U	424	1424	
CHICAGO O HARE	301	806	
CHICAGO MIDWAY	368	975	
MOLINE	323	865	
PEORIA	306	842	
ROCKFORD	263	719	
SPRINGFIELD	348	973	
INDIANA			
EVANSVILLE	396	1223	
FORT WAYNE	244	785	
INDIANAPOLIS	302	938	
SOUTH BEND	292	823	
IOWA			
BURLINGTON	300	854	
DES MOINES	378	1024	
DUBUQUE	236	602	
SIOUX CITY	381	959	
WATERLOO	283	756	
KANSAS			
CONCORDIA	414	1133	
DODGE CITY	521	1355	
GOODLAND	338	803	
TOPEKA	384	1116	
WICHITA	468	1356	
KENTUCKY			
COVINGTON	278	840	
LEXINGTON	314	973	
LOUISVILLE	380	1191	
LOUISIANA			
ALEXANDRIA	436	1643	
BATON ROUGE	499	2091	
LAKE CHARLES	461	1875	
NEW ORLEANS	524	2089	
SHREVEPORT	417	1638	
MAINE			
CARIBOU	97	290	
PORTLAND	201	462	
MARYLAND			
BALTIMORE	376	1027	
MASSACHUSETTS			
BLUE HILL OBS R	249	598	
BOSTON	316	817	
WORCESTER	224	555	
MICHIGAN			
ALPENA	150	272	
DETROIT	275	851	
DETROIT METRO	261	663	
FLINT	214	497	
GRAND RAPIDS	255	660	
HOUGHTON LAKE	155	333	
LANSING	264	553	
MARQUETTE U	172	324	
MUSKEGON	220	485	
SAULT STE MARIE	129	171	
MINNESOTA			
DULUTH	84	157	
INTERNATIONAL FALLS	127	322	
MINNEAPOLIS	271	714	
ROCHESTER	192	512	
ST CLOUD	186	406	
MISSISSIPPI			
JACKSON	477	1897	
MERIDIAN	445	1712	
MISSOURI			
COLUMBIA REGIONAL	361	1052	
KANSAS CITY	382	1075	
ST JOSEPH	387	1177	
ST LOUIS	375	1147	
SPRINGFIELD	388	1047	
MONTANA			
BILLINGS	235	574	
GLASGOW	259	528	
GREAT FALLS	226	540	
HAVRE	199	447	
HELENA	108	308	
KALISPELL	100	245	
MILES CITY	312	705	
MISSOULA	124	332	
NEBRASKA			
GRAND ISLAND	401	1003	
LINCOLN	387	988	
NORFOLK	395	963	
NORTH PLATTE	278	670	
OMAHA	395	1010	
SCOTTSBLUFF	250	620	
VALENTINE	373	812	
NEVADA			
ELKO	152	421	
ELY	85	200	
LAS VEGAS	708	2589	
RENO	117	378	
WINNEMUCCA	180	570	
NEW HAMPSHIRE			
CONCORD	242	576	
MT WASHINGTON OBS	0	0	
NEW JERSEY			
ATLANTIC CITY	345	930	
ATLANTIC CITY U	319	740	
NEWARK	459	1233	
TRENTON U	384	1073	
NEW MEXICO			
ALBUQUERQUE	409	1146	
CLAYTON	273	691	
ROSWELL	400	1270	
NEW YORK			
ALBANY	255	680	
BINGHAMTON	180	451	
BUFFALO	230	597	
NEW YORK U	401	1094	
NEW YORK KENNEDY	324	772	
NEW YORK LA GUARDIA	397	1041	
ROCHESTER	269	751	
SYRACUSE	281	714	
NORTH CAROLINA			
ASHEVILLE	292	787	
CAPE HATTERAS R	434	1339	
CHARLOTTE	373	1199	
GREENSBORO	343	1088	
RALEIGH	365	1169	
WILMINGTON	472	1531	
NORTH DAKOTA			
BISMARCK	227	400	
FARGO	219	435	
WILLISTON	250	454	
OHIO			
AKRON	252	713	
CINCINNATI ABBE OB	326	982	
CLEVELAND	273	705	
COLUMBUS	292	857	
DAYTON	306	942	
MANSFIELD	282	783	
TOLEDO	222	630	
YOUNGSTOWN	210	557	
OKLAHOMA			
OKLAHOMA CITY	462	1377	
TULSA	452	1476	
OREGON			
ASTORIA	0	6	
BURNS U	106	392	
EUGENE	50	209	
MEACHAM	65	204	
MEDFORD	233	752	
PENDLETON	232	759	
PORTLAND	81	358	
SALEM	47	202	
SEXTON SUMMIT R	54	223	
PACIFIC AREA			
GUAM TAGUAC R	456	3400	
JOHNSTON	490	3124	
KOROR R	548	4201	
KWAJALEIN	533	4210	
MAJURO	493	3954	
PAGO PAGO	450	4004	
PONAPE R	500	4012	
TRUK MOEN ISLAND	529	4153	
WAKE	504	3557	
YAP R	502	4027	
PENNSYLVANIA			
ALLENTOWN	331	875	
ERIE	167	420	
HARRISBURG	352	973	
PHILADELPHIA	435	1184	
PITTSBURGH	269	733	
SCRANTON	223	571	
WILLIAMSPORT	213	608	
RHODE ISLAND			
BLOCK ISLAND	225	459	
PROVIDENCE	318	796	
SOUTH CAROLINA			
CHARLESTON	501	1793	
CHARLESTON U	474	1761	
COLUMBIA	490	1563	
GRNVLLE-SPRTNBRG	375	1203	
SOUTH DAKOTA			
ABERDEEN	335	728	
HURON	331	666	
RAPID CITY	295	584	
SIOUX FALLS	370	826	
TENNESSEE			
BRISTOL	267	856	
CHATTANOOGA	400	1295	
KNOXVILLE	355	1101	
MEMPHIS	458	1710	
NASHVILLE	412	1283	
OAK RIDGE R	325	1028	
TEXAS			
ABILENE	550	1705	
AMARILLO	435	1215	
AUSTIN	550	1904	
BROWNSVILLE	519	2458	
CORPUS CHRISTI	560	2414	
DALLAS	569	1947	
DEL RIO	586	2244	
EL PASO	448	1421	
FORT WORTH	559	1884	
GALVESTON U	533	1994	
HOUSTON INTERCON	458	1866	
LUBBOCK	401	1324	
MIDLAND	437	1415	
PORT ARTHUR	459	1791	
SAN ANGELO	554	1899	
SAN ANTONIO	536	2053	
VICTORIA	556	2289	
WACO	611	1870	
WICHITA FALLS	570	1659	
UTAH			
MILFORD	241	582	
SALT LAKE CITY	367	1001	
WENDOVER	397	1103	
VERMONT			
BURLINGTON	243	582	
VIRGINIA			
LYNCHBURG	330	951	
NORFOLK	424	1362	
RICHMOND	395	1270	
ROANOKE	346	993	
WALLOPS ISLAND	351	928	
WASHINGTON			
OLYMPIA	7	62	
QUILLAYUTE	0	11	
SEATTLE	22	118	
SEATTLE-TACOMA	17	119	
SPOKANE	177	491	
STAMPEDE PASS R	7	26	
WALLA WALLA U	290	900	
YAKIMA	181	544	
WEST INDIES			
SAN JUAN P.R.	570	3966	
WEST VIRGINIA			
BECKLEY	173	491	
CHARLESTON	305	975	
ELKINS	125	384	
HUNTINGTON	344	1043	
PARKERSBURG U	313	965	
WISCONSIN			
GREEN BAY	228	562	
LA CROSSE	239	700	
MADISON	207	536	
MILWAUKEE	247	603	
WYOMING			
CASPER	182	395	
CHEYENNE	116	293	
LANDER	163	411	
SHERIDAN	168	371	

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

AUGUST 1973

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				@ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				Ø ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS
Alabama								°2	C			°4	C																
Alaska																												4	
Arizona	1	1										5	5	2															
Arkansas	1	1			5										17	4													
California	1	1			4						7	6																	
Colorado	2	2						5	5			5	4		1														
Connecticut	1	1			4										1	5													
Delaware																?												?	?
Florida	1	1			6							5		3	3	4													
Georgia	1	1			5							5	4		1	5													
Hawaii *																													
Idaho																?	4												
Illinois	5	4			?			?	?		5	4	?	1	11	6	?												
Indiana	1	1			6				6			5				4													
Iowa								5	6	3		5	5	1	3	5												6	6
Kansas	1	1						4	5			5				5													
Kentucky									4			4	3		2	5	3												
Louisiana																5													
Maine	1	1							2		4				1	4													
Maryland												4	?			?											1	?	
Massachusetts	2	2	4	43	6				2		?	4		1	4	4													
Michigan	4	4		6	5						2	5			2	4											14	5	C
Minnesota	3	1		3	5				4		2	6																	
Mississippi														1		4													
Missouri								?	?		4	6	?			3													
Montana	1	1						6	6		4	6	6	1	1	5	4												
Nebraska								5	6			6	6			5													
Nevada																										1	1	6	
New Hampshire																												6	4
New Jersey															1	?										7	?	7	
New Mexico														1	1													5	3
New York	3	1		1	5			3	?	2	4	5	?	4	2	5										1	1	?	
North Carolina									5		4	5																	
North Dakota	1	1			5			5	7		2	5	6																
Ohio	3	3			4			3			2	5	3		1	4												4	3
Oklahoma	1	1			4					2	1	5		2	2	5													
Oregon																?	?												
Pacific Area ‡																													
Pennsylvania												5	3			5	3									3	10	5	3
Puerto Rico												°5	C													1		°5	C
Rhode Island *																													
South Carolina	1	1			4							3	2			3	2											3	2
South Dakota	5	5			5			4	6			5	6			4													
Tennessee												5			1	5													
Texas	8	7			3			4	6			6				5												4	
Utah												°5	C			4													
Vermont								?	4					2	1	5	?												
U.S. Virgin Is.*																													
Virginia											2																	4	
Washington																5													
West Virginia																												4	
Wisconsin	3	2			5	1		5	5			5				5													
Wyoming	1	1			4						1	°4	C	1	6	2												4	

° Includes crop damage.
C Crop damage.
* No occurrence of storms or unusual weather phenomena reported.
@ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
Ø For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
‡ No Storm Data Report received for this State.
<> Report Incomplete.
† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5 Million
7	$5 Million to $50 Million
8	$50 Million to $500 Million
9	$500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

AUGUST 1973

Herbert J. Thompson and Raymond J. Haley
Office of Hydrology

Serious flooding with extensive damage and record crest stages occurred in New Jersey. A record crest stage was also reported at Patterson, N.C., from flash flooding on the Upper Yadkin River. Moderate flooding was reported from Nebraska, Iowa, Kansas, Alaska, and Puerto Rico. The drought in the Pacific Northwest continued for the tenth consecutive month, with streams in southwestern Oregon below minimum flow levels for irrigation purposes.

These and other hydrologic events of unusual significance or involving loss of life or property damage are discussed in more detail below.

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	ATLANTIC SLOPE DRAINAGE		
Passaic and Raritan River Basins	Intense rainfall associated with a cold front moving northeastward across New Jersey occurred on the 1st-2d. Amounts ranged from 2.5 to more than 9 inches. At Plainfield, N.J., 4 inches of rain occurred in 1 hour. The crest of 9.4 feet on the Passaic River near Chatham was the highest in 44 years of record. Record flooding also occurred in the Green Brook and Rahway River Basins. Peak discharges in the Rahway River Basin were estimated to be 1.3 times the 100-year flood by the U.S. Geological Survey. Serious damage occurred, particularly in the highly urbanized Green Brook, Elizabeth, and Rahway River Basins. There were six flood-related deaths, 34 people were injured, and more than 1,000 were evacuated. Middlesex, Somerset, Essex, and Union Counties were declared a federal disaster area. Among the communities most seriously affected were Plainfield, North Plainfield, Elizabeth, Cranford, Union Township, Bound Brook, Middlesex Borough, Dunellen, Maplewood, Orange, and South Orange. Additional information on this flood is available in a report prepared by the U.S. Geological Survey.	6	67,000
Schuylkill River Basin	The storm described above also deposited 9.5 inches of rain on Norristown, Pa. Severe flash flooding occurred in the area as numerous small creeks in the Norristown area overflowed their banks. Flooding was reported along the Schuylkill River above Norristown.	0	1,500
Cape Fear River Basin	Heavy rain occurred in the Fayetteville, N.C., area on the 2d. Unofficial reports of up to 6 inches were received. Widespread urban flooding occurred with some damage and evacuation of homes.	0	87
Yadkin River Basin	Flash flooding occurred along the Upper Yadkin River in Caldwell County on the 7th. An unofficial amount of 14 inches of rain was reported at a campground 5 miles northeast of Patterson, N.C.	0	939

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	ATLANTIC SLOPE DRAINAGE-Continued		
Yadkin River Basin-Cont'd.	Flooding extended from above Patterson downstream to W. Kerr Scott Reservoir. The sharp rise of as much as 30 feet did extensive damage to Camp Carolwood, a church facility. The crest of 12.8 feet at the Corps of Engineers gage in Patterson was 0.1 foot higher than the old record crest of August 1940. The recurrence interval of the peak discharge of this flood is more than 100 years. Several families were evacuated, and some mobile homes were lost. There was extensive commercial and industrial damage in addition to highway, bridge, and agriculture losses, with 200 acres inundated.		
Catawba River Basin	The storm discussed above in the headwaters of the Yadkin River also caused flash flooding along Zack's Creek early on the 7th. Some damage was done to a shopping center in Lenoir, N.C.	0	50
	MISSOURI BASIN		
Floyd River Basin	Sheldon, Iowa, received 6.31 inches of rain on the 22d. Lowland flooding was reported downstream from Hospers to Alton, with 400 to 500 acres inundated.	0	N.A.
Little Sioux River Basin	Heavy rainfall occurred over the Upper Little Sioux River on the night of the 22d. Totals generally ranged from 2.5 to 4.0 inches, with a maximum reported of 9.61 inches at Petersen, Iowa. The dry ground absorbed much of the rainfall, but lowland flooding was reported down to Correctionville, Iowa.	0	N.A.
Kansas River Basin	Significant flooding was reported along the Delaware River in northeastern Kansas on the 12th. The Delaware Basin received nearly 4 inches of rain. Damage was mainly to streets and farmland, with 500 acres of soybeans inundated.	0	120
Lower Missouri River	Heavy rainfall on the 11th in southeast Nebraska, with amounts up to nearly 8 inches, caused flooding along the lower Nemaha River below Falls City, Nebr., and the Missouri River from the mouth of the Nemaha to below St. Joseph, Mo. Significant damage occurred to corn and soybean crops, estimated at $220,000 along the Nemaha and $250,000 along the Missouri.	0	470

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	ALASKA		
Kobuk River	Rainfall totaled 4.0 inches during the period 18th-21st at Kobuk where significant flooding occurred. The airport runway was covered by up to 8 feet of water, with an average of 3 feet of water in the village.	0	N.A.
	PUERTO RICO		
Humacao and Juncos River Basins	On the 15th a strong easterly wave in conjunction with an upper low moved across the island with resultant heavy rainfall, particularly over the northeastern section where storm totals of nearly 6 inches were reported. At Las Piedras a 1-hour rainfall of 3.9 inches was recorded. The flash flooding which developed was moderate in severity. The crest discharge of 3,300 c.f.s. at the U.S. Geological Survey gage on the Valenciano River, a tributary of the Humacao, had an estimated recurrence interval of 10 to 15 years. There was one flood-related fatality in Cayey, with 200 people evacuated in Humacao, 90 in Las Piedras, and 75 in Patillas. There was up to 8 feet of overflow in the Villa Ana and Villa Graciela urban areas, with a number of families evacuated and 23 houses damaged.	1	N.A.

N.A. Not Available.

FLOOD STAGE DATA

(All dates in August unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest	
		From–	To–	Stage	Date
	Ft.			Ft.	
ATLANTIC SLOPE DRAINAGE					
Passaic:					
Chatham, N.J	6	2	6	9.4	2
Millstone:					
Blackwells Mills, N.J.	7	2	3	9.39	3
Raritan:					
Manville, N.J	12	2	3	17.47	2
Bound Brook, N.J.	8	2	3	E 12.9	2
Neshaminy Creek:					
Langhorne, Pa.	9	2	3	11.24	2
Rapidan:					
Rapidan, Va.	14	18	18	16.9	18
Lumber:					
Lumberton, N.C	9	5	9	10.3	6
Edisto:					
Givhans Ferry, S.C.	10	7	9	10.5	8
MISSISSIPPI SYSTEM					
Missouri Basin					
Elk Creek:					
Elm Springs, S.D.	6	24	24	6.27	24
Floyd River:					
Alton, Iowa	12	23	25	13.58	24
Little Sioux River:					
Cherokee, Iowa	17	23	25	#19.45	24
Nemaha River:					
Falls City, Nebraska	20	11	12	26.65	12
MISSISSIPPI SYSTEM-Continued					
Missouri Basin-Continued					
Black Vermillion River:					
Frankfort, Kansas(Hway 9)	19	8	9	21.43	8
Delaware River:					
Muscotah, Kansas	25	7	9	#27.83	8
		12	12	#25.04	12
Chariton River:					
Prairie Hill, Mo.	15	9	10	18.1	9
Missouri River:					
St. Joseph, Mo.	17	12	13	18.84	12
Ohio Basin					
Embarras:					
Lawrenceville, Ill.	11	July 26	2	14.22	July 31
Little Wabash:					
Wilcox, Ill.	16	15	15	#16.79	15
WEST GULF OF MEXICO DRAINAGE					
Guadalupe:					
Dupont, Tex.	20	July 9	13	23.3	July26-27
ALASKA					
Kobuk:					
Kobuk, Alaska	95.7	21	24	E103.0	22

___	Highest Stage of Record
E	Estimated
#	Highest Stage Observed

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y. 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	86	18.8	17.4	19	.7
1000	31	150	18.9	16.9	24	.8
950	31	593	19.0	14.5	28	2.4
900	31	1,057	16.9	11.4	30	3.4
850	31	1,542	13.8	7.6	29	3.5
800	31	2,052	11.0	3.4	28	4.3
750	31	2,568	8.1	-1.4	28	5.2
700	31	3,155	5.2	-6.7	28	6.4
650	31	3,756	2.0	-12.4	28	7.6
600	31	4,398	-1.3	-16.3	28	8.1
550	31	5,087	-5.1	-20.0	28	8.9
500	31	5,830	-9.5	-25.3	28	10.4
450	31	6,636	-14.8	-28.2	27	11.4
400	31	7,517	-20.8	-34.8	27	12.1
350	31	8,494	-27.8	-39.7	27	12.9
300	31	9,580	-36.1	-47.5	27	13.6
250	31	10,821	-45.4		27	15.7
200	31	12,280	-54.3		27	17.1
175	31	13,128	-57.9		27	17.7
150	31	14,093	-60.8		28	15.3
125	31	15,224	-61.9		28	10.4
100	31	16,605	-61.4		29	6.4
80	31	17,995	-59.6		31	3.0
70	30	18,833	-58.3		35	1.8
60	30	19,809	-56.4		04	2.0
50	29	20,972	-54.3		07	2.8
40	29	22,409	-52.3		08	4.1
30	28	24,282	-49.5		08	6.5
25	25	25,481	-47.7		09	6.3
20	24	26,962	-45.5		09	7.3
15	19	28,869	-43.2		09	8.5
10	7	31,622	-40.8			
7						
5						

ALBUQUERQUE, N. MEX. 841 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,619	18.8	9.1	08	.4
1000						
950						
900						
850						
800	31	2,045	18.8	5.7	19	1.3
750	31	2,596	15.6	2.4	22	2.1
700	31	3,178	11.4	.4	24	2.5
650	31	3,793	6.8	-2.0	24	2.0
600	31	4,445	1.7	-4.8	26	1.2
550	31	5,140	-3.4	-10.5	20	.9
500	31	5,888	-8.0	-18.2	20	1.2
450	31	6,699	-12.9	-25.5	23	1.5
400	31	7,586	-19.3	-33.4	26	1.9
350	31	8,569	-26.0	-39.4	28	2.9
300	31	9,663	-34.5	-46.4	28	4.7
250	31	10,912	-44.0		29	6.6
200	29	12,374	-54.3		28	7.9
175	29	13,219	-59.5		28	7.3
150	29	14,172	-64.9		28	7.0
125	29	15,272	-69.1		30	4.5
100	29	16,602	-68.6		02	.8
80	29	17,952	-64.9		09	3.2
70	29	18,770	-63.1		09	5.1
60	29	19,724	-60.7		09	6.6
50	29	20,866	-58.1		09	8.1
40	29	22,280	-55.9		09	10.3
30	29	24,124	-52.5		09	12.3
25	27	25,309	-50.4		09	13.2
20	26	26,772	-47.8		09	13.8
15	26	28,580	-45.7		09	14.6
10	14	31,388	-42.9		09	18.0
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5						

AMARILLO, TEXAS 893 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,095	19.0	12.5	20	4.5
1000						
950						
900						
850	31	1,523	21.9	8.8	22	9.5
800	31	2,048	19.0	6.3	23	7.0
750	31	2,599	15.1	3.3	24	3.4
700	31	3,179	10.7	-.6	29	1.4
650	31	3,792	6.2	-4.9	36	1.0
600	31	4,443	1.7	-11.2	05	2.1
550	31	5,138	-3.0	-16.9	06	2.1
500	31	5,886	-7.7	-21.8	35	.5
450	31	6,698	-12.8	-29.1	32	1.1
400	31	7,586	-19.0	-35.2	34	2.0
350	31	8,569	-26.3	-40.8	33	3.7
300	30	9,663	-34.7	-48.0	32	4.5
250	30	10,911	-44.4		31	6.0
200	30	12,374	-54.2		31	7.3
175	30	13,221	-58.9		31	7.5
150	30	14,177	-64.0		31	6.0
125	30	15,282	-68.2		31	4.4
100	29	16,618	-67.9		03	2.2
80	29	17,969	-64.6		08	3.4
70	29	18,790	-62.1		08	4.8
60	29	19,748	-60.0		08	6.6
50	29	20,893	-57.5		09	8.5
40	29	22,310	-55.2		09	10.5
30	29	24,162	-51.7		09	12.2
25	29	25,351	-49.7		08	13.2
20	27	26,823	-46.7		09	14.5
15	26	28,742	-44.4		09	15.6
10	9	31,469	-40.3			
7						
5						

* **ANCHORAGE, ALASKA** 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	45	11.2	8.8	17	2.1
1000	28	129	11.2	6.3	18	1.8
950	31	547	9.1	4.8	18	3.1
900	31	993	6.3	2.9	18	2.9
850	31	1,460	3.0	.3	19	2.2
800	31	1,949	.2	-1.8	20	1.5
750	31	2,464	-2.6	-5.2	21	2.1
700	31	3,009	-5.6	-9.7	22	1.8
650	31	3,567	-8.6	-14.6	23	2.3
600	31	4,204	-12.2	-20.4	24	3.2
550	31	4,864	-16.1	-25.3	25	4.2
500	31	5,576	-20.8	-31.2	26	5.4
450	31	6,347	-25.8	-35.5	26	7.2
400	31	7,190	-31.6	-40.2	27	9.1
350	31	8,125	-38.3	-45.4	26	10.9
300	30	9,158	-46.0		27	12.3
250	30	10,359	-49.4		28	13.3
200	30	11,826	-48.0		28	13.0
175	30	12,706	-48.1		27	11.8
150	30	13,722	-48.4		27	10.4
125	30	14,921	-48.9		27	9.0
100	30	16,385	-49.5		27	6.2
80	30	17,845	-49.9		27	4.6
70	29	18,721	-49.7		27	3.2
60	29	19,731	-49.6		27	2.0
50	29	20,925	-49.5		25	1.1
40	29	22,389	-49.0		05	.2
30	29	24,282	-48.0		09	1.4
25	29	25,488	-46.9		08	1.6
20	29	26,972	-45.5		07	1.5
15	27	28,898	-43.1		07	2.5
10	25	31,657	-39.6		08	3.8
7	17	34,167	-35.0		08	4.9
5						

* **ANNETTE, ALASKA** 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	37	10.5	7.1	15	.4
1000	31	154	11.1	8.3	19	.5
950	31	581	8.7	5.6	22	1.6
900	31	1,027	6.5	2.8	22	2.3
850	31	1,495	4.0	-.9	24	3.2
800	31	1,986	1.9	-4.0	25	3.8
750	31	2,505	-.7	-7.4	26	4.9
700	31	3,054	-3.5	-11.6	27	6.0
650	31	3,637	-6.1	-17.0	27	6.9
600	31	4,260	-9.4	-19.6	27	8.1
550	31	4,927	-13.2	-23.6	27	8.9
500	31	5,647	-18.0	-28.4	28	10.3
450	31	6,426	-23.2	-34.4	28	12.2
400	31	7,278	-29.2	-41.2	28	12.3
350	31	8,222	-36.1	-44.7	29	15.0
300	30	9,249	-43.5	-47.7	29	15.8
250	30	10,473	-44.1		29	18.2
200	30	11,933	-51.2		29	15.5
175	29	12,798	-51.1		29	13.6
150	29	13,811	-51.2		29	11.0
125	29	14,984	-52.2		28	9.0
100	29	16,426	-52.2		28	6.3
80	29	17,870	-52.3		27	4.4
70	29	18,734	-52.2		27	2.7
60	28	19,728	-52.0		[illegible]	1.6
50	28	20,909	-51.9		24	.9
40	27	22,363	-50.7		07	.7
30	25	24,248	-49.1		08	2.4
25	25	25,447	-48.0		08	2.4
20	25	26,924	-46.6		09	3.6
15	25	28,844	-44.1		09	4.1
10	23	31,603	-39.2		09	6.2
7	19	34,077	-34.4		09	7.4
5	10	36,516	-30.7			

ATHENS, GEORGIA 989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	20.0	19.3	32	.5
1000						
950	31	596	21.5	17.8	31	1.1
900	31	1,065	19.2	14.8	30	.9
850	31	1,555	15.8	11.8	26	.7
800	31	2,068	13.0	7.7	24	1.1
750	31	2,609	10.2	2.6	25	1.7
700	31	3,180	7.0	-1.6	25	1.9
650	31	3,786	3.9	-5.1	26	1.9
600	31	4,434	.5	-9.0	27	2.5
550	31	5,127	-3.3	-14.9	26	3.0
500	31	5,875	-7.8	-21.1	27	2.6
450	31	6,667	-12.9	-25.1	27	2.9
400	31	7,575	-19.1	-30.6	27	3.2
350	31	8,558	-25.9	-38.2	27	3.2
300	31	9,652	-34.4	-45.2	29	3.5
250	31	10,901	-44.4		29	4.4
200	31	12,361	-54.9		29	3.4
175	31	13,204	-60.3		30	2.9
150	31	14,154	-64.9		27	2.2
125	31	15,258	-67.6		34	.7
100	31	16,602	-66.8		06	2.2
80	31	17,960	-64.1		08	4.3
70	31	18,782	-62.3		08	5.9
60	31	19,740	-59.7		08	7.3
50	31	20,887	-57.0		09	9.2
40	31	22,306	-55.1		09	10.5
30	31	24,158	-51.7		09	13.1
25	30	25,347	-50.4		09	14.6
20	30	26,810	-48.3		09	15.7
15	28	28,716	-45.7		09	17.5
10	19	31,452	-41.0		09	18.4
7	7	33,881	-39.7			

* **BARROW, ALASKA** 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	3.6	3.0	23	.5
1000	30	83	4.0	3.2	21	.8
950	31	497	3.5	1.5	23	3.8
900	31	935	2.3	-.8	23	4.8
850	31	1,396	.3	-3.7	24	5.2
800	31	1,880	-2.1	-6.5	23	5.5
750	31	2,392	-4.4	-9.6	23	6.5
700	31	2,932	-7.5	-13.7	23	6.5
650	30	3,509	-10.4	-16.6	23	7.1
600	30	4,121	-13.9	-21.8	23	7.8
550	30	4,777	-18.0	-25.9	24	8.4
500	30	5,483	-22.6	-29.8	25	8.8
450	29	6,253	-27.7	-35.5	25	9.4
400	29	7,090	-33.5	-41.9	25	10.1
350	29	8,017	-40.2	-45.8	26	10.0
300	29	9,049	-47.2		26	10.5
250	29	10,244	-50.6		26	11.4
200	29	11,715	-45.8		25	7.7
175	29	12,605	-45.5		25	6.1
150	29	13,634	-45.4		25	5.0
125	29	14,849	-45.9		26	4.7
100	29	16,333	-46.2		26	3.8
80	28	17,817	-46.3		25	2.7
70	27	18,701	-46.4		25	2.0
60	25	19,722	-46.6		27	1.5
50	25	20,930	-46.5		03	.1
40	22	22,413	-46.4		05	.9
30	18	24,319	-46.3		04	.7
25	12	25,525	-45.8		08	.8
20	5	26,968	-45.2			
15						
10						
7						

BARTER IS., ALASKA 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	3.0	2.5	12	1.3
1000	30	93	4.7	3.3	13	1.6
950	31	511	6.6	.9	20	1.0
900	31	954	5.3	-.9	27	2.6
850	31	1,419	2.9	-3.5	27	2.6
800	31	1,908	.0	-5.4	27	2.8
750	31	2,422	-3.3	-7.9	27	3.2
700	31	2,965	-6.6	-10.6	26	3.7
650	31	3,541	-9.7	-15.0	25	3.5
600	31	4,154	-13.6	-19.7	25	3.7
550	31	4,811	-17.9	-25.1	25	4.9
500	31	5,517	-22.6	-31.2	25	5.3
450	31	6,282	-27.8	-37.7	25	5.1
400	31	7,119	-33.8	-43.0	25	5.7
350	31	8,045	-40.4	-45.0	26	6.3
300	31	9,077	-47.2		25	6.0
250	31	10,271	-51.1		25	6.5
200	31	11,736	-46.3		25	6.3
175	31	12,625	-45.7		26	6.0
150	31	13,652	-45.8		25	4.8
125	31	14,865	-46.2		25	4.3
100	31	16,348	-46.5		25	3.0
80	31	17,829	-46.6		25	2.6
70	31	18,716	-46.5		25	1.7
60	31	19,739	-46.7		24	1.2
50	31	20,948	-46.8		27	.5
40	30	22,425	-46.6		14	.4
30	29	24,335	-46.0		10	1.1
25	29	25,550	-45.2		07	1.2
20	29	27,045	-43.4		09	2.1
15	26	29,000	-41.1		08	2.3
10	21	31,808	-35.6		08	2.9
7	10	34,239	-33.4			

BETHEL, ALASKA 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	8.7	7.3	21	2.3
1000	27	121	9.3	6.5	23	2.2
950	31	528	7.6	4.6	21	4.6
900	31	972	5.2	2.0	21	5.2
850	31	1,437	2.9	-2.0	21	5.0
800	31	1,926	.1	-4.1	22	5.3
750	31	2,442	-2.1	-8.0	22	5.0
700	31	2,987	-4.9	-12.6	23	4.7
650	31	3,568	-7.5	-18.1	24	4.9
600	31	4,187	-10.9	-21.7	25	5.2
550	31	4,850	-15.0	-24.5	25	5.7
500	31	5,565	-19.4	-30.4	27	6.2
450	31	6,341	-24.7	-35.2	27	7.2
400	31	7,188	-30.7	-39.5	27	8.6
350	30	8,125	-37.5	-43.6	27	9.7
300	29	9,176	-44.6		27	11.0
250	29	10,381	-49.9		27	12.7
200	29	11,845	-48.4		27	11.8
175	29	12,724	-48.3		27	11.0
150	29	13,740	-48.6		26	9.3
125	29	14,937	-49.4		26	7.8
100	29	16,398	-49.7		26	6.1
80	29	17,858	-49.6		26	4.6
70	29	18,734	-49.4		26	2.9
60	29	19,745	-49.2		25	2.3
50	29	20,942	-48.9		25	1.2
40	28	22,410	-48.5		02	.0
30	28	24,307	-47.6		11	.7
25	27	25,514	-46.7		09	1.4
20	23	26,992	-45.8		08	.8
15	20	28,923	-43.3		07	2.1
10	17	31,666	-39.6		07	2.1
7						

* **BISMARCK, N. DAK.** 953 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	503	15.0	12.3	07	.8
1000						
950	23	546	15.5	11.7	09	.6
900	31	994	20.6	10.3	20	1.8
850	31	1,487	19.4	5.4	23	2.5
800	31	2,007	16.4	2.7	25	3.9
750	31	2,552	12.6	-.6	26	5.2
700	31	3,126	8.3	-5.1	27	6.1
650	31	3,734	3.6	-6.9	27	6.7
600	31	4,378	-1.3	-11.0	27	7.7
550	31	5,065	-6.4	-15.7	28	9.0
500	31	5,804	-11.2	-23.5	28	8.9
450	31	6,605	-16.4	-29.4	27	9.8
400	30	7,483	-22.8	-36.7	28	11.0
350	30	8,451	-30.1	-41.9	28	14.0
300	30	9,527	-38.5	-49.5	28	16.2
250	30	10,756	-47.3		27	19.0
200	30	12,210	-53.5		28	19.9
175	30	13,064	-55.8		28	19.0
150	30	14,040	-57.7		28	15.6
125	30	15,168	-59.1		28	10.4
100	30	16,584	-59.3		28	6.3
80	30	17,983	-58.4		29	3.3
70	30	18,825	-57.3		30	1.4
60	30	19,803	-56.0		03	.7
50	30	20,968	-54.1		07	2.1
40	30	22,405	-52.3		08	3.4
30	28	24,261	-49.1		08	4.5
25	27	25,481	-47.8		09	5.8
20	27	26,961	-46.0		09	6.8
15	26	28,884	-43.7		09	6.6
10	7	31,618	-39.8			
7						

BOISE, IDAHO 914 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	871	16.9	2.7	14	.8
1000						
950						
900	31	1,001	19.8	3.2	30	.2
850	31	1,494	19.9	.2	31	2.7
800	31	2,013	16.5	-2.2	29	2.9
750	31	2,559	12.6	-4.0	26	3.9
700	31	3,132	8.4	-7.7	25	6.2
650	31	3,740	3.8	-9.9	24	8.0
600	31	4,384	-1.1	-13.0	24	10.0
550	31	5,072	-6.2	-16.6	24	12.1
500	31	5,811	-11.4	-22.7	24	12.7
450	31	6,610	-16.9	-28.1	24	13.5
400	31	7,463	-23.4	-34.7	24	15.5
350	31	8,450	-30.4	-41.5	24	18.3
300	31	9,525	-38.6	-49.3	24	20.4
250	31	10,755	-46.8		24	22.5
200	31	12,213	-53.3		25	23.5
175	31	13,066	-56.3		25	21.5
150	31	14,039	-58.9		25	17.5
125	31	15,179	-60.8		25	11.3
100	30	16,564	-61.5		25	5.5
80	30	17,951	-60.1		24	2.0
70	30	18,767	-58.5		21	.7
60	30	19,760	-57.3		08	1.0
50	30	20,917	-55.9		08	3.3
40	29	22,343	-53.9		09	5.1
30	29	24,202	-51.1		08	5.5
25	28	25,392	-49.5		08	6.8
20	26	26,861	-47.3		08	8.3
15	22	28,774	-45.0		09	9.2
10	13	31,527	-40.8			
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BOOTHVILLE, LA. 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1	25.9	23.1	05	1.0
1000	31	143	26.3	22.9	07	1.4
950	31	595	23.0	20.4	10	2.0
900	31	1,066	19.9	16.5	13	2.0
850	31	1,557	16.8	11.8	14	1.9
800	31	2,073	14.5	7.2	14	1.3
750	31	2,617	11.5	3.6	14	1.2
700	31	3,190	8.2	-.9	19	.5
650	30	3,800	4.8	-3.5	24	.9
600	30	4,449	.9	-6.5	24	1.0
550	30	5,144	-3.2	-10.3	25	1.2
500	30	5,893	-7.6	-16.1	24	1.3
450	30	6,705	-12.7	-21.8	26	.6
400	30	7,595	-18.6	-28.8	25	.9
350	30	8,579	-25.7	-36.3	27	.5
300	29	9,674	-34.2	-44.5	17	.4
250	29	10,924	-44.2		07	1.1
200	28	12,382	-55.5		09	.9
175	28	13,224	-60.6		11	.6
150	28	14,170	-66.1		36	1.3
125	27	15,268	-68.9		05	2.4
100	24	16,602	-69.4		08	4.3
80	24	17,944	-65.9		08	7.5
70	24	18,760	-63.4		09	8.9
60	24	19,712	-61.3		09	10.9
50	23	20,850	-58.4		08	13.7
40	23	22,260	-56.5		09	15.1
30	23	24,099	-53.0		09	18.4
25	23	25,279	[illegible]		09	19.4
20	22	26,738	-48.9		09	20.4
15	18	28,650	-44.6		09	21.7
10	12	31,401	-40.7			
7						

* **BROWNSVILLE, TEXAS** 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	7	23.6	22.0	09	.2
1000	31	127	25.5	23.7	15	1.7
950	31	578	22.8	20.7	16	5.2
900	31	1,049	20.1	16.5	15	5.2
850	31	1,541	17.4	11.5	15	4.3
800	31	2,058	14.8	6.6	14	4.1
750	31	2,602	11.9	2.6	13	4.0
700	31	3,176	8.7	-.7	12	3.8
650	31	3,787	5.3	-4.1	11	3.5
600	31	4,437	1.6	-7.6	11	3.0
550	31	5,133	-2.5	-9.7	10	2.5
500	31	5,884	-7.1	-15.0	08	2.2
450	31	6,699	-11.8	-21.9	08	1.6
400	31	7,591	-17.8	-30.0	02	.9
350	31	8,560	-24.7	-38.1	32	2.0
300	31	9,679	-33.6	-46.0	31	3.4
250	30	10,930	-43.7		31	5.2
200	29	12,392	-55.4		31	7.2
175	29	13,231	-61.5		31	6.5
150	28	14,172	-67.8		34	4.9
125	28	15,257	-72.1		02	4.2
100	28	16,569	-71.5		06	7.1
80	26	17,900	-67.7		08	10.4
70	24	18,711	-65.7		09	11.4
60	23	19,655	-63.3		09	[illegible]
50	23	20,783	-60.3		09	15.2
40	23	22,182	-58.1		08	17.2
30	23	24,009	-54.0		09	21.1
25	22	25,189	-51.1		09	21.6
20	22	26,652	-47.9		09	22.0
15	19	28,562	-44.9		09	23.2
10	14	31,303	-40.7		09	17.2
7	11	[illegible]	-39.1		09	[illegible]

BUFFALO, N. Y. 992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	218	18.6	16.2	21	1.5
1000						
950	31	591	19.4	14.6	26	4.2
900	31	1,056	16.7	11.7	27	5.1
850	31	1,540	13.3	9.2	27	5.2
800	31	2,049	10.8	3.1	27	6.0
750	31	2,586	8.7	-2.5	27	6.8
700	31	3,153	5.2	-6.2	27	7.3
650	31	3,755	1.9	-10.6	27	7.9
600	31	4,397	-1.8	-15.4	28	9.1
550	31	5,084	-5.5	-22.1	28	9.3
500	31	5,825	-10.2	-26.5	27	10.4
450	31	6,630	-15.3	-30.6	27	10.6
400	31	7,509	-21.5	-35.2	27	11.1
350	31	8,482	-28.5	-40.8	27	12.5
300	31	9,565	-36.7	-48.4	27	13.5
250	30	10,802	-45.4		26	[illegible]
200	29	12,264	-53.7		27	18.5
175	29	13,116	-57.1		27	16.6
150	29	14,085	[illegible]		27	14.1
125	29	15,222	-60.8		28	11.1
100	29	16,609	-60.7		28	6.2
80	29	18,002	-59.0		29	[illegible]
70	29	18,842	-58.0		33	1.6
60	29	19,818	-56.1		03	2.3
50	29	[illegible]	-54.0		07	[illegible]
40	27	22,426	-52.0		08	4.2
30	26	24,303	-48.9		08	6.7
25	26	25,505	-47.2		09	7.4
20	25	26,992	-45.0		09	8.9
15	19	28,930	-42.6		09	10.5
10						
7						

CAPE HATTERAS, N. C. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	23.7	22.1	[illegible]	1.7
1000	31	154	24.3	22.2	28	2.1
950	31	603	21.9	18.6	27	3.2
900	31	1,072	19.0	15.3	27	3.0
850	31	1,562	16.2	10.7	26	3.0
800	31	2,077	13.7	6.8	26	3.7
750	31	2,619	10.6	3.1	26	4.2
700	31	3,191	7.2	-.3	25	4.9
650	31	3,798	3.8	-4.1	25	5.5
600	31	4,444	.0	-8.2	25	5.7
550	30	5,138	-3.3	-15.1	25	6.6
500	30	[illegible]	-7.7	[illegible]	[illegible]	7.1
450	30	6,679	-12.7	-23.9	24	7.3
400	30	7,588	-18.4	-30.6	24	7.5
350	29	8,573	-25.5	[illegible]	24	7.4
300	29	9,669	-34.0	-45.6	24	8.8
250	29	10,919	-44.0		24	[illegible]
200	29	12,381	-55.0		24	7.4
175	29	13,224	-60.1		26	4.9
150	29	14,174	-64.9		27	3.2
125	28	15,277	-67.2		29	1.4
100	28	16,627	-65.5		03	1.5
80	28	17,991	-63.3		07	3.1
70	28	18,816	-61.4		08	4.4
60	28	19,779	-58.7		09	6.7
50	27	20,932	-56.2		08	[illegible]
40	27	22,359	-53.6		09	10.7
30	27	24,224	-50.0		09	12.6
25	26	25,420	-48.5		09	12.8
20	26	26,896	-46.1		09	13.9
15	23	[illegible]	-44.5		09	14.3
10						
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

AUGUST 1973

* CARIBOU, MAINE
992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	191	15.9	14.7	24	.6
1000						
950	31	561	15.9	12.6	28	3.3
900	31	1,020	14.3	9.8	30	4.6
850	31	1,501	11.7	6.9	30	5.3
800	31	2,007	9.1	2.6	29	6.1
750	31	2,539	6.2	-.8	29	6.8
700	31	3,102	2.9	-5.4	29	7.5
650	31	3,699	-.2	-10.4	29	8.4
600	31	4,336	-3.7	-14.5	28	9.5
550	31	5,019	-7.0	-20.0	28	9.8
500	31	5,756	-11.7	-25.0	28	11.1
450	31	6,556	-17.1	-28.5	28	12.1
400	31	7,428	-23.4	-34.8	27	13.7
350	31	8,394	-30.4	-41.5	27	15.7
300	31	9,468	-38.9	-45.2	28	17.5
250	31	10,694	-48.2		27	20.3
200	31	12,145	-53.6		28	23.7
175	31	13,000	-55.8		28	22.0
150	31	13,979	-56.8		28	17.4
125	31	15,131	-57.9		28	13.4
100	30	16,539	-57.6		29	8.4
80	29	17,951	-56.6		30	5.5
70	28	18,800	-55.4		30	3.1
60	28	19,786	-54.0		32	1.3
50	27	20,963	-52.3		04	1.5
40	27	22,413	-50.6		08	3.1
30	26	24,300	-48.1		08	4.6
25	26	25,506	-46.6		08	5.7
20	25	26,994	-44.9		09	7.4
15	17	28,933	-42.0		09	7.9
10	13	31,689	-37.3		10	8.9
7	6	34,135	-33.3			

CHARLESTON, S. C.
1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	13	22.9	21.1	31	.6
1000	31	149	23.3	21.8	29	.6
950	31	598	21.8	18.2	25	1.1
900	31	1,067	19.1	15.0	24	1.0
850	31	1,557	16.1	11.4	23	1.3
800	31	2,071	13.5	7.2	23	2.0
750	31	2,613	10.6	3.1	23	2.6
700	31	3,184	7.3	-1.7	24	3.1
650	31	3,791	3.9	-4.8	24	3.3
600	31	4,438	.4	-8.3	24	3.1
550	31	5,132	-3.2	-12.9	24	2.9
500	31	5,881	-7.5	-17.9	24	2.9
450	31	6,694	-12.5	-24.2	25	3.0
400	31	7,583	-18.6	-29.2	22	2.7
350	31	8,568	-25.6	-36.7	23	2.9
300	31	9,664	-34.2	-46.9	22	3.8
250	30	10,911	-44.3		23	2.6
200	30	12,371	-55.1		29	1.6
175	30	13,213	-60.8		33	1.1
150	30	14,160	-65.8		01	.8
125	30	15,260	-68.0		05	1.4
100	30	16,604	-67.0		05	2.3
80	30	17,957	-64.5		07	5.3
70	30	18,779	-62.1		08	7.4
60	29	19,738	-59.6		09	9.0
50	29	20,886	-57.0		09	11.0
40	29	22,308	-54.3		09	12.6
30	29	24,167	-50.6		09	14.2
25	27	25,361	-48.6		09	15.2
20	23	26,835	-46.7		09	15.3
15	20	28,755	-44.0		09	18.2
10						
7						

CHATHAM, MASS.
1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	16	19.5	17.9	30	1.3
1000	31	143	20.7	16.2	30	2.1
950	31	588	19.6	12.6	30	2.9
900	31	1,052	16.9	10.2	30	2.8
850	31	1,537	14.0	6.5	29	3.3
800	31	2,047	10.9	2.7	29	4.0
750	31	2,583	8.3	-1.6	30	5.1
700	31	3,150	5.5	-6.8	30	6.2
650	31	3,753	2.5	-10.0	29	7.4
600	31	4,396	-.9	-13.8	29	8.5
550	31	5,086	-5.1	-18.0	28	9.3
500	31	5,828	-9.6	-22.4	28	11.2
450	31	6,635	-14.5	-28.0	27	12.8
400	31	7,518	-20.4	-32.9	27	13.1
350	31	8,495	-27.4	-39.5	27	14.0
300	31	9,563	-35.6	-47.2	27	15.8
250	30	10,827	-45.0		26	19.7
200	30	12,282	-55.6		27	20.5
175	30	13,125	-59.4		27	18.4
150	30	14,082	-62.7		27	15.0
125	30	15,203	-63.8		28	11.2
100	30	16,573	-62.9		28	6.6
80	30	17,955	-60.7		30	1.8
70	30	18,790	-59.0		34	.8
60	30	19,761	-57.0		06	1.8
50	29	20,924	-54.8		08	3.0
40	29	22,357	-53.0		09	4.8
30	26	24,225	-49.5		09	6.8
25	25	25,423	-48.4		09	7.7
20	21	26,900	-46.4		09	9.1
15	20	28,826	-43.7		09	9.9
10	16	31,588	-39.8		09	11.0
7	8	34,060	-35.9			

CHIHUAHUA, MEXICO
859 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,428	16.9	14.3	19	.4
1000						
950						
900						
850	31	1,520	17.9	13.1	19	.6
800	31	2,040	17.2	9.9	14	1.9
750	31	2,589	13.5	7.2	13	3.2
700	31	3,167	9.5	3.7	11	4.0
650	31	3,778	5.8	-1.0	09	5.0
600	31	4,430	1.9	-6.6	09	5.2
550	31	5,127	-1.9	-12.5	09	5.6
500	31	5,879	-6.4	-18.4	10	4.9
450	31	6,696	-11.4	-24.1	10	3.8
400	31	7,589	-17.4	-29.5	08	1.7
350	31	8,578	-24.4	-34.1	30	1.3
300	31	9,681	-32.7	-42.9	30	3.0
250	31	10,938	-42.8		29	4.4
200	31	12,406	-54.3		31	5.2
175	31	13,251	-60.0		32	5.3
150	30	14,200	-66.1		33	4.1
125	30	15,292	-70.8		02	3.3
100	29	16,610	-70.7		08	4.8
80	29	17,943	-67.7		08	8.2
70	29	18,752	-65.1		08	10.2
60	25	19,696	-62.7		09	11.9
50	25	20,827	-60.0		09	14.1
40	23	22,228	-57.1		09	16.0
30	22	24,064	-53.5		09	18.6
25	20	25,247	-51.4		09	19.4
20	19	26,707	-48.6		09	19.3
15	17	28,606	-45.4		09	20.1
10	8	31,348	-42.6			
7						

* COLD BAY, ALASKA
1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	9.0	8.3	19	3.9
1000	27	143	8.4	7.5	20	5.1
950	31	547	7.5	6.0	21	6.2
900	31	992	6.4	3.0	22	5.9
850	31	1,460	5.1	1.0	23	5.9
800	31	1,954	3.0	-3.3	24	6.7
750	31	2,475	.8	-8.0	25	7.2
700	31	3,028	-1.4	-11.0	25	8.1
650	31	3,615	-4.4	-15.2	25	9.5
600	31	4,242	-7.8	-19.0	25	11.1
550	31	4,914	-11.7	-22.9	25	12.2
500	30	5,640	-15.8	-27.7	25	13.6
450	30	6,427	-21.2	-31.3	25	15.4
400	30	7,285	-27.3	-38.3	25	16.8
350	30	8,237	-34.1	-41.5	25	18.5
300	30	9,296	-41.8	-43.7	25	19.7
250	29	10,508	-48.4		26	20.2
200	29	11,965	-51.5		26	17.7
175	29	12,832	-51.6		26	15.0
150	29	13,831	-52.4		26	13.0
125	29	15,008	-53.1		26	10.7
100	29	16,445	-53.4		26	7.8
80	28	17,880	-52.6		26	5.7
70	27	18,745	-52.1		26	3.9
60	26	19,747	-52.0		25	2.1
50	26	20,930	-51.5		25	.8
40	23	22,396	-50.2		08	.8
30	22	24,284	-48.4		09	2.4
25	21	25,490	-47.4		08	2.6
20	20	26,977	-46.2		10	3.7
15	17	28,895	-43.8		07	5.0
10	12	31,627	-39.7		08	5.6
7	10	34,115	-35.4			

DAYTON, OHIO
984 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	299	17.7	17.0	21	.1
1000						
950	31	599	20.2	15.5	25	2.2
900	31	1,065	17.7	12.6	28	2.9
850	31	1,552	15.0	8.2	29	3.6
800	31	2,063	12.1	4.6	29	4.3
750	31	2,602	9.4	-1.0	28	5.2
700	31	3,171	6.4	-6.9	28	5.2
650	31	3,776	3.4	-10.9	28	5.1
600	31	4,421	-.4	-14.1	28	5.3
550	31	5,111	-4.9	-18.4	28	6.0
500	31	5,853	-9.6	-24.8	28	6.8
450	31	6,660	-14.4	-29.3	28	7.2
400	31	7,542	-20.5	-35.2	28	7.9
350	31	8,519	-27.6	-41.3	28	8.1
300	31	9,607	-35.6	-48.8	28	9.5
250	31	10,850	-45.2		28	11.2
200	31	12,310	-54.0		28	13.2
175	31	13,160	-57.9		28	11.8
150	31	14,123	-61.6		28	8.3
125	31	15,246	-63.6		28	5.9
100	31	16,617	-63.3		30	2.3
80	30	17,993	-61.5		03	1.5
70	30	18,824	-60.0		05	2.4
60	30	19,792	-57.7		07	3.7
50	30	20,950	-55.4		08	4.6
40	29	22,383	-53.0		08	6.2
30	28	24,250	-50.3		09	7.6
25	24	25,439	-48.8		08	8.7
20	22	26,916	-46.7		08	11.1
15	14	28,845	-43.3		08	12.2
10	7	31,604	-40.6			

DEL RIO, TEXAS
979 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	314	22.9	19.4	11	3.2
1000						
950	31	575	22.3	18.8	15	6.3
900	31	1,045	20.1	16.0	17	7.1
850	31	1,537	17.3	12.5	15	5.9
800	31	2,054	14.9	7.1	14	5.1
750	31	2,599	12.3	2.2	13	4.2
700	31	3,174	9.3	-4.2	11	2.8
650	31	3,785	5.7	-7.3	11	2.6
600	31	4,435	1.5	-11.3	12	1.6
550	31	5,130	-2.7	-16.6	09	1.7
500	31	5,880	-7.2	-21.8	09	2.6
450	31	6,693	-12.4	-27.4	07	2.0
400	31	7,583	-18.4	-32.8	02	1.9
350	31	8,568	-25.7	-39.3	35	2.9
300	31	9,664	-33.9	-46.4	34	4.3
250	31	10,916	-43.4		33	5.8
200	31	12,382	-54.3		32	7.1
175	31	13,228	-59.9		33	7.1
150	31	14,177	-65.8		35	6.1
125	31	15,271	-70.6		02	4.2
100	31	16,593	-70.3		05	5.5
80	30	17,929	-66.3		08	7.4
70	30	18,744	-63.9		09	8.8
60	30	19,693	-61.9		09	10.9
50	30	20,828	-59.9		09	14.3
40	30	22,231	-56.7		09	16.3
30	28	24,073	-52.6		09	18.3
25	27	25,259	-50.0		09	19.3
20	27	26,729	-47.1		09	19.2
15	26	28,641	-45.2		09	20.4
10	16	31,382	-41.7		08	21.5

DENVER, COLO.
840 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,611	16.3	7.0	21	2.4
1000						
950						
900						
850						
800	31	2,027	19.7	3.4	25	3.2
750	31	2,580	16.9	.5	27	3.1
700	31	3,164	12.5	-2.7	27	3.7
650	31	3,780	7.6	-5.4	28	3.7
600	31	4,433	2.1	-8.5	28	3.9
550	31	5,129	-3.3	-11.8	27	4.2
500	31	5,876	-8.8	-19.3	27	5.1
450	31	6,684	-14.0	-25.4	27	6.4
400	31	7,568	-20.0	-32.2	27	7.7
350	31	8,547	-27.3	-38.0	27	9.4
300	31	9,634	-36.1	-45.4	27	11.1
250	31	10,876	-45.0		27	13.0
200	31	12,338	-54.0		28	13.5
175	31	13,186	-58.6		27	12.8
150	31	14,144	-63.1		28	11.3
125	31	15,257	-66.4		28	8.2
100	31	16,608	-65.6		26	3.4
80	31	17,978	-62.1		01	.2
70	31	18,805	-61.2		07	1.9
60	31	19,767	-59.0		08	3.8
50	31	20,919	-56.1		08	5.4
40	30	22,346	-53.8		09	6.6
30	29	24,206	-51.0		09	7.9
25	27	25,396	-49.4		09	9.2
20	25	26,866	-46.9		09	10.4
15	22	28,780	-44.6		09	10.8
10	11	31,496	-42.3			

DODGE CITY, KANS.
925 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	791	20.4	13.3	18	3.0
1000						
950						
900	31	1,028	22.5	13.1	20	7.7
850	31	1,526	21.9	8.4	22	9.6
800	31	2,050	18.9	4.7	23	7.0
750	31	2,601	15.2	1.5	23	4.2
700	31	3,180	10.3	-1.3	23	2.8
650	31	3,793	6.1	-6.1	27	2.3
600	31	4,443	1.5	-10.5	30	2.0
550	31	5,138	-3.2	-15.4	31	2.7
500	31	5,886	-7.8	-22.1	29	2.6
450	31	6,698	-13.1	-28.3	30	3.6
400	31	7,584	-19.5	-33.8	31	4.8
350	30	8,565	-26.6	-39.4	31	5.4
300	30	9,656	-35.2	-46.7	30	5.9
250	30	10,902	-44.8		30	7.6
200	30	12,364	-54.0		29	8.7
175	29	13,211	-58.6		30	9.3
150	29	14,170	-63.2		30	7.4
125	29	15,281	-66.8		30	6.5
100	29	16,630	-65.8		34	2.3
80	27	17,994	-63.1		06	2.6
70	27	18,820	-61.1		07	4.2
60	27	19,782	-59.4		08	5.5
50	27	20,930	-56.9		09	7.0
40	25	22,354	-54.4		09	8.1
30	24	24,209	-51.7		09	10.2
25	23	25,399	-49.4		09	11.5
20	21	26,867	-47.0		09	11.8
15	17	28,774	-45.0		09	13.0
10	13	31,506	-41.7			

EL PASO, TEXAS
883 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,193	19.4	10.7	17	.5
1000						
950						
900						
850	31	1,523	22.0	7.4	16	2.8
800	31	2,047	18.9	5.2	17	4.3
750	31	2,598	15.0	2.5	16	3.2
700	31	3,177	10.4	.1	10	2.5
650	31	3,789	5.8	-4.2	07	3.6
600	31	4,439	1.4	-9.4	08	4.1
550	31	5,134	-2.9	-16.2	09	4.4
500	31	5,883	-7.6	-22.2	10	3.8
450	31	6,696	-12.5	-27.5	13	2.1
400	30	7,585	-18.6	-31.9	20	.5
350	30	8,569	-25.8	-38.5	29	1.8
300	30	9,664	-34.1	-45.5	31	3.0
250	29	10,918	-43.8		31	5.3
200	29	12,382	-54.5		30	6.5
175	29	13,226	-60.2		30	6.2
150	29	14,174	-66.1		31	5.3
125	29	15,267	-70.7		34	3.8
100	29	16,589	-69.8		07	3.6
80	29	17,927	-67.1		08	5.5
70	29	18,738	-64.6		08	7.8
60	29	19,686	-61.8		09	9.8
50	29	20,823	-59.1		09	12.3
40	29	22,229	-56.9		09	13.2
30	27	24,064	-53.7		09	15.7
25	24	25,242	-51.0		09	17.0
20	23	26,707	-47.9		09	17.1
15	18	28,610	-45.9		09	18.5
10	11	31,320	-43.0			

ELY, NEV.
811 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,908	11.8	-3.1	20	3.8
1000						
950						
900						
850						
800	31	2,024	16.3	1.6	20	3.6
750	31	2,574	15.3	-.3	19	4.2
700	31	3,154	11.1	-3.4	22	5.5
650	31	3,768	6.3	-6.1	22	6.1
600	31	4,418	1.0	-9.2	22	6.4
550	31	5,110	-4.3	-13.7	22	6.6
500	31	5,854	-9.5	-21.0	22	8.1
450	31	6,661	-14.6	-27.4	23	8.3
400	31	7,543	-20.6	-34.5	24	10.0
350	31	8,520	-27.7	-40.8	24	11.3
300	31	9,607	-36.0	-48.2	24	13.9
250	31	10,849	-44.9		25	16.4
200	31	12,312	-54.1		25	17.6
175	31	13,160	-58.6		25	16.4
150	31	14,120	-62.4		25	14.4
125	29	15,238	-64.8		25	10.4
100	29	16,595	-64.9		24	4.0
80	29	17,963	-62.0		17	.7
70	29	18,793	-60.5		10	1.8
60	29	19,757	-58.6		08	4.0
50	29	20,909	-56.4		09	5.3
40	28	22,331	-54.6		09	6.5
30	28	24,185	-51.6		09	8.3
25	28	25,373	-49.7		09	9.5
20	28	26,842	-47.6		09	9.6
15	25	28,753	-45.5		09	11.2
10	21	31,481	-41.6		09	13.1
7	16	33,904	-38.2			

EMPALME, MEXICO
1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	26.8	23.6	06	.7
1000	31	97	27.2	23.4	11	.9
950	31	552	25.4	19.9	15	2.6
900	31	1,027	23.5	16.2	15	1.8
850	31	1,525	20.9	13.8	09	1.9
800	31	2,049	17.7	11.2	07	2.9
750	31	2,598	14.0	8.1	09	3.8
700	31	3,177	10.5	3.8	10	4.7
650	31	3,791	6.3	-.1	09	5.3
600	31	4,443	1.9	-4.2	09	5.3
550	31	5,141	-1.9	-11.1	09	4.3
500	31	5,893	-6.1	-18.2	08	3.1
450	31	6,711	-10.9	-23.7	09	2.0
400	31	7,606	-16.7	-31.4	13	.5
350	31	8,599	-23.7	-37.3	19	.7
300	31	9,703	-32.1	-45.6	24	.9
250	31	10,964	-42.0		25	3.0
200	31	12,436	-53.8		25	3.7
175	31	13,282	-60.2		25	3.2
150	31	14,227	-67.0		24	2.1
125	30	15,316	-71.7		16	1.0
100	27	16,628	-71.7		09	4.2
80	26	17,956	-67.9		08	8.8
70	25	18,766	-65.2		09	10.7
60	24	19,713	-62.8		09	13.1
50	22	20,846	-60.2		09	15.1
40	22	22,248	-57.5		09	16.9
30	20	24,080	-53.6		09	18.7
25	18	25,260	-52.0		09	20.3
20	17	26,710	-49.1		09	21.2
15	12	28,603	-45.8		09	21.4
10	9	31,305	-42.9			
7						

* FAIRBANKS, ALASKA
996 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	135	10.0	7.3	31	.5
1000	8	190	9.6	7.0		
950	31	529	9.6	4.6	26	2.1
900	31	976	6.7	2.1	25	3.7
850	31	1,443	3.4	-.3	25	4.5
800	31	1,932	.0	-2.2	24	4.7
750	31	2,447	-3.2	-5.0	24	4.9
700	31	2,990	-6.1	-10.6	24	5.5
650	31	3,567	-9.5	-15.3	24	5.5
600	31	4,181	-13.3	-21.0	24	5.7
550	31	4,838	-17.5	-25.8	24	5.8
500	31	5,545	-22.2	-31.1	24	6.7
450	30	6,308	-27.5	-36.3	24	7.7
400	30	7,145	-33.7	-42.3	24	7.8
350	29	8,070	-40.4	-43.9	25	8.2
300	29	9,102	-47.3		25	9.8
250	28	10,296	-51.0		26	10.6
200	28	11,760	-47.8		26	8.5
175	28	12,642	-47.6		26	7.6
150	28	13,661	-47.5		26	7.3
125	27	14,872	-48.2		26	6.1
100	25	16,345	-48.8		26	5.0
80	24	17,804	-48.9		26	3.3
70	24	18,682	-49.0		27	2.2
60	23	19,694	-48.9		26	1.9
50	23	20,892	-49.0		28	.7
40	23	22,358	-48.7		04	.5
30	22	24,261	-47.7		05	.4
25	21	25,470	-46.6		07	1.3
20	20	26,954	-44.9		07	1.9
15	18	28,887	-42.3		08	3.1
10	15	31,665	-37.4		08	3.9
7	6	34,165	-32.7			

FLINT, MICH.
989 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	236	16.9	15.6	22	1.4
1000						
950	31	582	19.0	13.6	27	3.9
900	31	1,046	16.6	10.8	28	4.1
850	31	1,531	13.4	6.2	28	4.5
800	31	2,040	11.3	.9	29	4.8
750	31	2,577	9.0	-5.1	28	5.1
700	31	3,145	5.5	-8.1	28	5.9
650	31	3,746	1.7	-11.7	28	7.1
600	31	4,387	-2.2	-17.1	28	8.6
550	31	5,073	-6.2	-21.5	28	9.2
500	31	5,812	-10.8	-26.3	28	9.3
450	31	6,615	-15.9	-31.8	28	9.8
400	31	7,492	-22.2	-37.7	29	10.4
350	31	8,463	-29.0	-43.4	29	11.6
300	31	9,544	-37.3	-49.7	28	13.1
250	31	10,780	-46.3		29	16.8
200	31	12,238	-53.4		29	17.1
175	31	13,092	-56.4		28	14.5
150	31	14,064	-59.4		28	11.8
125	31	15,200	-61.2		28	9.3
100	31	16,583	-61.2		29	5.0
80	31	17,973	-60.0		32	2.6
70	31	18,810	-58.5		02	1.7
60	31	19,783	-56.7		05	2.5
50	31	20,946	-54.7		07	3.6
40	28	22,381	-52.6		08	4.8
30	26	24,251	-49.7		08	6.3
25	26	25,448	-48.2		09	7.1
20	25	26,925	-45.9		09	8.8
15	23	28,849	-43.7		09	9.9
10	11	31,598	-39.7			
7						

FORT WORTH, TEXAS
995 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	180	22.9	19.2	19	2.5
1000						
950	31	583	23.4	17.1	21	5.8
900	31	1,055	21.5	14.0	20	5.2
850	31	1,548	18.3	11.0	19	2.6
800	31	2,066	15.2	6.8	16	.6
750	31	2,610	11.9	2.8	08	1.1
700	31	3,184	8.1	-1.1	08	1.3
650	31	3,793	4.7	-6.9	05	.8
600	31	4,442	1.3	-11.5	07	.9
550	31	5,137	-2.8	-17.2	06	1.5
500	31	5,886	-7.3	-22.0	04	1.5
450	31	6,699	-12.7	-27.0	03	1.5
400	31	7,587	-18.7	-33.5	01	2.2
350	31	8,572	-25.7	-40.4	35	2.6
300	31	9,667	-34.3	-47.6	33	3.5
250	31	10,917	-44.0		33	4.3
200	31	12,381	-54.0		33	4.6
175	31	13,228	-59.2		33	5.2
150	31	14,182	-64.4		34	5.0
125	31	15,286	-68.1		01	4.5
100	31	16,624	-68.1		05	3.9
80	31	17,973	-65.0		07	5.2
70	31	18,792	-63.1		08	6.1
60	31	19,747	-60.6		08	8.2
50	31	20,888	-58.5		09	10.1
40	31	22,301	-55.6		09	12.4
30	30	24,149	-52.0		09	15.1
25	28	25,337	-49.8		09	16.0
20	26	26,802	-47.3		09	16.3
15	24	28,710	-44.9		09	18.0
10	14	31,451	-40.9			
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

AUGUST 1973

GLASGOW, MONT. 931 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	696	16.5	8.5	09	1.6
1000						
950						
900	31	990	19.6	6.6	14	2.0
850	31	1,481	18.2	3.3	22	2.6
800	31	1,998	15.0	.6	24	3.8
750	31	2,540	11.1	-1.7	25	4.8
700	31	3,111	6.9	-4.4	26	6.7
650	31	3,716	2.4	-6.2	26	7.8
600	31	4,358	-2.3	-9.2	26	9.1
550	31	5,043	-7.1	-14.1	26	11.3
500	31	5,779	-12.4	-20.6	26	12.2
450	31	6,576	-17.9	-28.7	26	13.7
400	31	7,446	-24.0	-35.2	26	15.4
350	31	8,409	-31.4	-41.7	26	16.6
300	31	9,480	-39.6	-48.8	26	18.3
250	31	10,703	-48.3		26	21.7
200	31	12,154	-53.2		26	22.8
175	30	13,017	-54.3		26	21.2
150	30	14,002	-55.5		27	15.4
125	30	15,160	-57.4		27	11.5
100	30	16,566	-58.4		27	5.9
80	30	17,972	-57.6		27	2.9
70	30	18,818	-56.6		27	1.4
60	30	19,799	-55.2		06	.4
50	30	20,967	-53.6		08	1.6
40	30	22,408	-51.9		08	2.7
30	29	24,260	-49.7		09	4.0
25	29	25,478	-48.0		08	5.0
20	28	26,954	-45.8		09	4.8
15	24	28,880	-43.5		09	5.9
10	19	31,619	-40.1		09	6.2
7						
5						

GRAND JUNCTION, COLO. 854 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,472	19.1	5.7	13	4.1
1000						
950						
900						
850	28	1,514	19.6	5.9	13	4.4
800	31	2,033	19.3	4.5	15	5.1
750	31	2,585	16.6	1.8	20	3.3
700	31	3,168	12.3	-1.3	24	4.2
650	31	3,785	7.3	-3.1	24	5.2
600	31	4,437	1.8	-5.0	25	6.2
550	31	5,132	-3.9	-9.9	24	6.5
500	31	5,877	-9.1	-17.4	25	6.8
450	31	6,685	-13.8	-25.3	24	6.5
400	31	7,570	-19.9	-32.0	25	7.5
350	31	8,550	-27.0	-38.7	25	9.5
300	31	9,640	-35.4	-46.7	26	11.9
250	31	10,885	-44.7		26	14.0
200	31	12,348	-53.9		27	15.1
175	31	13,197	-58.4		26	14.5
150	31	14,154	-63.3		26	12.8
125	31	15,266	-66.5		27	8.9
100	30	16,615	-66.4		25	3.5
80	30	17,980	-62.8		16	.4
70	30	18,816	-61.1		09	2.1
60	30	19,769	-58.9		08	4.4
50	29	20,919	-56.8		08	5.9
40	28	22,340	-54.5		09	6.7
30	28	24,197	-51.4		09	9.0
25	25	25,389	-49.5		09	9.7
20	24	26,859	-47.1		09	10.0
15	21	28,768	-45.1		08	12.0
10	10	31,496	-41.6			
7						
5						

*** GREAT FALLS, MONT.** 887 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,118	15.3	4.5	23	3.1
1000						
950						
900						
850	31	1,486	17.5	1.6	25	4.4
800	31	2,001	14.5	-.6	27	3.5
750	31	2,543	10.5	-2.8	26	4.6
700	31	3,112	6.0	-5.0	26	5.9
650	31	3,715	1.6	-7.4	26	8.1
600	31	4,354	-3.0	-11.8	25	10.5
550	31	5,037	-7.8	-16.7	25	12.2
500	31	5,772	-12.9	-22.8	25	13.9
450	31	6,567	-18.6	-28.9	25	13.7
400	31	7,435	-24.8	-36.2	25	15.4
350	31	8,396	-31.7	-42.8	25	17.3
300	31	9,464	-40.1	-49.1	25	20.1
250	31	10,685	-48.4		25	24.2
200	31	12,137	-52.6		25	23.8
175	31	12,998	-53.7		25	21.3
150	31	13,985	-55.7		26	16.9
125	31	15,141	-57.8		25	12.0
100	31	16,546	-58.8		26	7.3
80	31	17,947	-58.2		26	3.6
70	31	18,792	-56.6		27	1.7
60	30	19,772	-55.7		13	.2
50	29	20,938	-54.1		10	1.4
40	29	22,376	-52.3		08	2.8
30	28	24,245	-50.1		08	4.0
25	28	25,442	-48.3		09	5.0
20	27	26,920	-46.1		08	5.9
15	25	28,837	-44.0		09	5.8
10	22	31,576	-39.8		08	7.6
7	17	34,032	-35.8		09	9.7
5	6	36,349	-33.4			

GREEN BAY, WIS. 991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	210	17.2	15.6	22	1.3
1000						
950	31	573	19.0	13.4	25	5.5
900	31	1,037	16.7	10.5	26	6.2
850	31	1,522	13.7	6.8	27	5.8
800	31	2,031	11.2	1.8	27	5.8
750	31	2,568	8.3	-1.3	27	6.6
700	31	3,135	5.0	-6.1	28	6.7
650	31	3,736	1.4	-10.4	28	7.1
600	31	4,376	-2.3	-15.1	28	7.7
550	31	5,062	-6.3	-21.4	28	8.3
500	31	5,801	-11.1	-27.5	28	8.6
450	31	6,602	-16.4	-31.6	29	9.6
400	31	7,477	-22.6	-35.9	29	10.6
350	31	8,446	-29.7	-42.5	29	11.8
300	31	9,524	-37.8	-49.8	29	14.5
250	31	10,757	-46.7		29	17.5
200	31	12,213	-53.7		29	17.6
175	31	13,066	-56.3		29	16.6
150	31	14,040	-58.5		29	13.7
125	31	15,181	-60.1		28	10.1
100	31	16,571	-60.3		29	5.3
80	31	17,965	-59.3		31	3.2
70	31	18,805	-58.0		35	2.0
60	31	19,779	-56.6		04	1.9
50	31	20,942	-54.6		06	2.8
40	30	22,380	-52.2		07	4.5
30	29	24,251	-49.4		08	5.4
25	29	25,451	-47.7		08	6.2
20	26	26,930	-46.2		08	7.7
15	21	28,858	-43.0		08	9.1
10	12	31,615	-39.0		09	6.0
7						
5						

GREENSBORO, N. C. 987 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	275	19.7	19.0	35	.4
1000						
950	31	604	21.5	18.2	34	1.2
900	31	1,072	19.2	14.9	34	1.5
850	31	1,562	16.3	10.7	32	1.2
800	31	2,076	13.3	5.8	28	1.5
750	31	2,617	10.4	1.1	27	2.2
700	31	3,189	6.9	-2.8	26	2.7
650	31	3,795	3.5	-6.8	26	3.2
600	31	4,440	.1	-11.7	27	4.1
550	31	5,133	-3.5	-17.6	26	4.3
500	31	5,880	-7.9	-22.3	26	4.5
450	30	6,692	-13.0	-28.5	27	5.0
400	30	7,579	-19.1	-34.0	26	5.5
350	30	8,562	-26.2	-38.7	26	6.0
300	30	9,656	-34.4	-47.4	27	6.5
250	30	10,906	-43.7		27	7.4
200	30	12,372	-53.9		28	8.2
175	30	13,218	-59.4		27	6.5
150	30	14,173	-63.6		26	4.5
125	30	15,283	-66.5		28	2.1
100	30	16,635	-65.3		04	.9
80	30	18,002	-62.8		08	3.3
70	30	18,829	-60.9		09	4.4
60	30	19,795	-57.9		08	5.6
50	30	20,950	-56.0		09	7.5
40	30	22,380	-53.0		09	8.9
30	28	24,245	-50.6		09	11.1
25	28	25,439	-48.8		09	12.4
20	27	26,914	-46.6		09	13.8
15	23	28,834	-44.3		09	15.0
10	7	31,582	-40.7			
7						
5						

GUADALUPE IS., MEXICO 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	23	17.4	15.0	33	5.2
1000	30	121	16.6	14.7	33	5.0
950	30	558	16.7	9.4	32	3.7
900	30	1,023	21.4	3.0	33	2.5
850	30	1,517	20.4	2.8	32	1.8
800	30	2,038	17.5	.4	31	1.4
750	30	2,586	14.0	-2.3	30	1.0
700	30	3,163	10.0	-6.0	29	.8
650	30	3,775	5.9	-10.1	29	.7
600	30	4,425	1.5	-13.5	28	.6
550	30	5,121	-2.5	-18.9	27	.7
500	30	5,871	-6.7	-24.9	21	.9
450	30	6,686	-11.6	-29.4	20	.9
400	30	7,578	-17.5	-35.2	17	1.3
350	30	6,568	-24.6	-41.2	16	1.8
300	30	9,668	-32.9	-48.0	12	1.7
250	30	10,926	-42.5		14	2.4
200	30	12,398	-53.3		16	2.6
175	30	13,247	-59.0		15	2.6
150	30	14,200	-65.5		15	2.6
125	29	15,297	-70.3		16	3.7
100	29	16,621	-70.1		15	2.9
80	28	17,956	-66.7		14	2.6
70	27	18,768	-64.2		13	3.3
60	24	19,722	-61.8		12	3.3
50	24	20,858	-59.2		11	5.0
40	23	22,261	-56.7		11	4.7
30	17	24,102	-53.6		10	7.0
25	15	25,281	-51.5		10	8.0
20	11	26,726	-49.0		11	7.6
15	6	28,602	-46.4			
10						
7						
5						

*** GUAM, MARIANA IS.** 999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	111	25.0	23.5	10	1.8
1000	6	112	25.0	23.7		
950	31	551	23.6	20.9	10	5.6
900	31	1,023	21.1	17.4	10	5.5
850	31	1,517	18.2	14.1	10	5.1
800	31	2,035	15.6	11.2	10	4.9
750	31	2,562	12.7	7.7	11	4.9
700	31	3,159	9.7	3.3	11	5.2
650	31	3,771	6.2	.3	11	4.3
600	31	4,424	2.2	-3.2	10	3.6
550	31	5,122	-1.8	-7.2	10	3.0
500	31	5,875	-6.2	-12.3	09	2.3
450	30	6,693	-10.8	-18.3	08	2.1
400	30	7,589	-16.4	-22.9	05	.8
350	30	8,583	-23.3	-31.1	02	.7
300	30	9,690	-31.6	-39.6	36	1.5
250	30	10,952	-42.1		33	2.6
200	29	12,421	-54.8		34	5.7
175	29	13,261	-61.9		34	6.2
150	29	14,198	-69.2		34	6.5
125	29	15,270	-75.4		35	4.9
100	27	16,555	-75.7		06	5.1
80	24	17,861	-71.5		09	10.3
70	24	18,656	-68.5		09	11.7
60	24	19,585	-66.2		09	11.9
50	24	20,700	-62.4		09	13.6
40	23	22,088	-59.4		09	14.5
30	23	23,904	-55.6		09	16.8
25	22	25,069	-53.5		09	18.2
20	20	26,509	-51.2		09	22.5
15	15	28,391	-48.6		09	27.9
10						
7						
5						

HILO, HAWAII 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	21.7	19.6	24	1.7
1000	31	152	22.5	18.6	26	.7
950	31	597	19.2	16.5	07	2.3
900	31	1,061	15.9	13.8	07	4.0
850	31	1,545	12.8	10.1	07	4.4
800	31	2,052	10.1	5.4	07	3.9
750	31	2,590	10.9	-6.6	09	4.3
700	31	3,164	9.3	-9.5	09	2.7
650	31	3,775	6.0	-12.3	11	1.9
600	31	4,426	2.4	-16.0	12	1.5
550	31	5,123	-1.8	-20.9	15	1.1
500	31	5,874	-6.8	-25.0	18	.8
450	31	6,688	-12.1	-29.2	24	1.8
400	31	7,578	-18.4	-35.1	24	3.3
350	31	8,563	-25.8	-40.5	26	6.7
300	31	9,658	-34.4	-48.0	26	10.4
250	31	10,906	-44.3		26	13.9
200	31	12,364	-55.9		26	16.1
175	31	13,201	-62.1		26	16.7
150	31	14,140	-68.0		26	14.2
125	31	15,227	-70.5		24	7.4
100	31	16,545	-71.8		14	2.5
80	31	17,869	-69.1		10	7.1
70	31	18,672	-66.7		09	9.9
60	31	19,609	-64.5		09	12.1
50	31	20,730	-62.2		09	14.6
40	31	22,119	-59.2		09	16.7
30	30	23,940	-55.0		09	19.7
25	30	25,110	-53.1		09	22.1
20	29	26,559	-49.8		09	24.0
15	23	28,453	-47.4		09	27.4
10	16	31,152	-43.6		09	29.7
7						
5						

HUNTINGTON W. VA. 989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	19.4	18.6	20	.6
1000						
950	31	592	21.2	16.6	27	2.2
900	31	1,060	18.6	14.0	28	2.9
850	31	1,548	15.5	10.1	28	3.6
800	31	2,061	12.5	4.6	28	4.2
750	31	2,600	9.8	-1.7	27	4.3
700	31	3,171	6.8	-7.6	27	4.4
650	31	3,776	3.8	-11.8	28	4.8
600	31	4,422	.3	-13.8	28	4.4
550	31	5,115	-4.2	-17.2	28	4.9
500	31	5,860	-8.7	-23.8	27	5.5
450	31	6,669	-13.7	-29.5	28	5.3
400	31	7,554	-19.8	-34.6	28	6.1
350	31	8,534	-26.6	-40.5	29	7.1
300	31	9,626	-34.9	-48.2	29	7.6
250	31	10,874	-44.1		29	9.0
200	31	12,339	-53.8		28	10.4
175	31	13,167	-58.6		29	9.6
150	30	14,147	-62.5		28	6.8
125	30	15,266	-64.3		28	3.3
100	30	16,630	-64.1		32	1.3
80	30	18,004	-61.8		04	2.4
70	30	18,834	-60.2		06	3.0
60	30	19,800	-58.0		08	4.3
50	29	20,958	-55.4		08	5.5
40	29	22,390	-53.1		08	7.0
30	28	24,253	-50.5		09	8.8
25	27	25,444	-48.5		09	9.4
20	25	26,922	-46.1		09	11.3
15	20	28,841	-44.0		09	13.5
10	8	31,546	-40.4			
7						
5						

*** INTERNATIONAL FALLS, MINN.** 971 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	359	15.3	13.3	15	1.0
1000						
950	31	545	17.4	13.3	19	1.6
900	31	1,008	16.0	10.3	23	3.1
850	31	1,492	13.7	5.0	26	3.4
800	31	2,002	11.4	.7	27	4.3
750	31	2,539	8.7	-3.5	28	5.8
700	31	3,106	5.1	-6.4	28	6.9
650	31	3,707	1.4	-10.8	28	8.2
600	31	4,346	-2.8	-15.1	28	8.9
550	31	5,031	-7.0	-20.8	29	9.8
500	31	5,767	-11.7	-26.7	29	10.9
450	31	6,567	-17.0	-32.2	29	11.5
400	31	7,439	-23.4	-37.6	29	13.1
350	31	8,405	-30.5	-43.3	29	15.2
300	30	9,480	-38.8	-49.6	28	17.3
250	30	10,708	-47.8		28	20.3
200	30	12,157	-54.5		28	19.5
175	30	13,011	-54.8		28	17.3
150	30	13,995	-56.0		28	14.6
125	30	15,151	-57.3		28	11.1
100	29	16,559	-57.7		29	7.6
80	29	17,970	-56.7		30	4.1
70	29	18,819	-55.8		32	2.5
60	29	19,804	-54.7		35	1.9
50	29	20,975	-53.0		07	1.7
40	28	22,425	-50.8		07	3.0
30	28	24,310	-48.0		08	4.7
25	28	25,519	-45.9		09	5.1
20	26	27,013	-44.0		09	5.7
15	25	26,952	-41.7		09	6.1
10	23	31,734	-37.1		08	7.6
7	14	34,207	-33.5			
5	5	36,548	-32.4			

JACKSON, MISS. 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	100	21.3	19.2	16	.3
1000	31	148	21.9	19.6	18	.3
950	31	596	22.6	17.7	23	.3
900	31	1,066	19.8	14.8	22	.4
850	31	1,557	16.6	10.2	24	.3
800	31	2,072	14.3	5.3	26	.5
750	31	2,615	11.1	2.7	27	.8
700	31	3,188	7.5	-1.1	27	1.2
650	31	3,795	4.3	-4.2	28	1.2
600	31	4,443	.7	-8.8	26	1.2
550	31	5,137	-3.3	-13.3	26	1.4
500	31	5,895	-7.6	-18.8	25	1.2
450	31	6,698	-12.6	-23.7	28	.7
400	31	7,587	-18.7	-29.8	25	1.1
350	31	8,572	-25.6	-37.0	23	1.1
300	31	9,668	-34.0	-45.5	23	1.5
250	31	10,919	-43.9		22	2.0
200	30	12,380	-55.1		24	2.3
175	30	13,222	-60.6		27	1.8
150	30	14,170	-65.5		33	1.8
125	30	15,270	-67.9		01	1.8
100	29	16,612	-67.7		05	3.2
80	29	17,963	-64.9		08	5.7
70	29	18,783	-62.3		09	6.7
60	29	19,740	-60.4		08	8.5
50	29	20,883	-58.4		08	10.1
40	27	22,294	-55.6		09	13.0
30	26	24,140	-52.9		09	15.4
25	25	25,324	-50.4		09	16.1
20	24	26,788	-48.4		09	18.4
15	21	28,590	-45.8		09	19.5
10	7	31,420	-40.6			

JOHN F. KENNEDY INT. AP NY 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	22.2	18.7	30	.7
1000	31	146	22.0	18.0	32	1.3
950	31	592	20.6	14.9	32	2.6
900	31	1,058	17.6	12.1	28	1.3
850	31	1,545	14.6	9.0	29	1.8
800	31	2,056	12.0	2.7	29	3.1
750	31	2,594	9.3	-2.7	29	4.3
700	31	3,163	6.0	-5.5	29	5.6
650	31	3,767	3.1	-10.0	29	6.9
600	31	4,412	-.3	-13.0	29	8.4
550	31	5,103	-4.2	-17.1	28	7.5
500	31	5,849	-8.5	-22.7	28	8.8
450	30	6,658	-13.7	-28.2	27	9.9
400	30	7,543	-20.0	-33.6	27	10.0
350	30	8,523	-26.8	-39.8	26	10.6
300	30	9,614	-35.0	-48.3	26	12.9
250	30	10,861	-44.4		27	13.9
200	30	12,322	-54.5		27	14.9
175	30	13,169	-58.7		27	14.5
150	30	14,129	-61.6		28	12.9
125	30	15,253	-63.5		27	9.5
100	30	16,623	-63.0		29	4.6
80	30	18,005	-60.4		33	1.6
70	30	18,841	-58.5		02	1.0
60	30	19,816	-56.3		06	2.5
50	30	20,979	-54.5		07	3.6
40	29	22,417	-52.2		08	5.2
30	28	24,291	-49.4		09	7.4
25	27	25,492	-47.8		09	8.7
20	24	26,974	-46.0		08	11.0
15	21	28,916	-42.8		09	13.9
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JOHNSTON IS., PACIFIC AREA 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	26.3	22.0	09	6.5
1000	31	126	24.9	21.7	09	7.4
950	31	575	21.2	19.1	09	8.7
900	31	1,043	18.2	14.6	09	9.0
850	31	1,531	15.2	11.4	09	8.0
800	31	2,044	13.5	5.9	09	6.3
750	31	2,586	11.5	-1.8	10	4.7
700	31	3,160	8.7	-6.7	10	3.3
650	31	3,770	5.6	-10.5	09	2.5
600	31	4,420	2.0	-14.4	09	2.1
550	31	5,117	-2.0	-18.2	09	1.1
500	31	5,868	-6.6	-21.5	12	.5
450	31	6,683	-12.2	-26.0	25	1.1
400	31	7,572	-18.5	-31.9	27	4.0
350	31	8,558	-25.6	-38.7	26	6.9
300	31	9,654	-34.0	-46.1	26	10.1
250	31	10,904	-44.2		26	13.4
200	30	12,361	-56.3		26	16.7
175	30	13,196	-63.0		26	18.1
150	30	14,131	-69.4		26	16.6
125	30	15,209	-71.4		26	10.6
100	29	16,525	-72.1		20	1.7
80	29	17,845	-69.7		09	7.0
70	28	18,545	-67.3		09	9.7
60	28	19,579	-65.1		09	10.9
50	28	20,698	-62.3		09	12.5
40	28	22,085	-59.6		09	15.8
30	26	23,905	-55.5		09	19.5
25	26	25,073	-53.7		09	20.1
20	25	26,519	-50.5		09	23.8
15	20	28,408	-47.3		09	27.2
10	16	31,120	-42.5		09	31.1

KEY WEST, FLA. 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	27.0	23.5	12	2.5
1000	31	129	26.6	22.9	12	3.4
950	31	581	23.2	20.5	12	4.8
900	31	1,053	20.4	16.2	12	4.6
850	31	1,545	17.3	12.1	12	4.0
800	31	2,061	14.6	7.7	13	3.7
750	31	2,605	11.8	3.3	13	3.3
700	31	3,179	8.4	-.9	12	2.7
650	31	3,789	5.0	-4.5	11	3.1
600	31	4,438	1.1	-8.2	11	3.2
550	31	5,133	-2.8	-13.2	10	3.3
500	31	5,882	-7.4	-17.6	10	2.8
450	31	6,696	-12.3	-22.8	09	2.4
400	31	7,586	-18.2	-28.7	07	2.3
350	31	8,574	-25.1	-36.7	04	1.6
300	30	9,671	-33.3	-44.4	05	1.5
250	30	10,925	-43.6		35	2.6
200	30	12,365	-55.7		33	2.2
175	30	13,224	-62.0		35	3.2
150	30	14,164	-67.7		02	3.0
125	29	15,255	-69.7		05	4.3
100	29	16,582	-69.7		07	5.3
80	29	17,920	-67.0		08	9.5
70	28	18,731	-64.9		08	11.6
60	28	19,678	-62.3		08	14.6
50	27	20,811	-59.6		09	16.5
40	24	22,217	-56.8		09	17.7
30	24	24,058	-52.6		09	18.4
25	26	25,243	-50.1		09	19.3
20	26	26,712	-46.9		09	20.7
15	25	28,633	-44.0		09	22.9
10	4	31,393	-40.1			

*** KOROR, CAROLINE IS.** 1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	27.9	24.2	09	1.5
1000	31	87	26.8	24.0	10	1.5
950	31	540	23.8	21.5	11	2.2
900	31	1,012	20.8	17.6	10	2.6
850	31	1,506	17.9	13.9	10	2.9
800	31	2,024	15.6	10.0	10	3.5
750	31	2,570	12.8	6.9	10	3.8
700	31	3,148	9.7	3.7	10	4.1
650	31	3,761	6.2	1.6	10	4.3
600	31	4,413	2.5	-1.7	10	4.2
550	31	5,113	-1.2	-6.4	10	4.2
500	31	5,868	-5.3	-10.5	10	4.3
450	31	6,689	-10.1	-15.4	09	4.3
400	31	7,588	-15.5	-23.2	09	4.7
350	31	8,587	-22.1	-31.5	09	5.1
300	31	9,699	-30.5	-41.1	08	5.8
250	31	10,967	-40.8	-49.8	06	7.0
200	31	12,445	-53.3		05	7.9
175	31	13,291	-60.4		04	9.3
150	31	14,234	-68.0		05	8.9
125	31	15,309	-75.9		06	8.3
100	30	16,581	-78.8		08	7.3
80	29	17,879	-71.2		08	9.5
70	28	18,673	-67.7		08	8.6
60	28	19,606	-65.2		09	8.3
50	28	20,725	-61.9		09	8.1
40	26	22,117	-59.2		09	8.4
30	25	23,934	-55.9		09	9.1
25	24	25,100	-54.3		09	10.4
20	22	26,537	-51.0		09	13.8
15	19	28,418	-48.5		09	20.7
10	13	31,123	-44.2		09	31.7

RAWINSONDE DATA

Average monthly values

KWAJALEIN, MARSHALL IS. 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	[illegible]	27.2	24.2	08	5.5
1000	31	97	26.5	24.0	08	6.3
950	31	550	23.0	21.5	09	8.6
900	31	1,021	20.2	17.5	09	9.2
850	31	1,513	17.5	14.9	09	9.4
800	31	2,031	15.0	11.6	09	9.4
750	31	2,576	12.5	7.1	09	9.5
700	31	3,153	9.6	3.2	09	9.1
650	31	3,766	6.1	-1.7	09	8.6
600	31	4,418	2.3	-5.8	09	8.2
550	31	5,116	-1.7	-10.2	09	8.3
500	31	5,870	-5.9	-17.4	09	7.4
450	31	6,688	-10.7	-21.7	09	6.0
400	31	7,584	-16.4	-27.4	09	3.3
350	31	8,575	-23.5	-32.4	22	.4
300	31	9,684	-32.0	-41.0	24	2.7
250	31	10,944	-42.6	-50.8	26	5.1
200	31	12,409	-55.3	-62.7	26	8.0
175	31	13,248	-62.1		27	9.9
150	31	14,183	-69.5		27	11.3
125	30	15,252	-76.2		27	10.0
100	26	16,536	-77.5		18	.9
80	25	17,835	-71.5		09	7.4
70	24	18,631	-68.4		09	7.1
60	23	19,562	-65.6		09	7.7
50	23	20,677	-63.1		09	8.0
40	22	22,062	-59.4		09	10.1
30	22	23,877	-56.0		09	10.9
25	22	25,040	-54.9		09	11.5
20	19	26,472	-52.9		08	16.5
15	18	28,344	-49.3		09	23.4
10	11	31,035	-43.6			
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LAKE CHARLES, LA. 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	22.2	20.6	05	1.6
1000	31	142	23.9	20.4	09	1.7
950	31	591	22.0	17.5	15	2.4
900	31	1,060	19.5	14.3	16	2.1
850	31	1,551	16.8	9.4	15	1.5
800	31	2,066	14.0	6.6	13	1.1
750	31	2,608	10.9	3.1	11	.7
700	31	3,180	7.4	.0	09	.6
650	31	3,788	4.2	-2.7	09	.3
600	31	4,436	.7	-8.1	15	.2
550	31	5,130	-3.5	-13.3	33	.3
500	31	5,878	-7.8	-18.1	32	.5
450	31	6,691	-12.7	-23.3	29	.9
400	31	7,580	-18.5	-31.0	29	1.6
350	31	8,565	-25.8	-38.2	29	1.3
300	31	9,660	-34.2	-46.1	29	1.8
250	31	10,910	-44.1		29	2.2
200	31	12,371	-54.9		29	3.0
175	31	13,214	-60.0		31	3.4
150	31	14,164	-65.2		36	3.6
125	31	15,266	-68.6		01	2.3
100	31	16,603	-67.9		05	4.8
80	31	17,952	-65.3		08	7.1
70	31	18,770	-63.0		08	7.9
60	31	19,724	-61.2		09	9.8
50	31	20,862	-59.1		08	12.4
40	31	22,270	-56.5		09	15.1
30	29	24,113	-52.5		09	17.5
25	28	25,297	-50.5		09	18.6
20	25	26,763	-48.5		09	19.5
15	20	28,660	-45.2		09	20.2
10	6	31,412	-41.7			
7						

LANDER, WYO. 831 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,697	15.1	3.0	23	1.5
1000						
950						
900						
850						
800	31	2,021	17.9	1.0	24	1.1
750	31	2,570	15.1	-1.8	26	2.7
700	31	3,150	10.8	-4.7	26	4.6
650	31	3,763	5.9	-6.7	26	6.8
600	31	4,412	.6	-9.5	25	8.9
550	31	5,103	-4.7	-13.8	25	10.4
500	31	5,847	-9.9	-20.2	26	10.8
450	31	6,652	-15.3	-27.2	26	12.2
400	31	7,530	-21.6	-33.8	25	14.4
350	31	8,503	-29.0	-41.1	25	17.8
300	31	9,583	-37.5	-48.2	25	19.8
250	31	10,817	-46.6		25	23.3
200	31	12,269	-54.9		26	25.8
175	31	13,117	-58.1		26	24.7
150	31	14,080	-61.3		26	19.6
125	31	15,205	-63.7		26	12.2
100	31	16,574	-63.3		26	4.9
80	31	17,955	-60.6		07	.7
70	31	18,789	-59.6		10	2.2
60	30	19,755	-58.1		08	4.3
50	28	20,909	-56.1		09	5.3
40	26	22,335	-54.2		08	7.2
30	26	24,196	-50.4		08	9.1
25	26	25,390	-48.9		08	9.3
20	25	26,861	-47.0		09	10.8
15	22	28,777	-44.6		09	11.0
10	8	31,507	-42.8			
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*** LIHUE KAUAI, HAWAII 1015 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	36	24.6	20.7	06	4.7
1000	31	162	23.6	20.1	06	5.8
950	31	610	20.0	18.0	07	7.2
900	31	1,075	16.5	14.1	08	7.9
850	31	1,560	13.5	10.6	08	8.2
800	31	2,069	11.3	5.5	08	8.1
750	31	2,607	10.4	-4.2	08	6.6
700	31	3,180	8.9	-11.1	08	4.4
650	31	3,790	5.7	-14.1	08	2.5
600	31	4,440	2.0	-16.7	11	1.6
550	31	5,136	-2.4	-20.5	13	.9
500	31	5,886	-7.1	-24.5	24	1.4
450	30	6,700	-12.7	-29.0	25	2.6
400	30	7,587	-19.6	-34.2	25	5.4
350	29	8,568	-27.0	-40.6	25	8.1
300	27	9,658	-35.7	-48.1	26	11.1
250	26	10,899	-45.7		25	14.6
200	26	12,349	-56.6		25	19.2
175	25	13,183	-61.8		25	20.9
150	25	14,126	-66.5		25	17.0
125	25	15,227	-67.2		23	8.8
100	25	16,564	-69.6		18	2.4
80	24	17,899	-67.5		10	6.6
70	24	18,709	-65.3		09	9.9
60	23	19,651	-63.6		09	12.6
50	22	20,775	-61.5		09	15.1
40	20	22,168	-58.2		09	16.5
30	20	23,995	-54.9		09	20.2
25	20	25,167	-52.4		09	22.7
20	20	26,622	-49.2		09	24.0
15	18	28,534	-45.7		09	25.3
10	16	31,253	-42.7		09	27.0
7	14	33,686	-38.7		09	29.8

LITTLE ROCK, ARK. 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	21.4	17.7	23	.6
1000	31	145	22.9	19.8	22	1.0
950	31	595	23.1	16.9	22	3.2
900	31	1,065	20.4	13.8	22	2.7
850	31	1,557	16.9	10.6	22	2.0
800	31	2,072	13.8	7.1	25	1.2
750	31	2,614	10.9	.7	26	.8
700	31	3,186	7.7	-4.9	27	.8
650	31	3,793	4.2	-7.5	27	1.0
600	31	4,441	.8	-13.0	29	1.2
550	31	5,135	-2.9	-18.2	28	1.1
500	31	5,884	-7.6	-23.3	29	.9
450	31	6,696	-12.8	-28.6	32	1.3
400	29	7,583	-19.1	-34.7	32	1.3
350	29	8,566	-26.2	-40.6	34	2.2
300	29	9,658	-34.9	-47.3	33	2.3
250	28	10,907	-44.4		31	2.4
200	28	12,369	-54.3		30	3.6
175	28	13,216	-59.1		31	4.3
150	28	14,172	-63.8		34	3.0
125	28	15,282	-66.5		35	3.4
100	28	16,631	-66.1		04	2.6
80	27	17,994	-63.7		07	3.8
70	26	18,816	-62.0		07	5.2
60	26	19,776	-59.5		08	7.1
50	26	20,924	-56.9		09	8.3
40	26	22,343	-55.1		09	10.0
30	24	24,196	-51.5		09	12.6
25	23	25,384	-49.6		09	14.0
20	21	26,857	-47.0		09	15.5
15	19	28,781	-44.3		09	17.1
10	9	31,516	-42.3			
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MCGRATH, ALASKA 1000 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	103	8.3	5.4	19	.9
1000	13	162	9.8	5.2	19	1.1
950	31	530	8.6	5.0	22	3.9
900	31	976	5.8	2.9	22	5.0
850	31	1,441	2.6	.7	22	5.0
800	31	1,930	-.3	-1.9	21	5.1
750	31	2,444	-3.1	-5.5	21	5.5
700	31	2,988	-6.0	-10.4	22	5.1
650	31	3,566	-8.7	-15.8	23	5.3
600	31	4,182	-12.5	-20.5	24	5.7
550	31	4,841	-16.8	-25.7	24	5.9
500	31	5,551	-21.4	-30.7	25	6.3
450	31	6,320	-26.5	-34.9	26	6.8
400	31	7,161	-32.2	-40.8	26	7.7
350	31	8,093	-38.8	-42.5	26	9.3
300	26	9,107	-45.9		25	9.8
250	25	10,315	-49.2		26	11.7
200	25	11,787	-46.8		25	10.4
175	24	12,660	-46.2		25	10.2
150	23	13,679	-46.4		26	8.9
125	23	14,887	-47.2		25	7.6
100	23	16,361	-48.2		26	6.4
80	23	17,833	-48.0		25	4.1
70	23	18,714	-48.2		26	3.4
60	22	19,730	-48.4		27	2.0
50	22	20,931	-48.3		23	.7
40	21	22,398	-48.0		11	.2
30	21	24,299	-47.1		10	.7
25	19	25,521	-46.3		08	.7
20	17	27,013	-45.1		05	1.3
15	10	28,989	-42.0			
10						
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5						

MAJURO, MARSHALL IS. + 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	[illegible]	28.2	24.2	09	4.1
1000	31	93	26.9	22.6	09	5.1
950	31	546	23.6	20.8	09	7.1
900	31	1,018	20.7	17.4	10	8.1
850	31	1,511	17.8	14.2	10	8.7
800	31	2,029	15.5	10.9	09	8.5
750	31	2,576	13.1	6.3	09	9.0
700	31	3,154	10.1	3.4	10	8.4
650	31	3,768	6.9	-1.2	10	8.7
600	31	4,422	3.3	-6.2	10	8.7
550	31	5,123	-.5	-10.2	10	8.5
500	31	5,880	-4.8	-14.9	10	7.6
450	31	6,702	-9.5	-20.7	09	6.6
400	31	7,603	-15.0	-26.1	10	5.2
350	31	8,603	-21.9	-33.5	09	3.4
300	31	9,716	-30.2	-42.1	05	1.5
250	31	10,985	-40.7	-51.5	30	1.7
200	31	12,464	-53.2		28	5.0
175	31	13,311	-60.0		28	7.3
150	31	14,255	-67.8		28	8.9
125	30	15,336	-74.2		28	7.3
100	30	16,624	-75.9		10	2.4
80	30	17,931	-69.6		10	5.4
70	29	18,732	-66.6		10	6.2
60	29	19,673	-63.6		10	5.9
50	29	20,800	-60.6		10	5.3
40	28	22,198	-58.5		10	5.4
30	27	24,025	-54.5		10	6.3
25	27	25,197	-52.9		10	7.7
20	24	26,638	-51.1		09	12.0
15	21	28,523	-47.5		09	20.1
10	9	31,244	-41.9			
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5						

*** MEDFORD, OREG. 969 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	401	14.0	6.5	29	.2
1000						
950	31	570	16.4	6.9	28	.8
900	31	1,029	15.0	5.6	29	1.0
850	31	1,512	13.4	2.9	30	.5
800	31	2,022	12.3	-2.9	25	.8
750	31	2,560	9.5	-5.9	23	3.0
700	31	3,129	5.8	-9.1	23	4.8
650	31	3,731	2.2	-12.4	23	5.9
600	31	4,372	-1.7	-18.7	24	6.1
550	31	5,059	-6.3	-23.4	24	6.8
500	31	5,797	-11.4	-28.1	24	8.1
450	31	6,597	-16.9	-33.1	25	8.6
400	31	7,470	-23.3	-37.7	25	10.2
350	31	8,436	-30.5	-44.0	25	12.0
300	31	9,511	-38.5	-50.9	25	15.0
250	31	10,742	-46.6		25	16.3
200	31	12,203	-52.3		25	18.5
175	31	13,061	-55.1		25	18.1
150	31	14,040	-57.8		25	15.3
125	31	15,183	-60.1		25	10.6
100	31	16,572	-60.9		25	6.0
80	31	17,964	-59.8		22	1.9
70	31	18,800	-59.1		20	.8
60	30	19,771	-57.2		09	1.6
50	30	20,928	-55.8		08	3.0
40	28	22,358	-53.6		09	5.1
30	26	24,219	-51.0		08	7.1
25	26	25,411	-49.5		09	7.9
20	26	26,880	-47.4		09	8.7
15	25	28,794	-45.0		09	10.3
10	22	31,519	-41.5		09	11.3
7	14	33,955	-37.4		09	13.3
5	8	36,317	-33.1			

MERIDA, MEXICO 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	11	23.0	22.5	08	.9
1000	31	115	24.6	23.8	11	3.7
950	31	567	23.4	20.6	12	7.4
900	31	1,039	21.2	16.4	12	7.7
850	31	1,533	18.4	12.2	12	7.1
800	31	2,051	15.7	8.5	12	6.3
750	31	2,597	12.5	5.1	13	6.3
700	31	3,173	9.1	.6	13	5.0
650	31	3,784	5.6	-2.7	12	4.6
600	31	4,435	1.8	-4.9	12	4.5
550	31	5,132	-2.0	-10.3	10	4.2
500	31	5,884	-6.2	-14.5	09	4.4
450	31	6,702	-10.8	-21.4	07	4.6
400	31	7,598	-16.8	-26.2	07	4.2
350	31	8,590	-23.6	-33.9	06	3.7
300	31	9,695	-32.0	-41.8	04	2.3
250	31	10,956	-42.2		36	1.8
200	31	12,426	-54.4		32	3.1
175	31	13,269	-60.7		33	4.2
150	31	14,212	-67.6		33	4.3
125	29	15,298	-71.8		34	4.2
100	26	16,612	-71.6		04	4.3
80	25	17,937	-68.6		08	6.8
70	25	18,742	-66.2		09	8.2
60	24	19,683	-63.2		09	9.6
50	23	20,816	-60.4		09	12.0
40	22	22,218	-57.5		09	14.8
30	18	24,051	-53.6		10	15.3
25	14	25,230	-50.7		09	16.1
20	10	26,705	-46.6			
15	5	28,650	-45.9			
10						
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5						

MIAMI, FLA. 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	25.3	23.9	09	1.4
1000	31	140	26.0	23.3	11	2.8
950	31	592	23.0	20.6	12	4.7
900	31	1,063	20.1	16.9	13	4.6
850	31	1,555	16.9	13.2	13	3.7
800	31	2,071	14.3	9.0	13	3.1
750	31	2,615	11.4	4.8	14	3.0
700	31	3,188	8.0	.3	14	2.9
650	31	3,797	4.6	-3.1	14	2.6
600	31	4,445	1.0	-7.2	14	2.4
550	31	5,140	-2.9	-12.3	14	2.3
500	31	5,890	-7.6	-17.3	12	2.1
450	31	6,702	-12.5	-22.5	10	1.4
400	31	7,592	-18.3	-29.0	11	1.5
350	31	8,578	-25.3	-34.9	13	1.3
300	31	9,676	-33.6	-43.2	13	2.2
250	31	10,929	-43.7		13	1.1
200	31	12,390	-55.6		35	2.0
175	31	13,229	-61.5		35	3.0
150	31	14,172	-67.1		02	2.9
125	30	15,265	-69.3		04	3.2
100	29	16,595	-69.3		07	5.4
80	29	17,936	-66.5		09	9.2
70	29	18,748	-64.6		08	11.4
60	29	19,695	-62.5		09	14.4
50	29	20,827	-59.9		09	16.9
40	29	22,230	-57.0		09	18.7
30	29	24,071	-52.7		09	20.0
25	26	25,256	-50.1		09	20.9
20	25	26,724	-47.1		09	21.7
15	18	28,642	-44.5		09	23.2
10	6	31,420	-41.6			
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5						

MIDLAND, TEXAS 917 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	874	19.6	12.9	17	2.7
1000						
950						
900	31	1,037	22.0	14.7	18	5.9
850	31	1,533	20.5	10.8	19	7.7
800	31	2,055	17.8	7.8	17	3.0
750	31	2,604	13.9	4.7	11	2.9
700	31	3,182	9.7	-.6	10	3.5
650	31	3,794	5.9	-5.4	09	3.3
600	31	4,444	1.9	-11.3	08	3.4
550	31	5,141	-2.2	-17.7	07	2.8
500	31	5,691	-6.9	-23.2	07	2.1
450	31	6,706	-12.1	-27.2	06	1.2
400	31	7,596	-18.5	-33.4	01	2.0
350	31	8,581	-25.7	-38.1	34	2.5
300	30	9,677	-34.2	-46.2	34	4.6
250	29	10,928	-43.5		33	7.2
200	29	12,394	-54.0		32	6.9
175	29	13,241	-59.3		32	6.6
150	29	14,193	-65.2		33	6.1
125	29	15,292	-69.6		35	4.3
100	28	16,619	-69.7		05	3.9
80	28	17,962	-65.8		08	6.1
70	28	18,778	-63.8		08	6.8
60	28	19,728	-61.7		08	7.9
50	28	20,865	-59.2		09	11.3
40	27	22,271	-56.1		09	13.8
30	27	24,117	-51.7		09	15.7
25	25	25,307	-49.6		09	16.2
20	24	26,776	-47.5		09	16.9
15	22	28,688	-44.8		09	18.3
10	12	31,411	-40.9		09	18.7

MONTERREY, MEXICO [illegible]64 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	423	21.3	20.6	12	.5
1000						
950	30	579	21.5	20.2	12	1.9
900	30	1,048	19.4	17.3	14	5.5
850	30	1,540	16.9	13.5	14	6.7
800	30	2,056	14.9	8.5	14	6.8
750	30	2,601	12.4	4.3	14	5.5
700	30	3,177	9.3	1.2	13	3.8
650	30	3,789	5.9	-2.7	12	3.5
600	30	4,440	2.0	-5.5	10	3.7
550	30	5,138	-2.0	-9.5	10	3.3
500	30	5,890	-6.4	-15.6	10	3.3
450	30	6,707	-11.2	-23.1	09	2.2
400	30	7,601	-17.1	-30.6	03	1.3
350	30	8,592	-24.2	-36.6	34	2.5
300	30	9,694	-32.7	-44.8	31	5.0
250	30	10,951	-42.9		31	7.9
200	30	12,418	-54.6		31	9.5
175	30	13,261	-60.8		32	8.6
150	30	14,205	-67.0		34	6.7
125	30	15,292	-71.6		02	5.4
100	27	16,611	-71.5		07	6.0
80	24	17,947	-67.3		08	9.9
70	22	18,755	-65.3		09	11.5
60	22	19,699	-63.3		09	13.0
50	22	20,825	-61.5		09	15.7
40	22	22,219	-58.3		09	18.4
30	22	24,051	-53.3		09	20.4
25	19	25,232	-51.2		09	21.1
20	17	26,692	-48.9		09	21.1
15	11	28,610	-45.8			
10						

MONETT, MO. 967 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	438	19.1	16.5	16	1.5
1000						
950	31	590	21.8	16.4	21	3.3
900	31	1,060	20.7	12.7	24	5.9
850	31	1,552	17.4	9.2	25	4.1
800	31	2,068	14.3	4.5	25	2.9
750	31	2,610	11.4	-2.8	25	2.3
700	31	3,183	7.8	-7.3	25	1.7
650	31	3,790	4.2	-9.5	28	1.5
600	31	4,437	.6	-14.3	30	.9
550	31	5,130	-3.6	-19.6	29	1.3
500	31	5,877	-8.2	-24.8	29	1.8
450	31	6,687	-13.5	-30.5	31	2.2
400	31	7,572	-19.9	-36.7	32	2.4
350	31	8,552	-26.7	-41.8	30	2.9
300	31	9,643	-35.2	-48.6	31	4.7
250	31	10,889	-44.7		33	5.4
200	31	12,348	-54.5		31	7.2
175	31	13,195	-58.9		32	6.4
150	31	14,152	-63.0		32	5.0
125	31	15,266	-65.8		32	3.8
100	31	16,619	-65.9		35	2.3
80	31	17,982	-63.1		06	2.9
70	30	18,807	-61.0		07	4.3
60	29	19,769	-59.4		08	5.3
50	29	20,919	-56.4		08	6.7
40	29	22,342	-54.4		09	8.2
30	27	24,195	-51.5		09	10.4
25	27	25,383	-49.7		09	12.1
20	24	26,855	-46.9		09	13.6
15	23	28,766	-44.5		09	14.2
10	12	31,521	-41.8		09	15.5

MONTGOMERY, ALA. 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	57	21.7	19.1	09	.3
1000	31	151	22.1	20.2	11	.2
950	31	599	22.1	18.1	23	.4
900	31	1,068	19.1	15.5	24	.7
850	31	1,558	15.9	11.7	23	.9
800	31	2,072	13.3	6.9	25	1.1
750	31	2,613	10.4	2.8	26	.9
700	31	3,185	7.1	-.7	30	1.3
650	31	3,791	3.8	-3.7	28	1.9
600	31	4,438	.3	-8.0	27	2.1
550	31	5,131	-3.7	-13.0	26	2.3
500	31	5,878	-8.0	-18.9	26	2.4
450	31	6,690	-13.1	-25.1	26	2.0
400	31	7,577	-19.0	-29.8	27	1.7
350	31	8,561	-26.1	-37.1	27	1.4
300	31	9,654	-34.5	-46.0	29	2.4
250	31	10,902	-44.4		28	2.0
200	31	12,360	-55.7		29	1.8
175	31	13,199	-61.3		29	1.4
150	31	14,144	-65.9		31	1.4
125	31	15,242	-68.4		03	1.0
100	31	16,583	-67.1		07	3.7
80	31	17,938	-64.6		08	5.3
70	31	18,758	-62.7		09	6.4
60	31	19,714	-60.3		09	8.3
50	31	20,858	-57.8		09	10.6
40	31	22,273	-55.5		09	12.1
30	29	24,124	-52.0		09	14.7
25	28	25,310	-50.3		09	16.3
20	28	26,776	-47.9		09	18.2
15	26	28,685	-44.7		09	19.2
10	18	31,415	-40.7		08	18.6

NASHVILLE, TENN. 997 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	180	19.6	18.5	15	.1
1000	5	182	19.7	18.1		
950	31	600	21.8	15.9	24	1.2
900	31	1,068	18.7	13.2	27	1.6
850	31	1,557	15.5	8.9	29	2.2
800	31	2,070	12.6	4.4	31	2.4
750	31	2,609	10.1	-1.4	30	2.4
700	31	3,180	7.0	-4.7	28	2.4
650	31	3,767	4.0	-9.2	27	3.0
600	31	4,433	.3	-13.7	26	3.0
550	31	5,126	-3.7	-19.0	27	3.3
500	31	5,872	-8.2	-23.8	27	3.8
450	31	6,682	-13.4	-29.5	28	4.3
400	31	7,568	-19.7	-34.7	28	5.0
350	31	8,549	-26.7	-40.0	28	5.7
300	29	9,638	-35.1	-48.4	28	6.3
250	29	10,884	-44.6		28	7.3
200	29	12,344	-55.0		27	7.7
175	29	13,188	-59.8		28	6.3
150	29	14,142	-63.5		28	3.9
125	29	15,254	-66.2		30	2.5
100	29	16,607	-65.6		04	1.9
80	29	17,972	-63.1		07	3.6
70	27	18,796	-61.2		07	4.6
60	27	19,758	-59.1		08	5.6
50	27	20,908	-56.7		08	7.1
40	27	22,329	-54.5		09	9.0
30	27	24,167	-51.1		09	11.2
25	26	25,378	-49.2		09	12.3
20	26	26,850	-47.2		09	14.0
15	25	28,758	-45.0		09	15.1
10	19	31,492	-40.9		09	18.0

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* NOME, ALASKA
1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	6.3	4.7	20	.7
1000	28	93	7.0	5.0	20	1.5
950	30	504	5.3	3.2	20	3.3
900	30	945	3.3	.1	20	4.3
850	30	1,408	1.4	-2.5	21	4.7
800	30	1,895	-.7	-5.8	22	4.6
750	30	2,409	-3.1	-8.0	22	4.4
700	30	2,952	-6.1	-12.5	22	4.3
650	30	3,530	-8.7	-16.2	23	5.1
600	30	4,147	-12.0	-19.3	25	4.8
550	30	4,808	-15.8	-25.4	26	5.3
500	30	5,520	-20.4	-30.0	25	5.5
450	30	6,292	-25.8	-35.0	26	5.8
400	29	7,139	-32.2	-41.2	26	6.9
350	29	8,071	-39.0	-44.3	27	7.9
300	29	9,108	-46.6		28	8.4
250	29	10,302	-51.5		28	9.7
200	29	11,762	-48.3		27	9.5
175	29	12,642	-48.0		26	9.2
150	29	13,660	-47.8		27	7.0
125	29	14,862	-48.5		26	6.5
100	29	16,329	-48.8		26	4.6
80	29	17,795	-48.7		26	3.3
70	29	18,674	-48.7		25	2.5
60	29	19,687	-48.8		26	1.7
50	29	20,886	-48.6		23	.9
40	29	22,354	-48.4		21	.2
30	27	24,245	-48.0		08	.5
25	27	25,449	-47.4		07	1.4
20	27	26,928	-46.5		06	2.0
15	24	28,835	-43.8		09	1.5
10	19	31,600	-39.5		08	2.0
7	10	34,056	-36.7			

NORTH PLATTE, NEBR.
917 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	847	16.1	12.4	13	1.1
1000						
950						
900	31	1,011	19.9	13.3	20	2.8
850	31	1,506	21.6	8.1	22	7.7
800	31	2,031	19.3	4.6	23	7.6
750	31	2,582	15.5	1.4	24	5.7
700	31	3,162	10.6	-2.6	25	4.4
650	31	3,775	6.3	-7.3	27	4.1
600	31	4,426	1.4	-11.8	28	5.4
550	31	5,119	-3.9	-15.5	28	6.3
500	31	5,865	-9.0	-23.6	27	6.9
450	31	6,673	-14.1	-29.0	27	8.0
400	31	7,557	-20.4	-35.1	28	9.1
350	31	8,534	-27.5	-42.0	27	10.7
300	31	9,621	-36.2	-48.6	28	12.3
250	31	10,861	-45.7		28	13.4
200	31	12,320	-54.0		28	14.5
175	31	13,169	-58.1		28	14.4
150	31	14,131	-62.1		28	12.5
125	31	15,251	-64.3		28	9.0
100	31	16,614	-63.7		29	4.3
80	31	17,991	-61.4		35	1.0
70	31	18,821	-60.5		08	1.5
60	30	19,787	-58.4		08	3.2
50	30	20,941	-55.9		08	4.5
40	30	22,370	-53.4		08	6.0
30	30	24,236	-50.2		09	7.6
25	28	25,434	-48.6		09	8.7
20	28	26,908	-46.7		09	9.5
15	25	28,831	-44.1		09	10.3
10	10	31,576	-40.1			
7						

OAKLAND, CALIF.
1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	6	12.8	11.2	28	1.7
1000	31	122	12.3	10.7	28	1.9
950	31	554	15.8	3.7	26	2.6
900	31	1,018	21.0	-1.7	28	3.5
850	31	1,510	19.3	-4.0	27	3.4
800	31	2,028	16.3	-6.5	24	3.4
750	31	2,573	12.6	-9.3	23	3.4
700	31	3,147	8.5	-11.8	21	3.7
650	31	3,755	4.7	-15.1	22	4.3
600	31	4,402	.5	-18.8	23	5.4
550	31	5,094	-4.1	-23.2	23	6.1
500	30	5,836	-9.3	-28.1	24	6.2
450	30	6,643	-14.8	-32.4	24	7.4
400	30	7,523	-20.7	-38.0	24	10.3
350	30	8,500	-27.7	-43.4	24	12.6
300	29	9,585	-35.8	-50.2	24	15.2
250	28	10,831	-44.5	-53.8	24	18.0
200	28	12,296	-53.3		24	17.6
175	28	13,148	-57.6		23	17.7
150	29	14,112	-61.4		23	15.1
125	28	15,235	-63.8		24	10.0
100	28	16,602	-63.9		23	3.0
80	28	17,974	-62.1		12	1.9
70	28	18,803	-60.7		10	3.1
60	28	19,767	-58.8		10	4.3
50	28	20,917	-56.7		10	5.7
40	28	22,339	-54.8		08	7.5
30	28	24,192	-51.7		09	10.5
25	27	25,378	-49.9		09	10.7
20	26	26,845	-48.0		09	12.4
15	22	28,752	-45.8		09	12.5
10	10	31,470	-42.5			
7						

OMAHA, NEBR.
968 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	403	19.6	16.8	18	2.5
1000						
950	31	560	21.5	16.5	20	5.6
900	31	1,031	21.7	12.9	23	10.0
850	31	1,525	19.5	8.3	24	7.9
800	31	2,044	15.9	4.0	25	5.3
750	31	2,590	12.4	-.6	25	4.5
700	31	3,164	8.3	-4.0	26	4.2
650	30	3,772	4.4	-8.3	27	4.3
600	30	4,419	.2	-12.3	27	4.7
550	30	5,111	-4.3	-16.5	28	5.3
500	30	5,856	-8.9	-22.9	28	6.0
450	30	6,664	-14.2	-29.0	28	6.7
400	30	7,547	-20.3	-34.3	29	8.2
350	30	8,526	-27.3	-40.0	29	9.5
300	30	9,614	-35.9	-47.0	28	11.8
250	30	10,856	-45.3		28	12.9
200	30	12,316	-53.9		29	13.2
175	30	13,166	-57.6		29	13.3
150	30	14,130	-61.2		29	11.2
125	30	15,257	-63.0		29	8.6
100	30	16,628	-63.2		29	3.6
80	30	18,009	-60.9		35	1.8
70	30	18,842	-59.4		04	2.3
60	30	19,812	-57.4		07	3.2
50	30	20,970	-55.5		08	4.3
40	29	22,403	-52.9		08	5.5
30	25	24,274	-49.9		09	7.5
25	23	25,467	-48.4		08	8.3
20	23	26,945	-45.7		08	9.4
15	21	28,876	-43.3		09	11.1
10	10	31,627	-40.2			
7						

+ PAGO PAGO, AMERICAN SAMOA
1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	27.9	23.2	11	4.3
1000	31	118	25.8	20.1	10	5.5
950	31	569	22.3	17.5	10	6.4
900	31	1,037	19.0	14.2	09	6.4
850	31	1,527	16.2	10.3	08	6.3
800	31	2,042	14.6	5.7	07	5.3
750	31	2,586	12.1	.9	07	3.2
700	31	3,162	9.1	-4.5	07	2.3
650	30	3,771	5.7	-8.2	09	2.2
600	30	4,422	2.2	-12.3	09	1.6
550	29	5,121	-2.1	-17.3	12	1.7
500	29	5,872	-6.6	-23.5	19	1.5
450	29	6,688	-11.2	-27.9	23	2.5
400	29	7,582	-17.0	-32.6	25	4.1
350	29	8,574	-24.1	-38.7	25	5.7
300	29	9,676	-32.4	-45.9	27	7.8
250	29	10,936	-42.4		26	9.2
200	28	12,406	-54.0		26	9.9
175	27	13,252	-60.4		25	11.0
150	27	14,197	-66.9		25	10.5
125	27	15,283	-72.4		25	8.2
100	27	16,580	-75.7		26	6.1
80	27	17,879	-71.5		27	5.7
70	26	18,676	-67.8		27	6.1
60	26	19,609	-65.5		28	5.6
50	26	20,726	-62.2		28	5.0
40	26	22,117	-58.5		29	5.2
30	26	23,945	-54.1		28	3.2
25	25	25,122	-52.2		26	.5
20	25	26,575	-48.9		08	1.8
15	20	28,477	-45.0		08	3.6
10	13	31,196	-42.5		09	5.2
7						

* PEORIA, ILL.
993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	200	18.8	16.0	16	.9
1000						
950	31	587	21.2	15.4	22	3.4
900	31	1,055	19.2	11.6	25	3.9
850	31	1,544	16.2	7.4	26	4.0
800	31	2,057	13.0	4.0	27	4.4
750	31	2,598	10.3	-2.3	27	5.1
700	31	3,168	6.9	-5.6	28	4.8
650	31	3,773	3.1	-8.4	28	4.8
600	31	4,418	-.8	-12.2	29	5.3
550	31	5,108	-4.7	-17.8	29	5.9
500	31	5,852	-9.3	-24.8	28	6.4
450	31	6,658	-14.6	-29.5	28	6.4
400	31	7,540	-20.7	-35.0	29	7.7
350	31	8,516	-27.9	-40.9	29	9.0
300	31	9,602	-36.2	-48.2	30	10.1
250	30	10,842	-45.7		30	13.6
200	30	12,298	-54.3		30	13.1
175	29	13,146	-57.6		29	11.9
150	29	14,112	-60.8		29	9.4
125	29	15,238	-63.5		29	6.9
100	28	16,605	-63.0		30	3.6
80	27	17,981	-61.7		02	1.7
70	27	18,813	-59.7		05	2.3
60	26	19,780	-58.1		06	3.5
50	26	20,935	-55.8		07	5.1
40	26	22,365	-53.2		09	6.3
30	24	24,226	-50.3		09	8.2
25	24	25,420	-48.7		09	9.1
20	24	26,895	-46.5		09	9.6
15	22	28,817	-44.0		08	10.9
10	16	31,542	-40.8		09	13.6
7	10	33,973	-37.6			
5						

* PITTSBURGH, PA.
976 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	359	18.6	16.6	16	.5
1000						
950	31	590	19.7	16.2	26	1.6
900	31	1,056	17.7	13.8	28	3.3
850	31	1,543	14.6	9.9	27	3.9
800	31	2,054	11.8	4.8	27	4.3
750	31	2,592	8.8	-.8	27	5.0
700	31	3,160	5.6	-5.7	28	5.6
650	31	3,763	2.6	-10.2	28	6.3
600	31	4,406	-.9	-13.8	28	7.0
550	31	5,096	-5.0	-19.0	28	7.6
500	31	5,839	-9.4	-24.0	27	7.8
450	31	6,646	-14.2	-29.5	27	8.5
400	31	7,529	-20.5	-34.7	27	8.8
350	31	8,506	-27.5	-39.9	27	8.9
300	30	9,592	-35.9	-47.3	27	10.5
250	30	10,834	-44.9		27	12.6
200	30	12,295	-54.3		27	15.3
175	30	13,143	-58.4		27	13.7
150	29	14,102	-61.3		27	10.6
125	29	15,228	-63.2		28	7.1
100	29	16,599	-63.2		29	3.4
80	29	17,978	-61.3		36	1.5
70	29	18,810	-59.6		04	1.9
60	28	19,780	-57.4		07	3.0
50	28	20,938	-55.2		08	4.4
40	28	22,368	-53.3		08	6.3
30	28	24,236	-49.7		09	7.4
25	28	25,433	-48.2		08	8.4
20	26	26,911	-46.3		09	9.9
15	23	28,840	-43.9		09	12.3
10	21	31,590	-39.7		09	12.6
7	12	34,014	-37.1			
5	5	36,326	-34.5			

+ PONAPE, CAROLINE IS.
1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	28.7	24.3	09	2.4
1000	31	80	27.0	23.1	09	2.6
950	31	533	23.7	21.2	10	4.9
900	31	1,005	20.6	18.0	10	6.7
850	31	1,499	17.8	14.2	10	7.7
800	31	2,017	15.6	10.2	10	7.9
750	31	2,563	12.9	6.1	10	7.7
700	31	3,140	9.6	2.5	10	7.7
650	31	3,753	6.2	-1.1	09	8.3
600	31	4,405	2.7	-6.3	09	7.9
550	31	5,105	-1.2	-9.3	09	7.5
500	31	5,860	-5.5	-14.8	09	6.8
450	31	6,680	-10.0	-19.2	09	6.2
400	31	7,579	-15.6	-24.6	09	3.8
350	31	8,577	-22.2	-33.3	08	2.4
300	31	9,688	-30.6	-41.5	02	.6
250	31	10,956	-40.9	-50.5	28	1.5
200	31	12,433	-53.6		27	4.3
175	30	13,279	-60.4		28	6.0
150	30	14,222	-68.1		26	7.5
125	30	15,299	-74.6		25	7.0
100	30	16,583	-76.8		09	1.7
80	30	17,884	-70.4		09	6.5
70	30	18,685	-66.6		10	6.0
60	30	19,623	-64.4		10	5.6
50	29	20,745	-61.9		09	6.3
40	29	22,137	-58.9		10	7.6
30	29	23,959	-55.0		10	7.2
25	28	25,129	-53.0		10	7.6
20	25	26,578	-51.6		09	11.7
15	21	28,458	-47.9		10	19.9
10	8	31,158	-43.4			
7						
5						

PORTLAND, MAINE
1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	20	18.4	16.8	28	.5
1000	31	140	19.0	16.1	30	1.0
950	31	582	19.1	12.9	31	2.1
900	31	1,046	16.7	9.8	30	2.9
850	31	1,531	13.7	6.7	30	4.1
800	31	2,040	10.6	3.4	29	4.9
750	31	2,575	7.5	.0	29	6.4
700	31	3,141	4.1	-5.3	29	7.5
650	31	3,740	1.0	-8.7	29	8.3
600	31	4,380	-2.4	-13.7	29	9.2
550	31	5,066	-6.1	-19.1	29	9.6
500	31	5,806	-10.5	-23.9	28	11.2
450	30	6,609	-15.6	-28.1	28	11.7
400	29	7,490	-21.6	-33.1	27	14.3
350	29	8,463	-28.5	-40.2	27	15.7
300	29	9,546	-36.8	-47.1	27	17.8
250	29	10,784	-45.8		27	22.4
200	29	12,240	-55.0		27	23.0
175	28	13,084	-57.9		27	22.0
150	27	14,052	-60.4		27	18.6
125	27	15,186	-61.2		27	12.8
100	27	16,571	-60.4		28	7.6
80	26	17,966	-59.1		29	3.5
70	26	18,807	-57.8		31	1.6
60	25	19,786	-55.8		05	1.0
50	25	20,953	-53.6		08	2.7
40	25	22,395	-51.6		08	3.8
30	24	24,276	-48.7		09	6.7
25	23	25,480	-47.0		09	6.9
20	22	26,961	-45.4		09	8.4
15	22	28,891	-43.0		09	9.7
10	10	31,662	-39.3			
7						
5						

* QUILLAYUTE, WASH.
1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	58	9.9	8.9	02	.1
1000	31	151	10.4	9.9	30	.2
950	31	579	10.0	8.2	30	1.9
900	31	1,030	10.4	3.2	30	3.0
850	31	1,505	9.2	-1.1	30	3.6
800	31	2,006	7.1	-4.0	29	4.0
750	31	2,534	4.4	-8.3	28	4.3
700	31	3,093	1.7	-13.4	28	5.0
650	31	3,687	-1.3	-16.4	28	6.3
600	31	4,321	-5.1	-19.4	28	7.0
550	31	4,998	-9.5	-23.3	27	7.8
500	31	5,728	-14.3	-27.5	27	8.9
450	31	6,519	-19.7	-32.2	26	10.6
400	31	7,382	-26.1	-37.4	26	11.7
350	30	8,333	-33.5	-43.8	26	13.1
300	30	9,394	-41.6	-51.5	26	14.1
250	30	10,612	-48.3		27	14.5
200	29	12,075	-51.2		26	15.2
175	29	12,941	-52.4		26	14.7
150	29	13,934	-54.1		26	14.0
125	28	15,097	-55.6		25	11.6
100	28	16,515	-56.6		25	7.4
80	28	17,930	-56.5		24	4.1
70	28	18,779	-55.8		25	2.9
60	28	19,762	-55.0		25	1.4
50	28	20,930	-54.1		05	.7
40	26	22,365	-52.3		08	2.2
30	25	24,233	-50.4		08	4.0
25	25	25,428	-48.6		08	5.1
20	24	26,907	-46.6		09	5.4
15	24	28,824	-44.7		08	7.7
10	22	31,568	-40.7		08	8.3
7	14	34,041	-35.8		09	10.2
5	6	36,338	-33.4			

RAPID CITY, S. DAK.
904 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	966	16.8	8.9	32	.9
1000						
950						
900	28	1,011	17.7	8.8	32	1.0
850	31	1,497	21.0	5.3	24	2.4
800	31	2,020	18.7	1.7	24	4.1
750	31	2,570	15.2	-1.2	25	5.3
700	31	3,149	10.5	-4.6	26	5.5
650	31	3,761	5.5	-6.5	27	6.2
600	31	4,409	.2	-10.3	27	7.2
550	31	5,100	-5.3	-14.4	27	8.5
500	31	5,842	-9.9	-23.4	27	9.3
450	31	6,647	-15.2	-28.9	27	9.9
400	31	7,525	-21.9	-34.4	27	10.7
350	31	8,498	-29.0	-42.0	27	12.8
300	31	9,578	-37.5	-48.7	27	16.0
250	31	10,812	-46.8		27	19.0
200	31	12,265	-54.4		27	18.9
175	31	13,114	-57.7		27	18.7
150	31	14,081	-60.1		27	15.5
125	31	15,212	-62.4		27	10.4
100	29	16,588	-62.2		28	5.2
80	29	17,973	-60.2		28	1.1
70	29	18,810	-58.5		01	.4
60	28	19,782	-57.5		06	1.1
50	29	20,940	-55.4		08	2.9
40	28	22,370	-53.1		08	4.3
30	28	24,235	-50.6		09	6.3
25	28	25,431	-48.2		08	6.4
20	28	26,907	-46.7		09	7.7
15	23	28,825	-44.0		08	8.8
10	7	31,565	-40.5			
7						

ST CLOUD, MINN.
978 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	316	16.6	15.3	15	.4
1000						
950	31	563	19.0	15.0	20	3.4
900	31	1,028	18.1	11.4	23	5.4
850	31	1,517	16.0	7.9	25	4.6
800	31	2,031	13.5	3.7	26	5.1
750	31	2,571	10.2	-.4	27	6.2
700	31	3,142	6.4	-3.1	28	6.4
650	31	3,746	2.4	-7.1	28	7.2
600	31	4,388	-1.4	-12.6	28	8.5
550	31	5,076	-5.6	-17.4	28	9.4
500	31	5,817	-10.3	-23.7	28	10.0
450	31	6,671	-15.6	-28.6	28	10.5
400	30	7,498	-22.1	-33.7	28	11.3
350	30	8,470	-29.2	-39.8	28	12.5
300	30	9,549	-38.0	-46.8	28	14.2
250	30	10,779	-47.3		28	17.3
200	30	12,229	-54.5		28	18.4
175	30	13,080	-56.5		28	15.9
150	30	14,052	-59.1		28	14.0
125	28	15,187	-60.7		28	10.5
100	28	16,573	-61.2		29	6.4
80	28	17,964	-59.2		30	2.9
70	27	18,805	-58.2		32	1.3
60	27	19,779	-56.9		01	1.1
50	27	20,939	-55.2		06	2.1
40	26	22,369	-52.6		07	3.4
30	24	24,240	-50.1		08	4.0
25	24	25,437	-48.2		08	4.2
20	24	26,912	-46.4		08	5.4
15	19	28,834	-44.0		08	6.3
10	5	31,594	-39.2			
7						

* ST PAUL IS., ALASKA
1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	7.1	6.7	21	2.4
1000	26	119	6.9	6.7	20	3.8
950	31	517	6.5	4.3	19	4.6
900	31	961	5.7	1.8	19	4.6
850	31	1,427	4.0	-.6	21	4.9
800	31	1,919	2.2	-2.8	23	4.6
750	31	2,439	-.2	-5.6	23	5.1
700	31	2,989	-2.8	-10.0	23	5.7
650	31	3,573	-5.9	-15.8	23	6.1
600	31	4,196	-9.3	-19.9	23	7.2
550	31	4,864	-13.3	-25.1	24	8.1
500	31	5,583	-17.8	-27.8	24	8.6
450	31	6,364	-22.9	-33.0	24	9.5
400	31	7,217	-28.8	-39.7	24	10.0
350	31	8,162	-35.9	-44.3	25	10.1
300	31	9,212	-43.9	-50.0	25	11.7
250	31	10,419	-49.4		25	13.4
200	30	11,881	-49.1		25	12.4
175	30	12,758	-48.8		25	12.4
150	30	13,770	-49.7		25	10.4
125	30	14,960	-50.8		25	9.5
100	30	16,411	-51.3		25	7.2
80	28	17,859	-50.8		25	4.6
70	28	18,729	-50.7		25	3.7
60	26	19,731	-50.3		24	3.3
50	26	20,922	-49.9		23	1.8
40	26	22,383	-49.4		18	.9
30	25	24,272	-48.0		12	1.7
25	24	25,475	-47.2		10	1.1
20	22	26,956	-45.9		09	1.7
15	16	28,892	-43.6		08	2.5
10	12	31,626	-39.7		07	2.3
7	8	34,124	-36.5			

SALEM, ILL.
997 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	174	19.1	18.0	17	.8
1000	5	175	18.3	17.0		
950	31	590	21.4	15.5	24	3.4
900	31	1,058	19.0	12.7	26	3.5
850	31	1,547	16.1	8.6	27	3.0
800	31	2,060	12.9	6.3	28	2.6
750	31	2,601	9.9	.0	29	2.7
700	31	3,171	6.6	-5.5	28	2.9
650	31	3,776	3.4	-10.9	28	3.0
600	31	4,421	-.3	-15.6	28	3.5
550	31	5,112	-4.2	-20.8	29	4.5
500	31	5,857	-8.6	-25.3	29	5.1
450	31	6,666	-13.7	-31.1	29	5.1
400	31	7,551	-19.8	-36.2	30	6.0
350	31	8,530	-27.1	-41.8	30	6.6
300	31	9,619	-35.5	-49.2	31	7.5
250	31	10,864	-45.1		31	8.6
200	30	12,323	-54.4		30	10.0
175	30	13,170	-58.6		30	8.1
150	30	14,130	-62.3		29	5.8
125	29	15,250	-64.1		29	4.4
100	29	16,615	-64.4		32	2.0
80	29	17,987	-61.7		05	2.2
70	29	18,818	-60.4		06	3.0
60	29	19,783	-58.5		07	4.6
50	29	20,937	-55.9		09	5.6
40	28	22,364	-54.0		09	6.4
30	27	24,225	-50.5		09	9.0
25	27	25,420	-48.7		09	9.8
20	26	26,892	-46.9		09	11.2
15	23	28,807	-44.0		09	12.6
10	16	31,568	-40.9			
7						

SALEM, OREG.
1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	61	11.1	7.4	34	.6
1000	31	145	13.0	9.5	01	1.3
950	31	576	12.3	8.2	02	3.3
900	31	1,030	12.2	3.8	36	2.8
850	31	1,509	11.0	-1.1	32	2.4
800	31	2,013	9.6	-6.0	30	2.7
750	31	2,547	7.6	-10.4	28	4.0
700	31	3,112	4.7	-11.9	27	5.3
650	31	3,712	1.4	-15.5	26	6.3
600	31	4,352	-2.7	-19.2	25	7.3
550	31	5,036	-7.4	-22.3	25	8.4
500	31	5,771	-12.5	-26.4	26	9.0
450	31	6,567	-18.2	-32.2	26	9.8
400	31	7,435	-24.7	-38.3	26	12.1
350	31	8,396	-32.0	-45.1	26	13.3
300	31	9,463	-40.0	-52.0	26	15.4
250	31	10,688	-47.4		25	17.8
200	31	12,147	-51.8		25	18.7
175	31	13,010	-53.8		25	16.7
150	31	13,995	-56.0		25	15.0
125	30	15,149	-58.0		25	10.6
100	30	16,552	-58.7		25	6.8
80	30	17,954	-58.5		25	3.0
70	30	18,797	-57.5		24	1.0
60	30	19,772	-56.5		11	.7
50	29	20,933	-55.1		09	1.6
40	29	22,364	-53.3		08	4.1
30	29	24,228	-50.8		09	5.2
25	29	25,420	-49.3		08	5.9
20	28	26,890	-47.5		09	7.4
15	24	28,794	-45.0		09	8.[illegible]
10	10	31,529	-41.1			
7						

See reference note at end of table.

RAWINSONDE DATA

Average monthly values

AUGUST 1973

SALT LAKE CITY, UTAH
871 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	1,288	18.6	6.2	15	3.7
1000						
950						
900						
850	31	1,501	22.0	3.3	16	5.5
800	31	2,026	20.2	-.3	19	4.9
750	21	2,578	16.1	-2.9	22	4.2
700	31	3,159	11.2	-5.8	24	4.9
650	31	3,772	6.1	-7.9	23	5.7
600	31	4,421	.6	-10.1	23	6.7
550	31	5,113	-4.9	-14.5	23	7.7
500	31	5,855	-10.2	-21.0	23	8.4
450	31	6,659	-15.1	-27.9	24	10.0
400	31	7,539	-21.1	-36.1	24	11.6
350	30	8,517	-28.6	-42.3	25	12.1
300	30	9,599	-36.9	-49.2	25	14.7
250	30	10,837	-45.6		25	17.1
200	29	12,294	-54.3		26	18.1
175	29	13,142	-58.3		26	18.2
150	29	14,104	-61.8		26	15.8
125	28	15,224	-64.7		26	9.9
100	27	16,583	-64.6		25	4.7
80	27	17,957	-61.5		29	.7
70	27	18,789	-59.7		07	1.6
60	27	19,756	-58.2		08	3.5
50	27	20,909	-56.4		08	4.9
40	27	22,333	-54.2		08	6.1
30	25	24,188	-51.0		08	7.3
25	23	25,376	-49.3		08	8.9
20	21	26,843	-47.4		08	9.6
15	20	28,756	-44.8		09	10.4
10	16	31,501	-40.8		09	12.5
7						
5						

SAN DIEGO, CALIF.
998 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	124	17.7	15.3	32	.6
1000						
950	31	547	17.2	12.0	04	.3
900	31	1,014	22.4	3.9	33	1.0
850	31	1,511	21.8	.5	29	1.6
800	31	2,034	19.0	-1.5	24	1.9
750	31	2,584	15.3	-4.0	21	2.5
700	31	3,163	11.0	-6.1	19	2.5
650	31	3,777	6.6	-8.6	19	3.4
600	31	4,428	2.2	-12.4	19	4.2
550	31	5,125	-2.8	-17.8	19	3.9
500	31	5,873	-7.5	-24.8	20	3.8
450	31	6,687	-12.3	-30.0	21	3.7
400	31	7,576	-18.4	-35.3	21	5.0
350	31	8,562	-25.7	-41.9	22	6.3
300	31	9,657	-34.0	-48.9	23	8.4
250	30	10,908	-43.4		23	10.4
200	30	12,376	-53.6		22	11.7
175	30	13,224	-59.0		23	11.0
150	30	14,178	-64.6		23	10.2
125	30	15,280	-68.9		23	5.9
100	30	16,611	-68.8		14	1.2
80	30	17,957	-65.6		10	4.7
70	30	18,774	-62.9		10	6.9
60	30	19,729	-60.8		09	7.8
50	30	20,870	-58.5		09	9.9
40	30	22,280	-56.0		09	12.0
30	29	24,126	-52.7		09	15.2
25	28	25,309	-50.9		09	16.0
20	27	26,772	-48.5		09	16.7
15	25	28,680	-45.8		09	17.5
10	17	31,392	-42.2		08	20.1
7						
5						

SAN JUAN, P. R.
1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	6	26.3	22.4	13	2.1
1000	31	139	25.5	22.1	10	4.5
950	31	590	22.5	19.8	10	8.6
900	31	1,060	19.5	16.1	10	9.1
850	31	1,551	16.4	12.2	10	9.5
800	31	2,066	14.4	6.8	10	9.2
750	31	2,610	11.7	.9	10	8.5
700	31	3,184	8.6	-4.8	10	7.6
650	31	3,793	5.0	-8.9	10	7.5
600	31	4,442	1.1	-12.4	10	6.4
550	31	5,137	-2.7	-17.4	10	4.8
500	31	5,886	-7.2	-23.0	10	3.5
450	31	6,700	-12.2	-27.9	11	2.6
400	31	7,589	-18.6	-32.5	14	1.1
350	31	8,574	-25.8	-38.0	21	1.8
300	31	9,668	-34.4	-46.1	26	1.7
250	31	10,917	-44.3		27	3.8
200	30	12,374	-55.4		28	3.6
175	30	13,215	-60.8		28	3.5
150	30	14,161	-66.3		28	2.7
125	30	15,257	-69.6		19	.6
100	28	16,581	-71.4		08	3.8
80	27	17,904	-69.1		09	9.6
70	27	18,707	-66.5		09	13.0
60	27	19,646	-63.9		09	15.2
50	27	20,773	-60.6		09	16.3
40	25	22,175	-57.7		09	16.3
30	23	24,008	-54.4		09	18.9
25	22	25,181	-52.0		09	20.3
20	21	26,636	-48.8		09	23.2
15	17	28,545	-45.3		09	26.2
10	6	31,266	-41.4			
7						
5						

* SAULT STE MARIE, MICH.
989 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	221	16.2	14.7	03	.2
1000						
950	31	566	17.6	12.5	28	2.2
900	31	1,028	15.5	10.1	29	4.3
850	31	1,511	12.5	5.6	28	5.1
800	31	2,018	10.4	.0	29	5.7
750	31	2,553	7.6	-2.9	29	6.6
700	31	3,119	4.3	-7.0	29	7.6
650	31	3,718	.7	-12.2	29	8.7
600	31	4,356	-3.1	-16.8	28	9.3
550	31	5,040	-7.0	-22.0	28	9.7
500	31	5,777	-11.7	-26.6	28	11.0
450	31	6,576	-17.2	-31.8	29	11.1
400	31	7,448	-23.6	-35.7	29	12.2
350	31	8,413	-30.7	-43.0	29	12.8
300	31	9,486	-39.1	-49.0	29	15.3
250	31	10,712	-47.9		29	17.6
200	31	12,165	-53.0		29	19.0
175	31	13,023	-54.7		29	17.6
150	31	14,005	-56.7		28	13.8
125	31	15,155	-58.7		28	11.4
100	31	16,555	-59.1		29	6.5
80	31	17,959	-57.8		30	3.5
70	31	18,804	-56.5		33	2.3
60	31	19,785	-55.3		02	1.8
50	30	20,954	-53.8		06	2.9
40	29	22,396	-51.2		08	3.8
30	28	24,282	-48.4		08	5.1
25	27	25,488	-46.4		08	6.2
20	26	26,972	-45.0		09	7.2
15	23	28,906	-42.1		09	9.2
10	17	31,689	-36.5		09	8.7
7	8	34,167	-33.8			
5						

* SHREVEPORT, LA.
1007 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	79	20.7	19.8	17	.7
1000	31	143	22.5	19.8	19	1.0
950	31	592	22.9	16.9	22	2.4
900	31	1,063	20.3	14.1	21	1.6
850	31	1,554	17.1	10.2	20	.9
800	31	2,070	14.1	6.0	23	.7
750	31	2,612	11.3	2.3	21	.5
700	31	3,186	7.9	-2.5	11	.4
650	31	3,794	4.4	-6.3	07	.6
600	31	4,441	.7	-9.9	07	.8
550	31	5,136	-3.1	-16.5	06	.3
500	31	5,884	-7.5	-20.5	07	.6
450	31	6,697	-12.5	-26.1	01	1.0
400	31	7,586	-18.5	-33.1	32	.9
350	30	8,570	-25.6	-37.8	31	1.8
300	30	9,666	-34.1	-46.8	32	3.1
250	30	10,916	-44.0		29	2.8
200	30	12,377	-54.8		31	3.8
175	30	13,222	-59.7		32	3.8
150	30	14,174	-64.5		34	4.1
125	29	15,278	-68.3		01	3.4
100	29	16,616	-68.0		05	3.3
80	28	17,968	-64.7		07	5.7
70	28	18,788	-63.0		08	6.9
60	28	19,742	-60.5		09	8.0
50	28	20,885	-58.4		09	10.4
40	28	22,297	-55.9		09	12.6
30	28	24,141	-52.7		09	15.0
25	27	25,326	-50.4		09	16.9
20	25	26,796	-47.9		09	18.3
15	25	28,711	-44.3		09	18.9
10	23	31,438	-42.1		08	19.2
7	21	33,876	-37.9		09	22.7
5	7	36,251	-34.4			

SPOKANE, WASH.
930 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	720	14.5	1.1	20	3.4
1000						
950						
900	31	1,000	17.8	.1	22	4.7
850	31	1,487	15.7	-2.7	25	5.1
800	31	1,998	12.1	-4.3	23	4.7
750	31	2,535	8.4	-6.8	24	5.0
700	31	3,101	4.4	-10.2	24	6.1
650	31	3,699	.3	-12.8	24	8.4
600	31	4,337	-3.5	-17.4	25	9.3
550	31	5,019	-8.2	-21.0	24	10.1
500	31	5,752	-13.2	-27.3	24	11.6
450	31	6,546	-18.7	-33.2	25	12.5
400	31	7,413	-25.0	-37.3	25	13.5
350	31	8,372	-32.4	-44.4	25	15.2
300	31	9,438	-40.4	-51.2	25	18.2
250	31	10,660	-47.9		25	20.8
200	30	12,116	-50.9		25	22.4
175	30	12,984	-52.1		25	20.1
150	29	13,975	-54.0		25	16.2
125	29	15,140	-55.9		25	12.3
100	28	16,554	-57.4		25	8.1
80	27	17,965	-57.1		25	4.5
70	28	18,812	-56.0		26	2.0
60	28	19,795	-55.1		25	1.0
50	28	20,964	-53.9		11	1.1
40	28	22,404	-51.8		08	2.3
30	28	24,279	-49.7		08	4.7
25	28	25,477	-48.1		09	4.6
20	27	26,956	-45.9		09	5.3
15	26	28,876	-43.9		09	6.0
10	17	31,627	-40.1		09	7.1
7						

* SWAN ISLAND, W. I.
1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	10	27.0	24.1	10	4.1
1000	31	106	26.7	24.1	10	4.9
950	31	559	23.1	21.4	11	6.7
900	31	1,030	20.2	17.1	11	7.3
850	31	1,522	17.3	13.3	11	7.5
800	31	2,039	14.8	8.7	11	7.1
750	31	2,583	12.0	4.2	11	6.9
700	31	3,158	8.7	.2	11	6.2
650	31	3,768	5.3	-3.2	12	5.7
600	31	4,419	1.7	-8.3	13	5.6
550	31	5,115	-2.3	-13.6	13	5.0
500	31	5,866	-6.7	-15.9	12	3.6
450	31	6,682	-11.5	-21.4	11	2.3
400	31	7,576	-17.0	-27.0	07	1.7
350	31	8,568	-23.9	-33.9	04	2.0
300	31	9,673	-32.1	-42.4	36	1.5
250	30	10,933	-42.4		33	2.6
200	30	12,402	-54.7		33	4.4
175	30	13,243	-61.5		33	5.4
150	29	14,182	-67.6		33	4.4
125	27	15,265	-72.3		35	3.0
100	26	16,574	-71.6		07	6.3
80	26	17,900	-68.4		09	9.7
70	26	18,705	-66.3		09	11.6
60	26	19,646	-63.5		08	12.9
50	25	20,771	-61.9		08	15.1
40	24	22,163	-58.8		09	18.1
30	21	23,983	-54.8		09	19.1
25	19	25,162	-52.7		09	19.7
20	17	26,618	-49.7		09	22.5
15	15	28,516	-45.7		09	24.4
10	12	31,243	-42.2		09	29.9
7	8	33,655	-38.9			

TAMPA, FLA.
1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	8	23.1	22.0	10	1.6
1000	31	144	24.3	22.3	12	2.4
950	31	595	23.0	18.6	15	3.0
900	31	1,065	20.2	14.6	15	2.4
850	31	1,557	17.1	10.4	14	2.1
800	31	2,072	14.1	7.2	14	2.1
750	31	2,615	11.1	3.7	15	2.1
700	31	3,189	7.9	-.8	16	1.5
650	31	3,797	4.5	-4.2	17	.8
600	31	4,445	.9	-8.0	15	.2
550	31	5,140	-3.0	-12.7	03	.6
500	31	5,889	-7.5	-18.3	02	.5
450	31	6,701	-12.7	-23.2	02	.8
400	31	7,590	-18.7	-28.6	03	1.2
350	31	8,575	-25.6	-37.2	04	2.0
300	31	9,671	-33.9	-45.3	06	1.6
250	31	10,923	-43.8		06	1.8
200	31	12,385	-55.2		04	2.0
175	31	13,225	-61.3		04	2.8
150	31	14,169	-66.4		06	3.1
125	31	15,266	-68.7		06	3.5
100	29	16,599	-68.8		07	5.7
80	28	17,943	-65.7		08	7.9
70	28	18,760	-63.3		09	9.6
60	28	19,711	-61.6		09	12.6
50	28	20,847	-59.2		09	15.9
40	28	22,256	-56.1		09	17.5
30	26	24,105	-51.9		09	17.7
25	24	25,291	-50.0		09	18.0
20	22	26,763	-47.4		09	20.3
15	20	28,684	-44.8		09	22.8
10	14	31,422	-40.7		09	24.5
7						

TOPEKA, KANS.
984 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	268	20.0	17.7	17	1.5
1000						
950	31	577	22.5	16.4	21	6.6
900	31	1,048	21.1	13.2	23	7.4
850	31	1,541	18.5	8.9	24	6.0
800	31	2,059	15.4	4.1	25	4.5
750	31	2,603	12.2	-.8	25	3.7
700	31	3,177	8.2	-4.2	25	2.9
650	31	3,785	4.4	-8.8	28	3.2
600	31	4,432	.2	-12.2	29	3.0
550	31	5,124	-4.0	-18.2	29	3.6
500	31	5,870	-8.7	-24.8	29	4.2
450	31	6,678	-13.9	-29.2	28	4.9
400	31	7,562	-20.1	-34.4	29	5.1
350	31	8,541	-27.1	-39.9	30	6.6
300	31	9,631	-35.3	-46.5	30	7.4
250	31	10,876	-44.9		29	8.4
200	31	12,336	-54.3		30	9.6
175	31	13,184	-58.3		30	9.8
150	28	14,142	-62.2		30	8.4
125	27	15,261	-64.7		30	6.2
100	27	16,624	-64.8		33	3.0
80	27	17,993	-62.4		04	1.8
70	26	18,822	-60.0		07	2.9
60	26	19,787	-58.5		07	4.1
50	25	20,942	-56.1		09	5.8
40	24	22,368	-53.5		09	6.9
30	22	24,230	-50.7		09	8.0
25	22	25,423	-48.8		09	9.3
20	21	26,896	-46.5		09	11.0
15	17	28,821	-43.8		09	11.8
10	7	31,568	-41.2			
7						

+ TRUK, CAROLINE IS.
1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	2	28.7	24.6	08	2.0
1000	31	94	27.6	23.5	09	2.4
950	31	548	23.9	21.5	10	4.2
900	31	1,021	21.2	17.6	11	5.9
850	31	1,515	18.2	13.7	10	6.3
800	31	2,033	15.8	10.4	10	6.7
750	31	2,580	13.2	6.4	10	6.9
700	31	3,158	9.9	2.9	10	7.6
650	31	3,771	6.5	-.5	09	7.9
600	31	4,424	2.8	-3.7	09	7.7
550	31	5,124	-1.1	-8.2	10	7.0
500	31	5,879	-5.0	-14.0	09	6.8
450	31	6,701	-9.6	-18.9	09	5.3
400	31	7,601	-15.3	-24.5	09	3.1
350	31	8,600	-22.2	-31.4	10	2.7
300	31	9,712	-30.6	-40.3	11	1.6
250	31	10,979	-41.1	-48.8	23	.9
200	31	12,455	-53.6		25	3.5
175	31	13,300	-60.7		25	4.7
150	31	14,242	-68.3		25	7.0
125	31	15,317	-75.3		25	6.5
100	31	16,600	-76.1		09	2.0
80	31	17,906	-70.0		09	8.4
70	31	18,708	-67.3		09	8.0
60	31	19,643	-64.9		10	7.8
50	30	20,764	-61.6		09	7.1
40	30	22,159	-58.3		09	8.5
30	29	23,986	-54.6		10	8.7
25	27	25,152	-53.4		09	8.7
20	25	26,596	-50.8		09	13.9
15	22	28,484	-47.8		09	21.5
10	15	31,194	-42.8		09	32.8
7						

* TUCSON, ARIZ.
[illegible]24 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	789	23.5	14.4	15	2.4
1000						
950						
900	31	1,015	25.3	11.7	15	2.3
850	31	1,516	23.5	8.1	05	.7
800	31	2,043	19.9	5.7	02	.6
750	31	2,595	15.9	3.8	13	.4
700	31	3,177	11.2	1.9	13	2.0
650	31	3,791	6.6	-.8	14	3.5
600	31	4,443	1.6	-5.1	14	4.8
550	31	5,138	-3.0	-12.5	13	3.8
500	31	5,887	-7.3	-19.6	15	2.3
450	31	6,701	-12.1	-26.6	19	1.7
400	31	7,592	-18.0	-33.8	22	2.3
350	31	8,579	-25.1	-39.9	25	2.7
300	31	9,677	-33.5	-45.9	26	4.1
250	31	10,932	-42.8		26	5.5
200	31	12,402	-53.8		26	7.0
175	30	13,248	-59.6		26	6.9
150	30	14,198	-65.8		26	6.0
125	30	15,291	-70.7		28	2.8
100	30	16,614	-69.7		10	1.8
80	30	17,952	-66.8		09	5.2
70	29	18,765	-64.1		09	7.4
60	29	19,716	-61.4		09	9.2
50	27	20,856	-58.8		09	10.7
40	27	22,265	-56.2		09	13.3
30	26	24,108	-52.9		09	15.7
25	25	25,288	-51.3		09	16.5
20	24	26,751	-48.6		09	17.0
15	24	28,655	-46.0		09	17.4
10	18	31,391	-41.3		09	20.2
7	15	33,832	-38.3		09	20.6
5	9	36,149	-33.7			

* VANDENBERG AFB, CALIF.
1003 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	100	12.1	11.5	32	1.1
1000	30	123	12.0	11.5	33	1.2
950	31	554	16.6	6.7	36	2.7
900	31	1,020	22.1	1.3	01	2.5
850	31	1,515	20.1	-.8	01	1.2
800	31	2,034	17.0	-3.6	33	1.0
750	31	2,581	13.8	-6.2	23	1.1
700	31	3,158	9.9	-8.1	21	2.4
650	31	3,769	5.6	-11.7	21	3.3
600	31	4,419	1.4	-16.0	21	3.7
550	30	5,119	-2.7	-20.6	21	3.9
500	30	5,867	-7.7	-25.8	22	5.2
450	30	6,678	-13.1	-30.7	23	5.6
400	30	7,565	-19.2	-36.2	23	6.6
350	30	8,547	-26.4	-41.8	24	8.4
300	30	9,640	-34.7	-48.8	24	9.7
250	30	10,888	-44.1		24	11.6
200	30	12,352	-54.1		24	13.3
175	30	13,199	-59.2		23	13.2
150	29	14,152	-64.0		23	12.1
125	29	15,259	-67.3		24	9.4
100	29	16,602	-66.9		21	2.4
80	29	17,957	-64.7		12	3.4
70	29	18,777	-62.4		10	5.1
60	28	19,735	-60.4		10	6.8
50	28	20,878	-57.9		10	9.1
40	27	22,293	-55.6		09	10.3
30	27	24,139	-52.7		09	12.2
25	26	25,322	-50.6		09	13.6
20	24	26,784	-48.7		09	14.7
15	23	28,691	-46.1		09	15.8
10	21	31,407	-42.9		09	17.4
7	16	33,820	-38.7			
5						

VICTORIA, TEXAS
1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	33	22.6	21.7	04	1.1
1000	31	129	24.8	23.2	11	.8
950	31	580	22.7	19.8	16	3.3
900	31	1,050	19.9	15.4	15	4.1
850	31	1,541	17.2	10.8	15	3.6
800	31	2,058	14.5	6.3	15	2.8
750	31	2,601	11.7	2.5	14	1.9
700	31	3,175	8.4	-.2	13	1.6
650	31	3,785	4.8	-2.1	13	1.4
600	31	4,434	1.2	-7.2	10	1.6
550	31	5,130	-2.6	-13.3	08	1.4
500	31	5,880	-7.1	-17.9	08	.8
450	31	6,695	-12.0	-23.8	12	.5
400	31	7,585	-18.2	-30.3	28	.3
350	31	8,572	-25.3	-36.7	29	1.7
300	31	9,669	-33.9	-46.0	30	2.6
250	31	10,920	-43.9		30	3.8
200	31	12,383	-54.7		30	5.0
175	30	13,226	-60.2		32	5.7
150	29	14,174	-65.8		34	5.0
125	29	15,269	-70.0		01	4.1
100	28	16,597	-69.6		06	5.5
80	28	17,938	-66.2		08	8.2
70	28	18,752	-64.1		09	9.3
60	27	19,700	-61.9		09	11.2
50	27	20,835	-59.6		09	13.4
40	27	22,240	-57.0		09	15.9
30	26	24,075	-53.5		09	17.7
25	25	25,253	-51.3		09	19.3
20	24	26,709	-47.9		09	20.9
15	23	28,621	-44.7		09	21.3
10	16	31,353	-41.0		09	21.3
7	8	33,778	-37.9			
5						

* WAKE IS., PACIFIC AREA
1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	5	27.0	24.1	09	4.4
1000	31	131	26.0	22.8	09	5.7
950	31	582	22.5	20.4	10	7.3
900	31	1,052	19.4	16.8	10	6.5
850	31	1,543	16.1	12.8	10	6.2
800	31	2,058	13.7	9.5	09	5.6
750	31	2,600	11.0	5.7	09	5.3
700	31	3,173	7.8	1.1	10	4.2
650	31	3,782	4.6	-3.5	10	2.9
600	31	4,430	.9	-6.8	09	1.8
550	31	5,125	-3.3	-12.1	08	.5
500	31	5,872	-8.0	-16.5	23	.5
450	31	6,684	-12.9	-22.1	27	1.3
400	31	7,572	-18.9	-28.5	26	2.8
350	31	8,556	-26.1	-35.4	25	4.8
300	31	9,650	-34.4	-43.4	25	7.0
250	31	10,897	-44.8		26	9.8
200	31	12,350	-56.8		26	14.3
175	31	13,185	-62.9		26	15.7
150	31	14,121	-68.4		27	14.1
125	31	15,207	-70.5		27	6.6
100	30	16,530	-69.7		08	1.3
80	30	17,864	-68.3		08	7.2
70	26	18,667	-66.2		08	9.6
60	23	19,603	-64.4		08	11.9
50	20	20,729	-61.7		09	14.9
40	18	22,120	-59.2		09	16.9
30	16	23,939	-55.7		09	19.3
25	16	25,104	-53.7		09	22.5
20	16	26,552	-49.7		09	25.8
15	16	28,445	-47.5		09	26.3
10	13	31,145	-43.7		09	31.1
7	9	33,545	-40.1			
5						

* WALLOPS IS., VA. NASA
1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	4	21.7	20.7	33	.4
1000	31	147	23.1	19.7	31	.7
950	31	595	21.3	15.8	32	1.3
900	31	1,062	18.4	13.3	30	1.7
850	31	1,550	15.4	7.6	29	2.4
800	31	2,063	12.7	4.8	29	3.3
750	31	2,602	9.8	1.4	29	3.6
700	31	3,173	6.6	-3.1	28	4.4
650	31	3,778	3.2	-7.1	27	5.0
600	31	4,423	-.3	-10.9	27	5.5
550	31	5,114	-4.3	-15.2	27	5.9
500	31	5,860	-8.2	-21.6	26	6.5
450	31	6,670	-13.5	-26.7	26	6.9
400	30	7,555	-19.2	-32.2	25	6.6
350	29	8,536	-26.7	-37.5	25	7.0
300	29	9,627	-35.2	-45.4	25	8.2
250	29	10,872	-44.6		25	9.3
200	29	12,331	-55.0		26	10.3
175	28	13,173	-59.4		27	8.2
150	28	14,128	-63.8		27	7.0
125	28	15,240	-65.9		28	4.9
100	28	16,595	-65.0		33	1.6
80	28	17,964	-62.5		05	2.0
70	27	18,791	-60.5		07	3.4
60	27	19,757	-58.3		08	4.4
50	27	20,912	-55.6		08	5.6
40	26	22,339	-53.7		08	7.5
30	26	24,202	-50.6		09	9.7
25	26	25,396	-48.7		09	10.9
20	24	26,867	-46.6		09	12.1
15	21	28,782	-44.7		09	13.1
10	17	31,509	-40.9		09	14.3
7	10	33,927	-38.5			
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb.)	WASHINGTON DULLES INT. AP 1008 MB				Resultant Wind		WAYCROSS, GA. 1012 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.
SURFACE	31	85	18.2	17.5	28	.2	31	44	21.8	21.3	31	.2
1000	31	150	20.4	18.4	29	.5	31	143	22.8	21.0	28	.4
950	31	596	21.0	15.7	31	1.4	31	592	22.2	18.4	28	1.0
900	31	1,063	18.5	12.3	31	2.0	31	1,062	19.7	14.9	28	.8
850	31	1,551	15.7	8.9	29	2.4	31	1,553	16.6	11.1	24	.9
800	31	2,064	12.9	3.9	29	3.3	31	2,068	13.9	7.2	24	1.3
750	31	2,604	9.6	.4	28	4.4	31	2,610	10.8	2.7	24	1.3
700	31	3,173	6.4	-5.1	28	5.2	31	3,182	7.4	-1.2	24	1.7
650	31	3,778	3.2	-8.3	28	6.3	31	3,789	4.1	-4.5	26	1.7
600	31	4,423	-.5	-11.6	28	6.3	31	4,437	.8	-9.1	26	2.0
550	31	5,114	-4.7	-15.9	28	6.6	31	5,132	-2.8	-14.0	26	1.5
500	31	5,858	-8.7	-22.6	26	6.5	31	5,881	-7.3	-19.1	27	1.5
450	31	6,667	-13.6	-27.4	26	7.2	31	6,695	-12.4	-24.0	32	1.2
400	31	7,553	-19.7	-32.8	25	8.0	31	7,584	-18.6	-30.4	33	1.2
350	31	8,533	-26.6	-39.9	25	8.5	31	8,570	-25.5	-37.3	32	1.0
300	31	9,625	-34.9	-48.1	25	9.5	31	9,667	-33.8	-46.1	34	1.0
250	31	10,871	-44.6		26	10.9	31	10,919	-43.7		01	.9
200	31	12,332	-54.5		27	11.1	31	12,383	-54.5		04	1.0
175	31	13,179	-59.1		27	10.9	31	13,228	-60.1		06	1.5
150	31	14,135	-63.0		27	8.7	31	14,178	-65.2		02	.9
125	30	15,250	-65.6		27	6.2	30	15,278	-68.0		03	2.0
100	30	16,609	-64.5		30	2.6	30	16,618	-67.2		06	4.1
80	30	17,980	-62.3		06	1.4	30	17,973	-64.4		08	5.9
70	30	18,810	-60.1		08	2.0	30	18,794	-62.4		08	8.0
60	30	19,776	-58.4		07	3.6	28	19,749	-60.1		09	10.5
50	30	20,929	-55.8		08	4.9	28	20,895	-57.3		09	12.4
40	30	22,357	-53.7		08	7.1	27	22,313	-54.9		09	14.1
30	28	24,220	-50.2		09	8.7	26	24,168	-51.9		09	16.0
25	27	25,416	-48.8		09	9.8	25	25,356	-49.8		09	16.6
20	24	26,894	-46.8		09	10.9	24	26,823	-47.6		09	17.7
15	23	28,812	-44.4		09	12.3	24	28,735	-45.0		08	19.4
10	14	31,550	-41.2		09	13.1	16	31,488	-40.7		09	22.1

Standard pressure surface (mb.)	WINNEMUCCA, NEV. 871 MB				Resultant Wind		WINSLOW, ARIZ. 854 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.
SURFACE	31	1,312	13.4	-1.1	14	.5	31	1,487	16.2	9.5	18	1.0
1000												
950												
900												
850	31	1,520	19.9	2.0	27	.5	31	1,524	18.4	8.1	19	1.1
800	31	2,040	17.0	-.3	28	2.4	31	2,047	19.8	5.0	23	2.2
750	31	2,587	13.1	-2.9	27	3.4	31	2,600	17.0	1.7	23	2.7
700	31	3,162	8.8	-5.6	24	4.2	31	3,184	12.3	.3	21	2.8
650	31	3,770	4.1	-7.9	22	6.3	31	3,800	7.2	-1.3	19	3.9
600	31	4,416	-.6	-11.1	22	8.6	31	4,453	1.9	-5.1	19	4.7
550	31	5,104	-5.6	-15.5	22	10.1	31	5,149	-3.3	-10.4	20	4.0
500	31	5,845	-10.6	-21.8	23	9.6	31	5,896	-8.1	-18.7	21	3.4
450	31	6,648	-15.9	-27.8	23	10.7	31	6,708	-12.7	-25.9	22	3.7
400	31	7,525	-22.2	-33.6	24	12.1	31	7,596	-18.8	-32.6	24	3.9
350	31	8,495	-29.3	-40.7	24	14.3	31	8,581	-25.7	-38.3	24	5.5
300	31	9,575	-37.6	-48.8	24	18.5	31	9,676	-33.9	-46.3	25	7.2
250	31	10,810	-45.9		24	19.2	31	10,929	-43.2		26	7.4
200	30	12,267	-53.9		24	19.9	30	12,397	-53.6		26	9.4
175	29	13,121	-57.3		25	19.1	30	13,246	-58.9		26	8.9
150	28	14,086	-60.4		25	14.5	30	14,200	-64.6		26	8.1
125	27	15,219	-63.6		25	10.2	29	15,302	-68.7		26	5.9
100	27	16,588	-63.5		24	4.4	26	16,631	-68.7		24	1.5
80	27	17,965	-61.4		18	.9	26	17,982	-64.3		10	2.8
70	27	18,796	-60.1		12	1.2	25	18,802	-62.3		09	5.3
60	27	19,762	-58.3		09	2.4	25	19,758	-60.3		09	6.5
50	27	20,916	-56.1		08	4.2	25	20,902	-57.8		09	8.2
40	25	22,340	-54.1		09	5.7	25	22,318	-55.3		09	10.7
30	23	24,200	-51.4		09	7.2	23	24,168	-52.3		09	12.4
25	22	25,394	-49.4		08	8.6	21	25,350	-50.3		09	13.0
20	17	26,859	-47.3		09	10.0	21	26,814	-48.0		09	13.1
15	13	28,770	-45.8		09	9.3	17	28,721	-46.0		09	15.1
10												

Standard pressure surface (mb.)	YAKUTAT, ALASKA 1014 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.
SURFACE	30	12	8.6	8.0	09	1.4
1000	30	130	10.1	7.9	12	1.9
950	30	555	7.9	5.0	14	3.5
900	30	1,000	5.3	2.4	16	3.3
850	30	1,465	2.7	-.4	17	2.4
800	30	1,954	.6	-3.0	20	1.5
750	30	2,471	-2.0	-6.6	21	2.3
700	30	3,016	-5.1	-10.1	23	2.7
650	30	3,596	-8.3	-14.8	24	3.1
600	30	4,213	-11.7	-17.7	25	3.6
550	30	4,875	-15.8	-25.3	26	5.2
500	30	5,588	-20.2	-30.4	27	6.6
450	30	6,360	-25.3	-35.3	27	8.2
400	30	7,206	-31.0	-41.1	28	9.8
350	17	8,151	-38.3	-43.2	28	11.6
300	17	9,193	-44.9		28	14.9
250	16	10,408	-49.3		28	17.7
200	16	11,876	-48.1		28	12.7
175	16	12,757	-48.0		28	11.9
150	16	13,772	-48.7		27	10.2
125	16	14,969	-49.6		28	8.9
100	16	16,430	-49.9		26	6.3
80	15	17,897	-50.1		27	3.4
70	15	18,769	-50.1		26	2.0
60	15	19,777	-50.1		26	1.3
50	15	20,968	-50.1		06	.2
40	15	22,430	-49.0		09	1.5
30	15	24,326	-47.5		08	1.9
25	13	25,536	-46.4		09	2.2
20	9	27,018	-45.1			
15	8	28,948	-42.7			
10						

Standard pressure surface (mb.)	* YAP, CAROLINE IS. 1008 MB				Resultant Wind		YUCCA FLAT, NEV. 881 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point †	Direction	Speed M.p.s.
SURFACE	31	14	28.6	24.2	11	2.2	31	1,198	15.6	-2.0	28	.2
1000	31	85	26.9	23.4	11	2.5						
950	31	539	23.6	21.0	11	3.1						
900	31	1,010	20.7	17.3	12	3.4						
850	31	1,504	17.7	14.0	11	3.7	31	1,507	23.1	2.1	21	1.7
800	31	2,022	15.5	10.5	11	4.0	31	2,032	20.0	-.8	21	5.4
750	31	2,568	12.7	7.5	10	4.6	31	2,584	15.8	-3.2	20	6.2
700	31	3,145	9.5	3.8	11	4.6	31	3,164	11.0	-5.5	20	5.6
650	31	3,758	6.2	.9	11	4.6	31	3,778	6.4	-7.7	20	5.4
600	31	4,410	2.4	-2.8	10	4.5	31	4,429	1.5	-11.0	20	5.2
550	31	5,110	-1.4	-7.3	10	4.0	31	5,123	-3.6	-15.6	20	5.8
500	31	5,864	-5.5	-11.1	10	3.9	31	5,869	-8.6	-21.8	22	6.9
450	31	6,684	-10.1	-15.8	09	3.5	30	6,680	-13.6	-28.2	23	7.9
400	31	7,584	-15.6	-22.9	09	2.9	30	7,566	-19.4	-35.0	23	9.5
350	31	8,582	-22.2	-30.8	07	3.2	30	8,548	-26.7	-41.7	23	10.6
300	31	9,693	-30.6	-39.0	05	3.9	30	9,639	-34.9	-49.1	23	12.9
250	31	10,961	-41.0	-48.5	03	5.7	30	10,887	-43.9		24	13.9
200	31	12,437	-53.7		01	8.0	30	12,353	-54.0		24	14.8
175	31	13,282	-60.6		02	9.6	30	13,201	-58.6		24	14.6
150	31	14,224	-68.2		02	10.8	30	14,158	-63.4		24	13.4
125	31	15,300	-75.4		03	7.9	30	15,269	-66.6		25	8.6
100	31	16,580	-77.0		07	6.4	28	16,617	-66.7		22	3.3
80	31	17,881	-71.0		08	11.0	27	17,979	-63.6		13	1.7
70	31	18,680	-67.6		08	10.9	27	18,803	-61.5		10	3.1
60	31	19,615	-64.9		09	10.3	27	19,763	-59.5		09	5.2
50	31	20,734	-62.4		09	11.4	27	20,911	-57.1		09	6.5
40	31	22,121	-59.8		09	12.1	27	22,331	-54.8		09	8.1
30	31	23,940	-55.1		09	12.2	25	24,185	-52.1		09	10.2
25	29	25,115	-53.1		09	13.6	24	25,369	-50.2		09	11.7
[illegible]	29	26,559	-51.0		09	17.0	23	26,831	-48.3		09	12.1
15	25	28,444	-48.0		09	22.9	22	28,737	-45.9		09	13.6
10	23	31,147	-43.0		09	34.3	17	31,458	-42.9		10	14.6
7	7	33,541	-41.4				5	33,868	-40.9			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

Observations for these stations are scheduled at 0000 G. C. T.

† Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun. AUGUST 1973

ALBUQUERQUE, N. MEX.

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Aug.									
1	0.79	0.87	0.97	1.13	1.32	1.07	0.93	0.81	0.72
2	----	.82	.96	1.10	1.32	1.06	.85	.75	.64
3	.77	----	.94	1.13	1.28	----	----	----	----
4	.72	----	.90	----	----	1.08	.90	.79	.70
5	.66	.74	----	.98	1.23	----	----	----	.52
6	.63	.73	.87	1.04	1.26	----	----	.76	.64
7	.68	.79	.93	.98	1.31	1.13	.95	.85	.79
8	.79	.88	1.00	1.14	1.33	1.13	----	(.83)	(.73)
9	.74	.83	.95	1.10	1.30	----	.95	.79	.70
10	.75	.86	.97	1.10	1.27	1.03	.87	.69	(.59)
11	.76	.86	.98	1.13	1.30	1.04	.88	.78	.66
12	.68	.79	.91	1.07	(1.24)	----	----	----	----
13	.73	.80	.94	1.09	1.27	----	----	(.42)	(.38)
14	(.67)	----	----	----	1.24	----	----	----	----
15	(.69)	(.78)	(.90)	(1.05)	----	----	----	----	----
16	----	(.81)	(.91)	(1.07)	----	----	----	----	----
17	.78	.87	1.00	1.14	1.36	1.16	1.00	.85	.75
18	.71	.80	.94	1.09	1.23	----	----	----	----
19	.51	.61	.75	.94	----	----	----	----	----
20	.60	.73	.85	----	----	(1.09)	----	----	----
22	----	----	----	----	1.25	----	----	----	----
23	.63	.74	.87	1.03	1.26	.99	.83	(.69)	----
24	.66	.81	.92	1.08	1.26	----	----	----	----
25	----	(.57)	(.73)	.93	1.27	1.08	.93	(.79)	----
26	.75	.84	.98	1.12	1.30	1.13	.96	.85	.74
27	.69	.80	.93	1.07	1.21	----	----	(.79)	.69
28	.64	.74	.86	1.03	1.24	----	----	----	----
29	.65	.74	.86	1.03	1.22	----	.94	----	----
31	.76	86	1.00	1.16	1.26	----	----	----	----
Averages	0.70	0.80	0.93	1.07	1.27	1.08	0.92	0.79	0.69

OMAHA, NEBR.

	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78

NO DATA RECEIVED

TUCSON, ARIZ.

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.64	3.71	2.78	1.86	*	1.86	2.78	3.71	4.64
Aug.									
1	----	----	----	1.06	1.30	----	----	----	----
2	----	----	----	1.08	1.29	1.05	0.76	----	0.59
3	----	----	0.76	1.02	----	----	----	----	----
4	0.55	0.68	.83	1.01	1.33	1.12	.91	----	----
5	.45	----	----	.89	1.15	----	----	----	.52
6	.52	.65	.76	.98	----	1.18	.95	.84	.72
7	.77	.90	1.02	1.17	----	1.16	1.02	.89	.77
8	.72	.81	.94	1.10	1.34	1.13	.91	.83	.74
9	.67	.77	.91	1.08	1.31	1.05	.86	.75	.64
10	----	----	.76	.94	1.25	1.01	.82	.72	.60
11	.61	.72	.85	1.03	1.22	.95	.73	.56	.47
12	.66	.76	.91	1.07	1.31	1.12	.99	----	----
13	.70	.78	.91	1.09	1.29	1.04	.86	----	----
15	.67	.75	.87	1.04	----	----	----	----	----
17	----	----	----	----	1.27	----	----	----	----
18	.64	.76	.87	1.06	1.28	----	----	----	----
19	.57	.69	.80	.97	1.20	----	----	----	----
20	.66	.78	.97	1.06	1.28	----	----	----	----
21	----	----	----	1.11	1.34	1.02	.79	.67	.62
22	.68	.76	.91	1.07	1.33	.97	.72	.60	.41
23	.55	.65	.78	----	1.25	----	----	----	----
24	.70	.80	.93	1.10	1.31	1.14	1.01	.88	.77
25	----	----	.95	----	1.32	1.10	.96	.84	.74
26	.62	.74	----	1.05	1.27	----	----	----	----
27	.55	.67	.76	.94	1.22	1.01	.83	.71	.63
28	.67	.76	.87	1.03	1.21	.95	----	----	----
29	.51	.65	.82	1.02	1.22	----	.76	.54	.43
30	.68	.77	.91	1.06	1.26	----	.80	.69	.58
31	----	.70	.85	1.07	1.28	1.13	----	----	----
Averages	0.63	0.74	0.87	1.04	1.27	1.07	0.86	0.73	0.62

MADISON, WIS.

	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Aug.									
2	M 0.48	M 0.61	M 0.75	----	M 1.13	----	----	----	----
12	S .61	S .71	S .84	S 1.10	----	----	----	----	----
20	.65	.77	.90	1.19	1.29	----	----	----	----
22	S .61	S .68	M .71	.81	----	----	----	----	----
26	----	----	----	----	----	M 0.84	----	----	----
27	M .50	M .59	M .75	M .94	M 1.13	S .92	----	S 0.52	S 0.49
28	I .25	I .34	I .45	I .64	I .92	----	----	----	----
29	----	I .35	M .51	M .72	I .93	----	----	----	----
31	I .26	I .30	----	----	----	----	----	----	----
Averages	0.48	0.54	0.70	0.90	1.08	0.88	----	----	----

( )	Clouds Present
*	Values corresponding to true solar noon
BD	Blowing Dust
BN	Blowing Sand
D	Dust
DI	Intense Dust
DM	Moderate Dust
DS	Slight Dust
F	Fog
GF	Ground Fog
H	Haze

HI	Intense Haze
HM	Moderate Haze
HS	Slight Haze
I	Intense Haze-indeterminable
K	Smoke
KI	Intense Smoke
KM	Moderate Smoke
KS	Slight Smoke
M	Moderate Haze-indeterminable
N	Sand
S	Slight Haze-indeterminable

Langley is the unit used to denote one gram calorie per square centimeter. An Explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

NET RADIATION

AUGUST 1973

Net radiation in langleys per day (8 a.m. to 8 a.m. at Palmer, Alaska

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	179	152	117	171	29	68	68	196	142	108	62	125	158	216	143	145	179	165	193	132	39	57	146	75	90	173	168	139	97	23	56	123

The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp Station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (< 3900 Å) at Ames, Iowa

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	23.64	18.52	16.45	19.01	19.86	11.94	17.30	14.14	19.86	19.13	11.21	19.13	9.87	15.96	14.01	16.70	16.57	13.28	13.65	16.28	12.67	15.11	8.04	7.43	11.21	16.45	16.21	16.09	14.99	14.67	11.45	15.19

These data are from an U-V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup Recorder.

This instrument has not been checked by the NOAA, National Weather Service.

TOTAL OZONE DATA

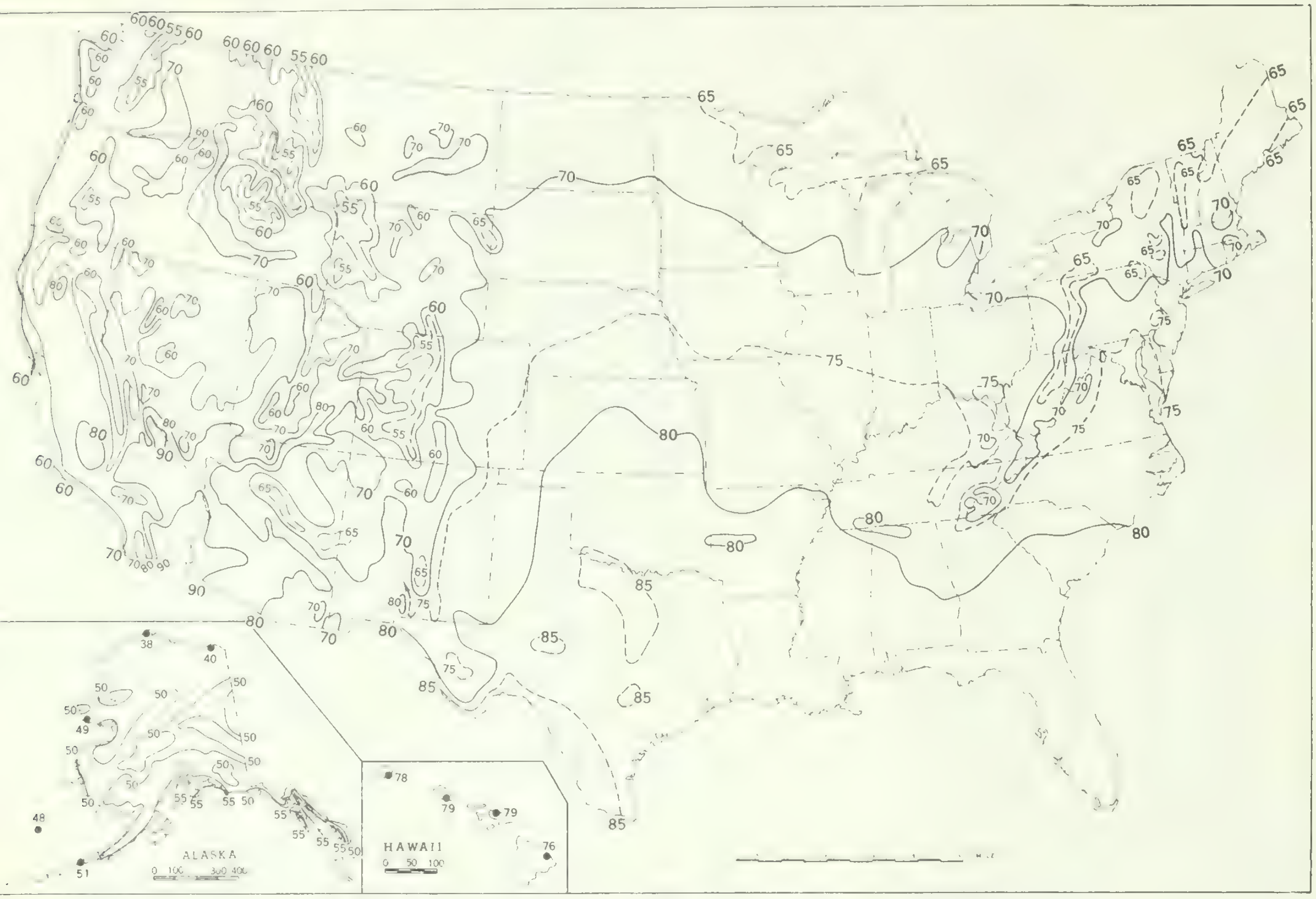
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code as [illegible] defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units Milli-atmo-cms.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
														NO DATA RECEIVED																		

[illegible]

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), August.


ALASKA
0 100 300 400
HAWAII
0 50 100
38
40
49
48
51
78
79
79
76

B. Temperature Departure from 30 - Year Mean (°F 1931-60), August 1973

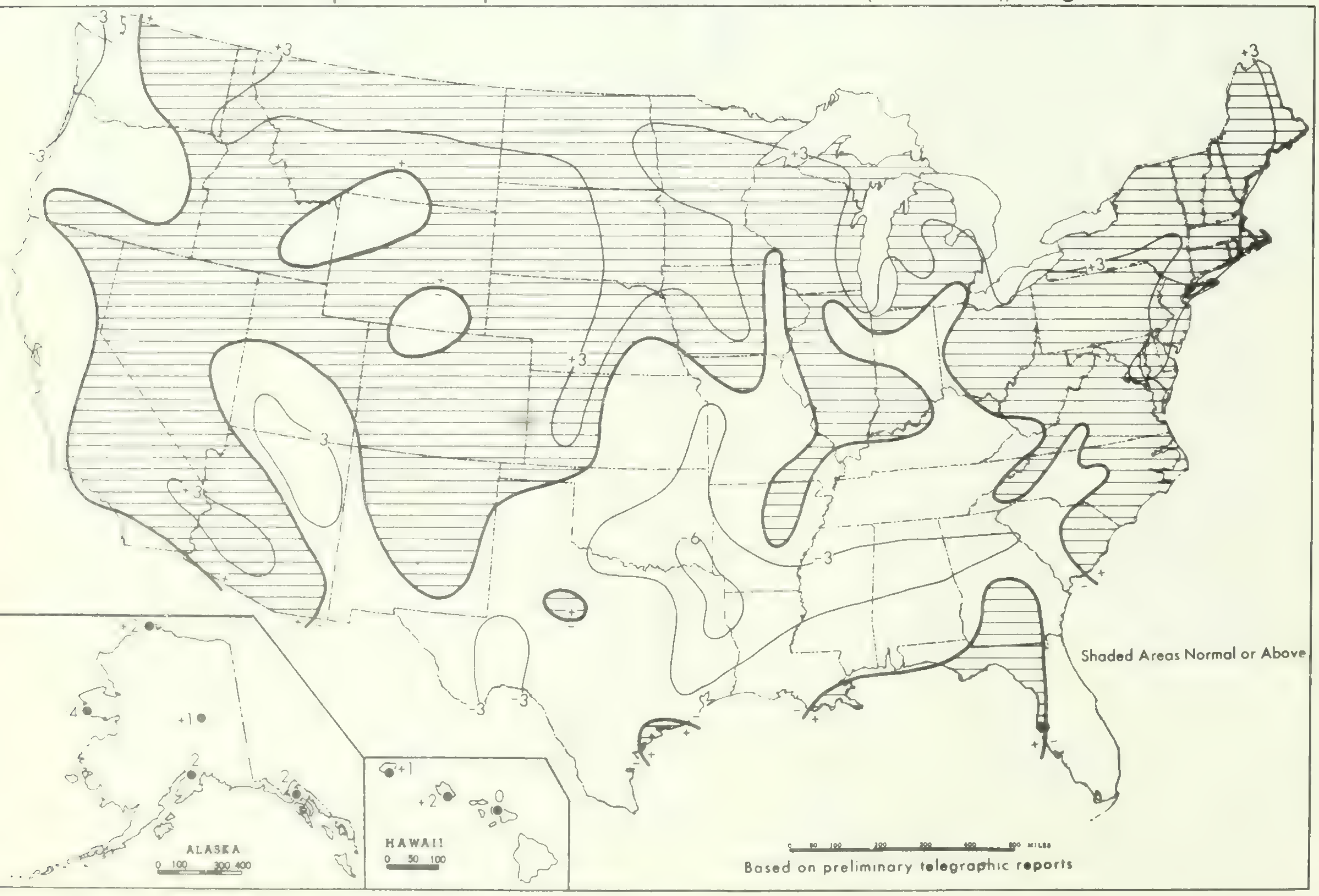
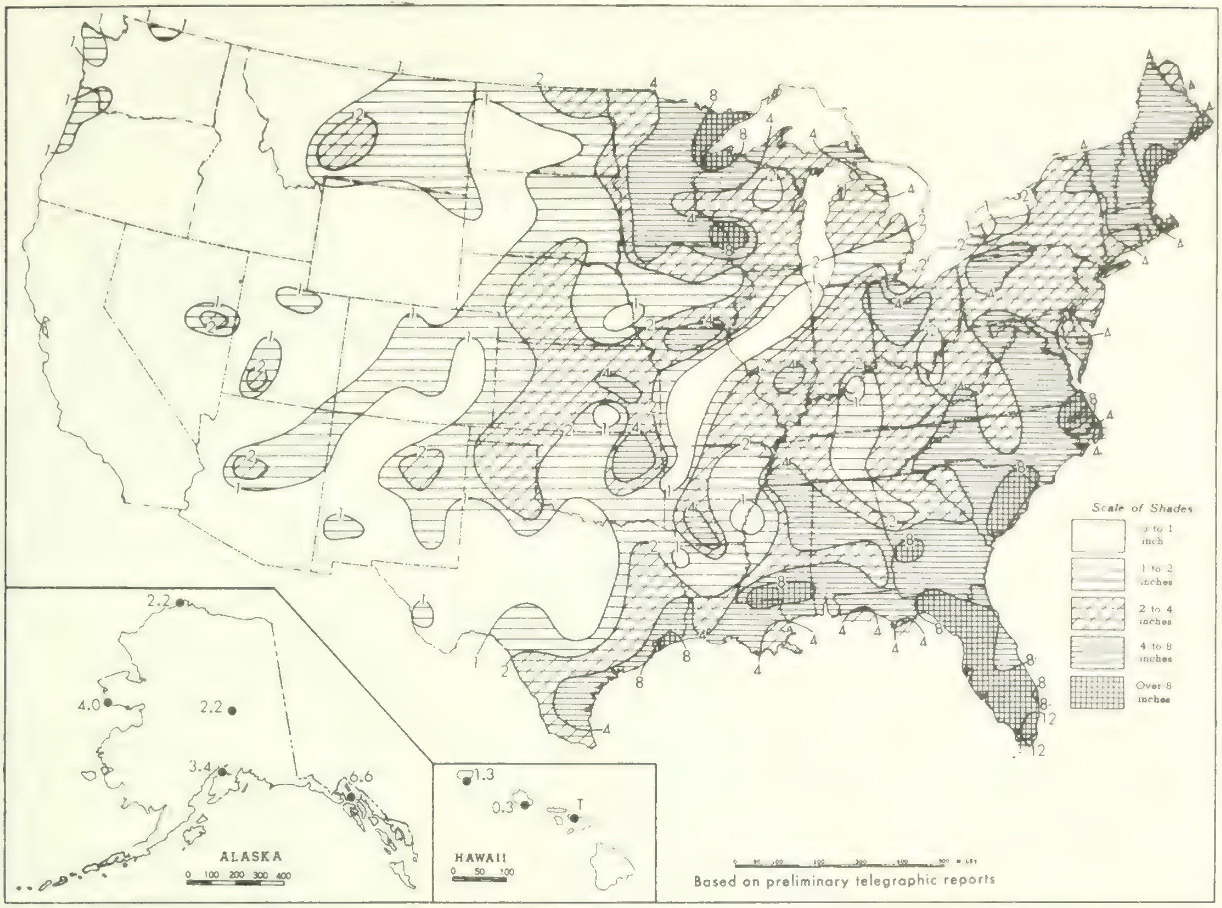

Shaded Areas Normal or Above
ALASKA
0 100 300 400
HAWAII
0 50 100
Based on preliminary telegraphic reports
+3
-3
+1
+2
0
4
2

Chart II. A. Total Precipitation (Inches), August 1973


Scale of Shades
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 8 inches
Over 8 inches
ALASKA
2.2
4.0
2.2
3.4
6.6
0 100 200 300 400
HAWAII
1.3
0.3
T
0 50 100
Based on preliminary telegraphic reports

B. Percentage of Normal Precipitation, August 1973

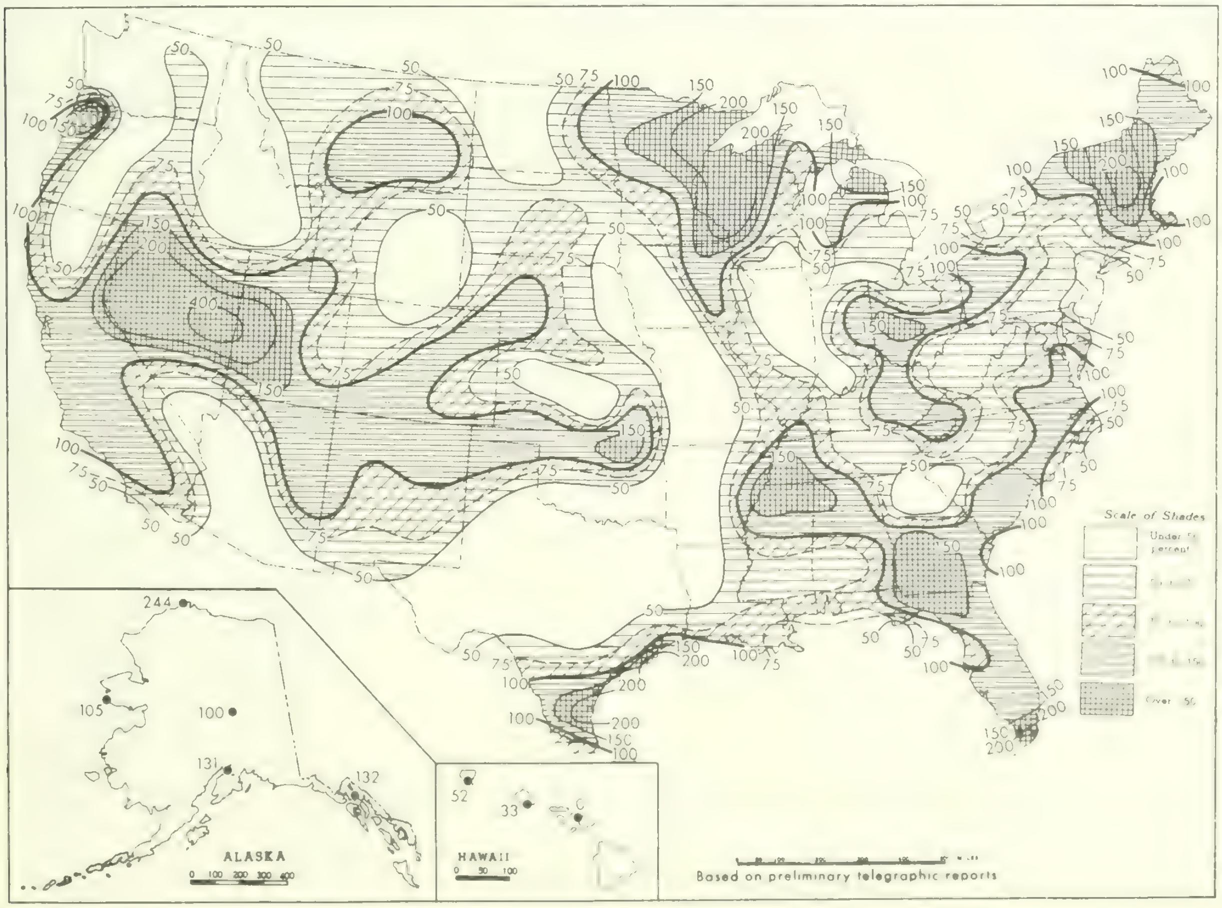
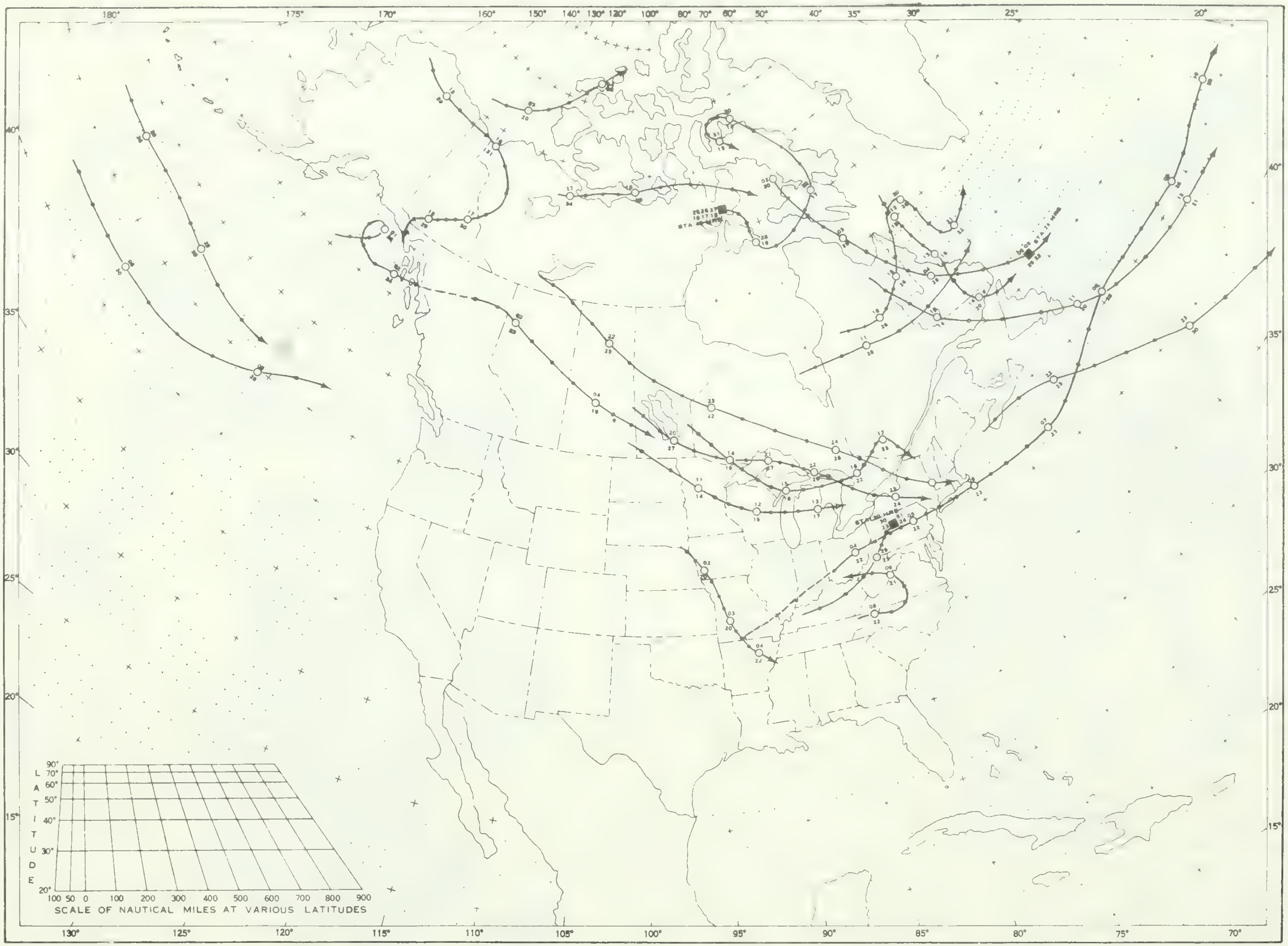
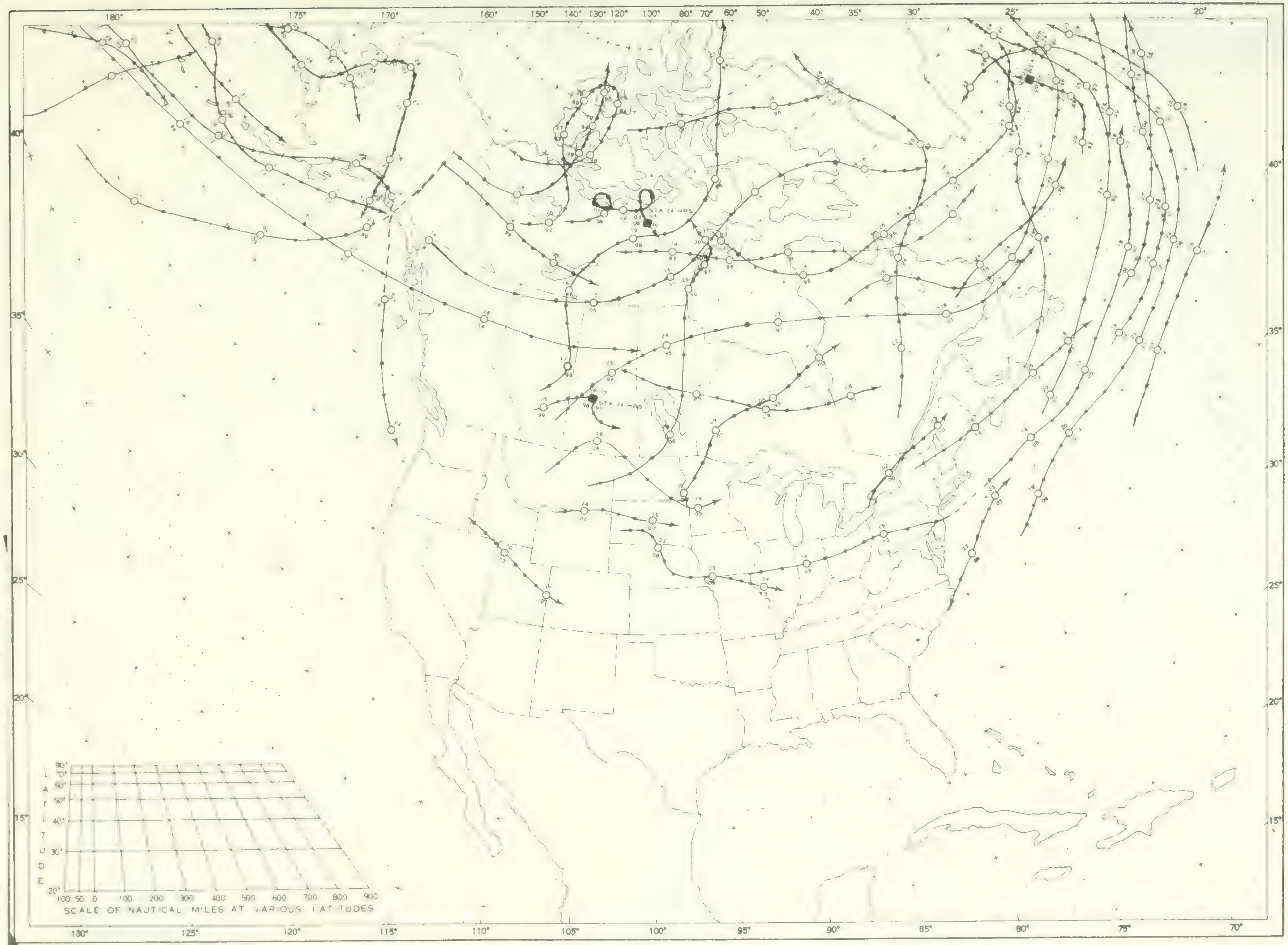

Scale of Shades
Under 50 percent
Over 150
ALASKA
244
105
100
131
132
0 100 200 300 400
HAWAII
52
33
0
0 50 100
Based on preliminary telegraphic reports

Chart III. Tracks of Centers of Anticyclones at Sea Level, August 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
STA
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, August 1973


STA 24 HRS
STA 24 HRS
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES
LATITUDE
180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

IMBER
1973
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No. 9
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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

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I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina 28801.

William H. Haggard
Director, National Climatic Center

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

SEPTEMBER 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

Dr. Richard E. Felch, Climatologist

HIGHLIGHTS:

1. Most of the East was warmer than normal, while the West was mostly cooler than average.

2. The Plains States were wetter than normal, while the East and Southwest were rather dry.

TEMPERATURE--Temperatures averaged cooler than normal in the West, but as is often in such a case, were warmer than normal over the eastern half of the United States. In the West the greatest departures occurred over the Rocky Mountains and the western Plains. Goodland and Concordia, Kans., and North Platte, Nebr., all averaged more than 5° below normal. In the East the greatest departures occurred down through the Ohio River Valley, western Kentucky and Tennessee, and southeastward through Georgia to the Atlantic and Gulf Coasts.

This same pattern was apparent as the month began with the greatest departures occurring in the Oklahoma and Texas Panhandles where temperatures were 9° below normal. At the same time temperatures in the Pacific Northwest and New England were running 3° to 6° above normal. Temperatures had been running much above normal over the East for several days, and the extreme heat was finally broken by a passage of a long delayed cold front. By the end of the first decade temperatures were considerably below normal over nearly the entire Nation.

This change in temperature conditions proved to be the pattern for the next two weeks as the Nation continued to be much cooler than normal. By the end of the second decade, frost had occurred through most of the northern tier of States. Temperatures over the northern Plains averaged 6° to 9° below normal during most of this period.

The month ended with temperatures above normal over the eastern half of the Nation, the northern Rockies, and the Pacific Coast, but much below normal over New England and most western States. Temperatures were 6° to 12° above normal over the Corn Belt.

PRECIPITATION--Precipitation was considerably above normal over most of the Plains States, with rainfall generally normal to below normal over the eastern third of the Nation. Much of the above normal precipitation, particularly in the southern Plains, was associated with Tropical Storm Delia, which struck near Galveston on the 3d. Lake Charles, La., received 19.96 inches.

Tropical Storm Delia came ashore near Galveston, Texas, on the 3d, meandered in the area for several days, and finally moved northward through Missouri and Iowa before breaking up. By the time the storm cleared away, over 9 inches had fallen in the Port Arthur, Texas, area, and over 6 inches had fallen in surrounding areas.

Most significant rainfall during the remainder of the month was associated with thunderstorm activity which was very active. At Midmonth two distinct storm systems brought heavy rainfall to the Gulf Coast and the Great Plains. From 2 to 6 inches fell along the Gulf Coast and upwards of 2 inches fell over most of the Great Plains. Heavy rains also caused flooding and some damage in the Carolinas where over 6 inches fell in some locations. Meanwhile, snow was falling at higher elevations in the Rockies.

The month ended very wet, as a slowly moving cold front dumped monsoon-like rains on the Nation's midsection. Considerable violent weather was associated with the front -- 20 tornadoes touched down in Kansas in a single afternoon. By the end of the month Topeka, Kans., had received over 46 inches of precipitation so far in 1973.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

SEPTEMBER 1973

STATE	Temperature Monthly extremes Station	Highest	Date	Station	Lowest	Date	Precipitation Monthly extremes Station	Greatest	Station	Least
		°F			°F			In.		In
Alabama	2 Stations	99	10	3 Stations	39	19	Robertsdale 1 E	13.27	Wadley	.75
Alaska	3 Stations	75	16	Coldfoot Camp	-2	27	Mac Leod Harbor	23.91	Willow Lake	.07
Arizona	Quartzsite	115	7	Sunrise Mountain	19	28	Lukachukai	1.38	133 Stations	.00
Arkansas	[illegible]	98	11	2 Stations	36	18	Jessieville	11.67	Arkansas City	3.01
California	Palm Springs	113	6	White Mountain 2	-5	25	Elk Valley	7.28	216 Stations	.00
Colorado	John Martin Dam	97	24	Climax	15	29	Palmer Lake	6.22	Bond	.02
Connecticut	Hartford-Brainard Fld	98	1	Wigwam Reservoir	27	21	Stafford Springs 2	6.40	Round Pond	1.93
Delaware	Dover	97	1	Georgetown 5 SW	44	20	Middletown 1 WSW	4.93	Georgetown 5 SW	2.49
Florida	Pompano Beach	99	15	2 Stations	55	26	Deland 1 SSE	13.14	Ocala	2.95
Georgia	2 Stations	98	10	Tallapoosa 2 N	41	19	Fort Stewart	10.82	West Point	.70
Hawaii	Keawakapu Beach 260.2Maui	94	4	2 Stations	35	19	Mt Waialeale 1047, Kauai	24.87	14 Stations	.00
Idaho	3 Stations	103	6+	Tensed	20	16	Henry	4.73	Glenns Ferry	.11
Illinois	3 Stations	95	2	2 Stations	36	19	Galena 1 N	11.95	Shawneetown New Town	.72
Indiana	4 Stations	95	2	Culver Exp Farm	34	19	Jeffersonville	7.08	Richmond Wtr Wks 2 NNE	.30
Iowa	2 Stations	93	1	Elkader 5 SSW	30	18	Mount Pleasant	11.78	Sioux Center	1.68
Kansas	Anthony	101	2	Hunter	31	18	Lyons 3 S	16.28	Richfield 10 WSW	2.01
Kentucky	Ashland	99	4	Falmouth 5 WNW	35	19	Jackson	4.96	Fords Ferry Dam 50	.16
Louisiana	3 Stations	95	11	3 Stations	50	20+	Abbeville	19.99	Lake Providence	1.50
Maine	Brunswick	95	3	Van Buren 2	22	24+	Greenville	5.73	Portland WSO AP	2.23
Maryland	2 Stations	99	1	Bittinger 2 NW	35	19	Conowingo Dam	5.84	Assateague State Park	1.03
Massachusetts	Chester 2	101	3	Chester 2	21	22	Middleboro	8.72	Haverhill	1.23
Michigan	3 Stations	97	3	Watersmeet	18	20	Fife Lake 4 SW	6.09	Port Huron Wastewtr Pl	.83
Minnesota	3 Stations	89	2	Karlstad	14	20	Nett Lake	12.38	Ortonville	1.04
Mississippi	5 Stations	96	24	2 Stations	40	20+	Standard	17.76	2 Stations	.44
Missouri	2 Stations	96	2	Plattsburg Waterworks	32	18	Marshall	13.38	Parma	1.18
Montana	2 Stations	97	6+	3 Stations	14	16+	Plevna	5.27	Browning	.14
Nebraska	Beaver City	94	1	3 Stations	26	27+	Guide Rock	13.70	Haigler	3.34
Nevada	Sunrise Manr Las Vegas	108	7	2 Stations	17	27	Vya	1.39	25 Stations	.00
New Hampshire	2 Stations	94	4	Mount Washington	15	21	Mount Washington	6.93	Otter Brook Lake	1.18
New Jersey	2 Stations	100	2+	Sussex 1 SE	34	21	Burlington	6.63	Ringwood	2.16
New Mexico	4 Stations	100	5+	Eagle Nest	19	3	Carlsbad Caverns	4.85	10 Stations	.00
New York	Glenham	98	[illegible]	Tully-Heiberg Forest	22	22	Lyons Falls	7.68	Eagle Bridge 2 SE	1.16
North Carolina	2 Stations	98	1	Hayesville 4 NE	35	19	Celo 2 S	6.59	Roxboro	.56
North Dakota	2 Stations	97	1	Powers Lake 1 N	18	16	Montpelier	11.11	Garrison	1.22
Ohio	2 Stations	99	1	2 Stations	29	21	Jackson 2 NW	5.28	2 Stations	.45
Oklahoma	8 Stations	98	3	Jay	33	18	Jay	13.63	Boise City 2 E	2.17
Oregon	Medford WSO AP	106	4	2 Stations	15	16+	Nehalem 9 NE	10.74	Pine Mtn Observatory	.30
Pennsylvania	Johnstown	101	3	Austinburg 2 W	24	21	Newport	8.77	North East 2 SE	.89
Puerto Rico & VI	Benavente-Hormigueros,P.R.	96	1	2 Stations	58	20+	Pico Del Este, P.R.	20.12	Aibonito, P.R.	1.55
Rhode Island	2 Stations	91	4	2 Stations	35	30+	North Scituate 4 W	6.24	Providence WSO AP	3.01
South Carolina	Kershaw	99	7	Rainbow Lake	48	20	Anderson FAA AP	10.45	Wateree Dam	.73
South Dakota	2 Stations	96	1	Camp Crook	24	17	Tyndall	7.71	Ridgeview	1.20
Tennessee	Palmetto	97	4	Mountain City No 2	35	19	Copperhill	6.53	Lawrenceburg Filt Pl	.83
Texas	5 Stations	102	13+	Bravo	33	28	Angleton 2 W	19.33	2 Stations	.00
Utah	Saint George	102	4	2 Stations	20	27+	City Creek Water Plant	5.76	8 Stations	.00
Vermont	Vernon	95	4	Mount Mansfield	20	22	Mount Mansfield	8.59	Newfane	.82
Virginia	Manassas	100	2	Burkes Garden	32	19	Pennington Gap	4.84	Diamond Springs	.61
Washington	Lower Granite Dam Near	102	6	Chewelah 4 SSW	23	16	Cougar 6 E	7.97	Priest Rapids Dam	.24
West Virginia	Logan 1 W	101	2	2 Stations	32	19	Camden on Gauley	6.24	Renick No 2	.99
Wisconsin	3 Stations	94	2+	Drummond 6 W	18	20	Brodhead	8.06	Newald	1.29
Wyoming	Worland FAA AP	92	7	Bondurant 3 NW	14	17	Glendo 4 SW	6.71	Dixon	1.06

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation on ground	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
ALABAMA	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M.p.s		M.p.s							%
BIRMINGHAM	189	994.6	1016.7	30.8	19.3	25.1	0.5	35.0	10	7.2	19	12	0	18.9	75	67	- 18	56	5	3	0	0	1.3	9	9.8	SW	13	6	11	13	6.1	65
HUNTSVILLE	190	994.2	1017.1	30.4	19.4	24.9	1.3	33.3	9+	7.2	19	10	0	18.9	73	45	- 33	13	5	5	0	0	1.7	9	9.4	13	26	7	13	10	5.8	
MOBILE	64	1007.5	1015.2	31.0	22.5	26.8	1.5	33.9	25+	15.0	19	12	0	21.1	76	322	163	96	17	13	0	0	1.2	9	9.8	21	13	6	7	17	6.8	
MONTGOMERY	56	1009.1	1016.2	31.7	20.8	26.3	1.2	33.9	8+	12.2	20+	19	0	20.0	75	103	3	48	9	6	0	0	0.8	10	9.4	SE	1	11	6	13	5.8	65
ALASKA												8																				
ANCHORAGE	35	1004.7	1009.6	11.5	3.7	7.6	- 1.3	15.6	6+	- 2.2	29	0	4	6.1	68	19	- 44	9	8	0	0	0	0.3	16	11.7	15	30	3	5	22	8.4	39
ANNETTE	34	1010.2	1014.3	15.4	7.7	11.6	- 0.7	21.1	13	3.9	30+	1	0	7.2	88	325	74	51	19	0		0	1.7	14	13.4	16	1	5	7	18	7.3	
BARROW	9	1007.8	1008.5	3.4	- 1.2	1.1	1.9	12.8	15	- 7.2	27	0	22	0.0	91	29	13	10	15		165	76	1.1	15	12.5	14	29	0	2	28	9.3	
BARTER ISLAND	12	1008.5	1010.3	3.8	- 0.6	1.7	1.6	12.8	13	-10.6	28	0	17	0.6	95	17	- 7	10	6	0	91	102	1.3	11	12.1	10	20	1	6	23	8.5	
BETHEL	38	1001.4	1006.8	11.5	3.3	7.4	0.4	19.4	5+	- 3.9	27	0	4	3.9	81	43	- 23	9	18	1	T	T	0.2	18	13.9	18	30+	3	6	21	7.8	
BETTLES	196			10.9	0.5	5.7		20.0	16	-10.6	28	0	13			26		9	11	0	58	T			10.3	14	[illegible]	3	9	18	7.2	
BIG DELTA	386			12.6	1.6	7.1		20.6	15	- 6.1	24	0	12			7			3	0	0											
COLD BAY	29	1003.7	1007.3	10.4	5.6	8.0	- 0.6	15.0	29	0.6	23	0	0	6.1	89	78	- 32	29	16		T		1.5	24	23.7	14	11	0	2	28	9.2	
FAIRBANKS	133	992.2	1009.3	14.3	2.7	8.5	2.1	23.3	15	- 2.2	28	2	6	1.1	64	5	- 23	2		0	20	T	0.4	3	8.0	27	30	5	5	20	7.6	
HOMER	20			11.7	3.7	7.7		15.6	2	- 3.3	24	0	7			72	2	21	16	0	0				11.6	14	13+	5	4	21	7.7	
JUNEAU	4	1012.5	1013.2	13.3	4.4	8.9	- 0.5	20.6	11	- 0.6	18+	0	6	6.7	91	126	- 44	33	15		0		1.7	12	14.0	12	1	7	2	21	7.4	41
KING SALMON	15	1004.7	1006.9	12.6	4.2	8.4	- 0.4	19.4	2	- 3.9	26+	0	8	3.9	76	36	- 42	21	11	0	T	T	1.8	12	15.6	9	15+	4	10	16	7.2	
KODIAK	4	1003.7	1008.2	10.9	4.8	7.9	- 2.1	15.0	1	- 2.2	28	0	3	4.4	81	168	13	4	16	0	0		0.9	6	14.8	9	7	8	4	18	7.1	
KOTZEBUE	3	1006.4	1006.8	8.8	2.9	5.9	0.9	16.1	16	- 3.9	26	0	6	2.3	83	38	7	9	17	0	76	51	1.4	11	17.4	16	26	2	9	19	7.7	
MC GRATH	105	995.6	1008.2	13.1	1.9	7.6	0.9	20.6	3	- 6.1	27	0	9	2.2	73	41	- 25	15	11	1	8	T	0.3	21	13.9	19	[illegible]	4	5	21	7.9	
NOME	4	1004.4	1005.3	9.0	2.2	5.6	0.1	18.3	5+	- 6.7	25	0	10	2.8	81	63	- 5	11	19	0	8	T	1.2	14	19.7	18	[illegible]	4	7	19	[illegible]	39
ST. PAUL ISLAND	7	1005.1	1005.8	8.8	4.4	6.6	- 0.4	11.7	4	0.0	22	0	1	[illegible]	90	42	- 36	10	17	0		0	1.9	25	17.9	13	14	1	5	24	8.9	
SUMMIT	732	924.1	1010.8	8.4	0.6	3.9		16.7	15	-11.7	24	0	16	- 1.6	75	22		14	9		198	[illegible]	0.4	8	9.8	16	13	3	3	24	8.8	
TALKEETNA	105			12.8	0.7	6.8	- 1.0	19.4	2	- 6.7	29+	0	13			38	- 75	20	12						5.8	17	26+					
UNALAKLEET	5			11.2	3.6	7.4		19.4	4	- 6.7	9	0	7			33			15	0	6				13.0	17	[illegible]					
YAKUTAT	9	1010.8	1011.8	12.9	2.7	7.8	- 1.7	19.4	16	- 3.3	30	0	11	5.0	86	304	-116	61	16	0	0	0	1.4	10	13.4	14	26	8	3	19	[illegible]	
ARIZONA																																
FLAGSTAFF	2135	789.7	1015.1	25.1	3.4	14.3	- 0.4	30.0	5	- 1.7	25	0	3	0.5	44	T	- 40	T	0	[illegible]	0	0	1.1	21	14.8	SW	23	27	3	0	1.0	93
PHOENIX	340	971.2	1009.0	38.1	20.4	29.3	1.1	42.2	5+	16.1	29+	30	0	5.0	22	0	- 19	0	0	0	0	0	0.4	14	14.3Y	SW	[illegible]	29	1	0	0.3	99
TUCSON	788	923.8	1009.6	34.6	18.3	26.4	- 0.4	40.0	4	12.8	27	26	0	5.6	28	T	- 25	T	0	0	0	0	1.0	[illegible]	13.9	SW	[illegible]	28	2	0	0.9	97
WINSLOW	1492	852.4	1013.9	29.7	8.2	19.0	- 2.5	35.0	7	1.1	28	8	0	1.0	32	2	- 21	2	2	1	0	0	1.4	22	13.0	31	25	24	6	0	1.3	
YUMA	59	1001.7	1008.8	37.7	20.4	29.1	- 1.1	42.8	7	16.1	24	30	0	9.4	34	0	- 10	0	0	0	0	0	0.6	21	11.6	N	[illegible]	30	0	0	0.1	100
ARKANSAS																																
FORT SMITH	136	998.6	1015.2	28.7	18.5	23.6	- 0.2	34.4	1	8.9	18	5	0	17.8	75	131	39	52	12	3	0		1.2	10	9.4	S	[illegible]	4	11	15	5.0	67
LITTLE ROCK	78	1006.4	1015.7	29.1	19.5	24.3	0.8	33.9	1	12.2	19+	2	0	18.9	76	231	149	98	9	6	0		1.0	11	15.6	SW	24	8	10	12	6.3	76
CALIFORNIA																																
BAKERSFIELD	145	995.9	1013.3	32.7	16.8	24.8	0.1	37.2	9	13.3	24	17	0	11.1	45	0	- 2	0	0			0	1.5	34	9.4	31	4	28	1	1	0.9	
BISHOP	1252	874.0		31.1	7.5	19.3	- 0.8	36.1	7+	2.8	24	9	0			0	- 5	0	0		0	0						24	4	2	1.2	
BLUE CANYON	1609	843.2		21.8	10.8	16.3	- 0.8	30.6	4	2.8	22	0	0			71	55	53	5		0	0			8.9	21	[illegible]	[illegible]	[illegible]	6	1.6	
EUREKA	13			17.1	10.8	13.9	0.4	24.4	9	7.2	1	0	0			60	43	25	7		0	0			14.3	NW	1	7	12	11	5.9	40
FRESNO	100	1001.4	1013.1	31.3	13.2	22.2	- 1.2	35.0	29+	10.6	25+	14	0	12.2	57	0	- 3	0	0	0	0	0	1.6	[illegible]	8.9	NW	24+	25	4	1	[illegible]	98
LONG BEACH	8	1012.9	1014.2	24.8	15.8	20.3	- 1.5	37.8	27	12.2	24	3	0	11.7	62	T	- 2	T	0	0	0	0	1.1	[illegible]	9.4	11	26	8	14	8	5.1	
LOS ANGELES	30	1009.8	1013.6	23.3	16.2	19.8	- 0.5	36.7	27	13.9	6	3	0	13.9	76	T	- 4	T	0	0	0	0	2.0	24	10.3Y	W	5+	7	15	8	5.3	
LOS ANGELES [illegible]	92			25.6	16.7	21.1	- 1.1	37.2	27	14.4	24	3				0	- 6	0				0			6.7	SW	[illegible]	10	16	4	4.3	64
MT SHASTA R	1080	893.3	1016.5	24.3	6.6	15.5	- 0.9	34.4	4	2.2	26+	1	0	3.9	54	37	15	19	4			0	[illegible]	[illegible]								
OAKLAND	2	1015.6	1015.7	20.8	13.3	17.1	- 1.3	31.7	27	11.1	29+	[illegible]	0	13.3	[illegible]	11	6	9	3			0	2.8	[illegible]	[illegible]	34	[illegible]	13	[illegible]	4	[illegible]	
RED BLUFF	104	1001.[illegible]	1013.4	30.6	14.8	22.7	- 1.7	38.3	3	11.1	27	12	0	[illegible]	47	4	- 6	4	1		0	0	[illegible]	[illegible]	[illegible]	SE	19	21	4	3	2.8	92
SACRAMENTO	5	1012.5	1013.5	30.2	12.9	21.6	- 0.4	37.2	9	10.6	17+	[illegible]	0	10.0	[illegible]	8	4	8	3			0	1.7	[illegible]	[illegible]	N	8	[illegible]	6	1	2.1	92
SANDBERG	1377			24.7	12.8	18.7	- [illegible]	30.6	12	6.1	24	[illegible]	[illegible]			T	[illegible]	T	0		0	0	1.4	[illegible]	[illegible]	[illegible]	24	28	[illegible]	[illegible]	[illegible]	
SAN DIEGO	4	1012.5	1013.7	23.5	17.4	20.4	- 0.6	33.9	27	15.6	7	3	0	[illegible]	66	1	- 3	1	1			0	1.8	28	8.5	NW	[illegible]	[illegible]	8	11	5.5	63
SAN FRANCISCO	2	1014.9	[illegible]	22.2	12.7	17.5	- 0.2	[illegible]	27	10.6	[illegible]	[illegible]	0	[illegible]	[illegible]	1	- 4	1	1			0	3.7	29	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]	
SAN FRANCISCO [illegible]	16			19.7	12.2	16.3	- 0.4	32.2	27	10.6	[illegible]					[illegible]		[illegible]	4													46
SANTA MARIA	72			22.7	11.0	16.8	- 0.3	35.6	27	[illegible]	[illegible]					[illegible]	- 2	1	1		[illegible]	0						[illegible]			[illegible]	
STOCKTON	7	1012.9	1013.7	29.3	13.1	21.2	- 1.4	35.0	9	8.3	[illegible]	[illegible]	[illegible]	11.1	[illegible]	2	- 3	1	1			0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
COLORADO																																
ALAMOSA	2297	774.5		22.2	1.6	11.9	- 1.3	27.2	9	- [illegible]	[illegible]	0	9			[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	1						[illegible]	[illegible]	[illegible]	[illegible]	

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths sunrise to sunset	Possible sunshine
												No of days							No of days		Snow, Ice pellets				Fastest mile 1.6 kilometers							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear 0-3	Partly cloudy 4-7	Cloudy 8-10		
COLORADO	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm.	Mm.			Mm	Mm	M p s		M p s							%
COLORADO SPRINGS	1873	813.4	1015.4	21.6	8.2	14.9	- 1.6	29.4	20	2.8	27	0	0	2.8	50	26	- 1	10	10	3	0	0	1.1	6	16.5	35	26	14	9	7	4.6	
DENVER	1610	837.8	1014.1	23.5	7.5	15.5	- 1.7	30.6	7	1.7	27	0	0	4.4	53	72	44	38	12	6	0	0	0.2	5	12.1	SW	23	11	10	9	5.2	69
GRAND JUNCTION	1476	852.7	1013.0	27.0	10.4	18.7	- 1.2	33.3	7	2.8	28+	1	0	1.1	35	8	- 15	6	3	2	0	0	0.8	13	16.1	SW	23	17	7	6	3.7	77
PUEBLO	1428	856.4	1013.5	26.2	10.2	18.2	- 1.1	32.8	23+	3.3	18	5	0	7.2	56	30	9	18	6	0	0	0	1.3	6	18.8	SW	23	14	11	5	4.2	76
CONNECTICUT																																
BRIDGEPORT	2	1018.3	1018.8	24.6	15.3	20.0	1.4	32.8	4	7.2	21	1	0	12.8	64	65	- 35	25	6	3	0	0	1.7	28	15.6	30	18	8	13	9	5.6	
HARTFORD	52	1011.9	1018.2	24.6	11.8	18.2	0.8	35.6	4	2.8	22	4	0	12.2	73	95	2	29	7	4	0	0	1.3	30	8.9	NW	7	4	18	8	6.3	71
DELAWARE																																
WILMINGTON	23	1015.6	1018.7	26.8	15.8	21.3	1.6	35.0	3+	10.0	19	4	0	15.0	69	77	- 24	53	9	3	0	0	0.7	32	12.5	34	2	9	10	11	5.8	
DIST.OF COLUMBIA																																
WASHINGTON DULLES	88	1007.1	1018.7	27.1	14.6	20.9		34.4	1	6.1	19	3	0	16.1	77	80		59	5	2	0	0	0.3	26	10.3	18	3	8	13	9	5.7	
WASHINGTON NATIONAL	3	1016.3	1018.8	28.4	18.6	23.5	2.6	35.6	1	11.1	19	6	0	15.6	64	40	- 57	25	5	3	0	0	0.1	29	9.8	N	29	8	13	9	5.9	62
FLORIDA																																
APALACHICOLA	4			30.4	24.0	27.2	1.2	32.2	25+	20.0	20+	2	0			225	8	72	19	11	0	0			15.2	E	4	5	15	10	6.2	88
DAYTONA BEACH	9	1015.2	1016.6	30.8	23.4	27.1	0.9	33.3	14+	21.1	18	3	0	22.8	81	131	- 47	50	12	9	0	0	1.7	9	10.3	10	25+	2	17	11	6.2	
FORT MYERS	5	1015.2		32.3	23.8	28.1	0.7	33.9	21+	22.2	30+	26	0	22.8	78	213	- 3	141	14	11	0	0	0.8	10	13.0	25	11	3	19	8	6.0	
JACKSONVILLE	8	1015.9	1017.0	30.9	21.6	26.3	- 0.1	34.4	9	20.0	29+	8	0	22.2	85	200	8	59	15	9	0	0	1.3	8	14.3	NE	25	6	13	11	6.2	54
KEY WEST	1	1014.2	1014.8	30.8	25.9	28.3	0.4	32.2	10	23.3	22	1	0	23.9	77	84	- 87	28	13	8	0	0	2.4	11	14.3	SE	1	4	14	12	6.4	73
LAKELAND	65			31.4	22.6	27.0	0.2	32.8	26+	20.6	24	13	0			156	- 11	34	16		0	0						3	17	10	6.4	56
MIAMI	2	1014.9	1015.2	30.3	25.0	27.7	0.3	32.2	10	22.8	22	1	0	23.9	82	167	- 73	39	20	11	0	0	2.2	11	17.9	11	6	2	19	9	6.5	
ORLANDO	33	1011.9	1016.2	31.8	23.1	27.4	0.8	33.3	14+	21.7	28+	19	0	22.8	81	293	109	156	15	15	0	0	1.3	7	11.2	7	23	4	16	10	6.5	
PENSACOLA	34	1011.2	1015.4	30.8	23.1	27.0	1.3	33.3	25+	15.0	19	7	0	22.2	80	156	- 40	44	12	9	0	0	1.2	11	8.9	29	14+	8	5	17	6.4	
TALLAHASSEE	17	1013.9	1016.1	31.9	22.2	27.1	1.4	33.9	21+	18.3	24	13	0	22.2	82	135	- 5	44	11	11	0	0	1.1	9	7.6	25	14+	6	14	10	6.1	
TAMPA	6	1015.2	1015.6	31.7	23.5	27.6	0.7	33.3	7+	21.7	29+	14	0	22.2	78	226	51	40	14	14	0	0	1.1	9	12.5	32	11	3	15	12	6.5	64
WEST PALM BEACH	5	1014.6	1015.4	31.6	23.9	27.8	- 0.1	33.3	19+	20.0	30	12	0	22.2	76	193	- 53	67	17	11	0	0	1.7	11	12.5	27	11	5	12	13	6.6	
GEORGIA																																
ATHENS	244	989.2	1017.5	29.8	18.3	24.1	1.1	35.0	9+	12.2	19	5	0	19.4	82	104	27	34	10	4	0	0	1.0	7	9.4	8	3	8	15	7	5.5	
ATLANTA	308	980.7	1017.0	29.1	19.3	24.2	1.4	33.3	9	10.6	19	2	0	18.9	76	106	23	26	9	4	0	0	1.7	9	13.0	NW	30	7	9	14	6.1	59
AUGUSTA	41	1011.9	1017.0	31.4	19.0	25.2	1.2	35.6	9	15.0	19	12	0	19.4	76	75	- 1	32	7	5	0	0	0.8	7	9.4	2	10	6	17	7	5.6	
COLUMBUS	117	1002.7		31.3	20.9	26.1	1.7	33.9	8+	12.8	20+	12	0	20.6	79	57	- 14	27	11	4	0	0	1.6	8	10.3	6	26	5	14	11	5.8	
MACON	108	1004.4	1017.0	32.2	20.6	26.4	1.7	35.6	9+	13.3	19	19	0	21.1	79	25	- 45	13	8	2	0	0	1.2	8	9.4	NE	25	6	12	12	5.8	71
ROME	194			29.6	18.2	23.9	1.4	35.0	9+	8.9	19	9	0			155	72	52	11		0	0										
SAVANNAH	14	1015.6	1017.4	30.8	21.4	26.1	1.3	33.9	9	18.9	23	3	0	21.7	81	93	- 41	26	12	6	0	0	1.3	8	11.2	NW	14	9	11	10	5.8	47
HAWAII																																
HILO	8	1015.6	1016.9	29.0	20.2	24.6	0.4	30.6	24+	17.8	19+	0	0	21.1	82	205	- 11	77	22	0	0	0	0.3	31	6.7	E	23+	4	16	10	6.2	49
HONOLULU	2	1016.3	1016.6	31.4	22.9	27.2	1.0	32.8	25	20.0	13	3	0	18.9	63	16	- 9	9	6	0	0	0	5.2	6	12.1	NE	23	9	18	3	4.8	74
KAHULUI	15	1013.9	1016.3	30.3	20.4	25.4	- 0.4	31.7	14	16.7	19+	0	0			1	- 5	1	4	0	0	0	6.0	4	13.4	E	24+	16	9	5	4.0	82
LIHUE	31	1012.9	1017.9	29.4	22.7	26.1	0.4	30.6	6+	21.1	13+	0	0	20.6	74	45	- 8	12	17	0	0	0	4.9	4	9.8	NE	19	4	18	8	5.7	48
IDAHO																																
BOISE	865	916.0	1015.1	24.9	9.6	17.3	0.2	33.9	5	3.3	26+	2	0	3.9	46	21	11	13	4	0	0	0	0.4	32	12.5	NW	19	16	7	7	3.9	83
LEWISTON	431			25.3	11.0	18.2	0.7	38.3	5	5.6	16	5	0			28	6	9	7		0	0			13.9Y		7	10	8	12	5.3	
POCATELLO	1358	864.5	1016.3	22.2	5.9	14.1	- 1.7	31.7	5	- 0.6	17	0	1	4.4	58	58	43	23	8	1	0	0	1.9	22	13.4	NE	25+	9	11	10	5.5	69
ILLINOIS																																
CAIRO U	96			26.9	19.1	23.1	0.6	31.7	4	8.3	19	0	0			124	48	60	9		0	0			9.8	SE	24					51
CHICAGO O HARE	201	993.2	1017.6	23.7	14.0	18.9	1.3	33.3	3	6.1	18	3	0	13.9	73	153	83	55	16	5	0	0	0.2	15	13.0	23	4	7	6	17	6.8	
CHICAGO MIDWAY	185	995.6	1018.2	24.2	14.7	19.4	0.5	34.4	1	6.1	18	3	0	13.3	70	107	38	34	15	6	0	0	0.4	15	11.6	SE	21	7	6	17	6.7	64
MOLINE	177	995.9	1017.2	23.5	13.9	18.7	0.2	32.8	1	4.4	18	1	0	13.9	77	171	89	42	13	7	0	0	0.8	14	16.1	S	24	4	6	20	7.4	44
PEORIA	199	993.6	1017.5	24.6	14.3	19.4	0.3	32.2	1	4.4	18	1	0	15.0	78	193	115	43	14	7	0	0	0.7	14	10.7	W	17	4	7	19	7.5	46
ROCKFORD	221	990.9	1017.7	22.7	13.1	17.9	0.3	32.8	1	3.9	18	1	0	13.9	80	216	127	65	16	8	0	0	0.7	12	10.3	11	21	5	6	19	7.2	
SPRINGFIELD	179	995.3	1017.1	26.4	15.6	21.0	1.2	33.9	2+	5.6	18	2	0	16.7	79	83	9	28	12	7	0	0	1.1	14	14.3	SW	22	5	5	20	7.6	55
INDIANA																																
EVANSVILLE	116	1003.7	1017.5	28.7	17.0	22.9	1.7	33.9	3	7.2	19	5	0	17.8	76	19	- 54	12	5	3	0	0	0.5	11	11.2	S	30	6	11	13	6.5	57

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation ground	Pressure		Temperature								No of days			Average relative humidity	Precipitation			No of days		Snow Ice pellets		Wind		Fastest mile (1.6 kilometers)			No of days sunrise to sunset			Sky cover tenths sunrise to sunset	Possible sunshine
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear 0-3	Partly cloudy 4-7	Cloudy 8-10		
INDIANA	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	Mps		Mps							
FORT WAYNE	241	988.8	1018.5	25.7	13.0	19.4	1.2	32.8	3+	4.4	19	3	0	13.9	74	18	- 50	6	6	2	0	0	0.2	22	11.6	W	22	8	6	16	6.3	55
INDIANAPOLIS	241	989.2	1018.0	26.7	15.4	21.1	1.9	33.3	2	6.7	19	4	0	16.1	77	62	- 21	34	7	5	0	0	0.7	16	12.5	NW	22	8	7	15	6.2	53
SOUTH BEND	236	989.8	1017.6	24.8	14.1	19.4	1.8	34.4	3+	6.7	21	3	0	13.3	69	54	- 24	19	9	4	0	0	0.6	18	9.4	13	21+	6	8	16	6.7	
IOWA																																
BURLINGTON	211			23.7	14.6	19.2	0.3	32.2	1	4.4	18	1	0	15.6	80	149	68	27	14	6	0	0	1.7	15	13.0	21	24	3	7	20	7.5	
DES MOINES	286	982.4	1016.7	23.1	14.3	18.7	0.2	30.6	21	4.4	18	0	0	13.3	75	180	106	78	16	4	0	0	0.9	12	13.7	SW	24+	4	5	21	7.8	45
DUBUQUE	322	979.1		21.3	12.6	16.9	0.4	32.2	1	3.9	18	1	0			185	90	36	16													
SIOUX CITY	334	977.0	1016.7	22.7	11.9	17.3	- 1.3	30.0	10+	2.2	18	0	0	12.2	74	103	33	38	13	4	0	0	0.8	13	13.4	SE	24	7	5	18	7.3	41
WATERLOO	265	985.8	1017.4	21.2	11.9	16.6	- 0.6	31.7	1	1.7	18	0	0	12.2	77	175	78	63	15	4	0	0	0.9	12	12.5	22	1	5	4	21	7.7	
KANSAS																																
CONCORDIA	448	962.4	1014.9	22.4	13.6	18.0	- 2.9	32.8	2	4.4	18+	1	0	15.0	85	216	146	81	15	9	0	0	1.4	11	14.3	E	25	5	2	23	7.6	57
DODGE CITY	787	924.5	1014.2	23.6	13.3	18.5	- 2.8	35.0	2	6.1	18+	2	0	11.7	71	173	134	42	14	11	0	0	0.8	9	15.2	N	2	3	6	21	7.6	45
GOODLAND	1114	888.9	1015.0	21.5	9.2	15.4	- 3.2	32.2	1	3.3	16	1	0	10.0	79	137	105	43	14	5	0	0	0.3	5	15.6	15	23	5	12	13	6.7	
TOPEKA	267	984.4	1015.7	24.1	14.4	19.2	- 1.6	33.3	21	1.7	18	1	0	16.1	84	323	247	96	16	8	0	0	1.1	11	15.6	NW	21	2	6	22	8.4	30
WICHITA	403	967.6	1014.6	24.6	15.2	19.9	- 1.9	35.0	2	3.3	18	1	0	16.1	81	240	158	70	14	9	0	0	1.4	14	16.1	NW	21	1	9	20	7.8	37
KENTUCKY																																
COVINGTON	265	987.1	1018.3	26.6	15.2	20.9	1.3	32.8	4+	3.9	19	3	0	16.1	78	67	- 5	21	9	4	0	0	0.4	15	10.3	23	22	8	9	13	6.1	
LEXINGTON	294	983.4	1018.4	28.4	16.2	22.3	1.6	33.9	4+	3.3	19	6	0	16.1	74	36	- 36	15	10	3	0	0	0.8	13	8.9	24	22	9	7	14	6.5	
LOUISVILLE	145	1000.0	1017.3	28.4	17.8	23.1	2.3	34.4	4	7.8	19	6	0	16.1	69	59	- 7	20	10	4	0	0	0.6	14	8.1	[illegible]	[illegible]	7	11	12	6.1	57
LOUISIANA																																
ALEXANDRIA	29	1010.6	1014.7	29.9	20.3	25.1	0.1	33.9	1	13.3	19	4	0	21.1	83	242	163	79	11	6	0	0	1.1	8	9.8	9	12	7	11	12	6.1	
BATON ROUGE	20	1011.9	1014.6	30.8	22.3	26.6	1.1	32.8	26+	13.9	19	12	0	21.1	78	332	243	160	15	5	0	0	1.7	11	11.2	14	4	4	8	18	7.1	
LAKE CHARLES	3	1012.5	1013.5	29.9	21.9	25.9	0.6	33.3	1	17.2	19	4	0	22.2	84	507	405	200	13	13	0	0	2.2	10	13.4	15	6	4	14	12	7.3	
NEW ORLEANS	1	1013.5	1014.3	30.4	22.6	26.5	0.9	33.9	24	17.2	21+	7	0	21.7	78	281	153	61	13	10	0	0	1.8	10	10.1	18	26+	6	9	15	6.7	48
SHREVEPORT	77	1005.1	1014.3	28.8	18.8	23.8	- 2.2	32.8	1	12.2	29	2	0	19.4	80	162	104	78	9	5	0	0	1.3	10	13.0	16	6	7	11	12	6.1	67
MAINE																																
CARIBOU	190	991.5		17.1	6.1	11.6	- 0.5	28.9	2	- 2.8	22	0	5			67	- 23	25	13		T	0						3	9	18	7.4	
PORTLAND	13	1014.9	1017.4	20.8	8.4	14.7	- 0.2	33.9	3	- 1.1	22	1	1	10.6	81	57	- 33	19	9	3	0	0	1.1	27	12.5	NW	7	9	11	10	5.7	61
MARYLAND																																
BALTIMORE	45	1013.5	1019.1	26.2	15.7	21.0	0.9	35.6	1	7.8	19	4	0	15.6	74	124	39	45	5	2	0	0	0.8	27	16.5	N	2	10	11	9	5.5	56
MASSACHUSETTS																																
BLUE HILL OBSERV	192			21.6	11.6	16.6	- 0.3	32.8	3	3.3	21	2	0			108	7	33	9		0				16.5	WSW	22					69
BOSTON	5	1016.9	1017.8	22.4	13.6	18.0	- 0.5	34.4	4+	6.1	21	2	0	11.1	67	50	- 38	26	9	3	0	0	1.4	28	21.9	SW	6	9	14	7	5.2	72
WORCESTER	301	981.4	1018.1	20.7	10.5	15.6	- 0.4	31.7	4+	3.3	21	0	0	10.6	73	97	- 3	40	7	3	0	0	1.9	29	8.9	29	8+	6	17	7	5.8	
MICHIGAN																																
ALPENA	211	993.2	1018.5	20.0	7.3	13.7	0.3	32.2	3	- 1.7	21+	1	4	8.9	75	75	- 16	36	10	3	0	0	1.0	26	11.6	W	4	7	13	10	5.8	65
DETROIT	189			23.3	13.2	18.2	- 0.2	33.3	3	3.3	21	4	0	10.6	62					2	0		0.8	28	11.2	26	22					
DETROIT METRO	193	994.2	1018.2	24.7	11.8	18.3	0.9	33.9	3+	3.3	21	4	0	12.2	72	46	- 13	27	6	3	0	0	0.6	26	10.7	WSW	22	10	10	10	5.7	68
FLINT	234	989.8	1017.8	23.1	10.9	17.0	0.3	33.3	3	2.8	21	4	0	11.1	70	71	- 4	44	10	3	0	0	0.8	25	9.4	23	22	7	12	11	6.3	
GRAND RAPIDS	239	989.5	1018.5	23.3	11.5	17.4	0.7	33.9	3	1.7	18	3	0	11.7	71	63	- 13	43	9	2	0	0	0.4	21	11.0	NW	4	6	10	14	6.7	55
HOUGHTON LAKE	350	976.6	1018.7	19.9	8.2	14.1	0.1	31.7	3	- 1.1	21	0	1	10.0	77	50	- 25	25	9	4	0	0	0.7	26	14.0	24	6	7	12	11	6.1	
LANSING	256	986.8	1018.4	24.0	9.4	16.7	0.0	36.1	3	2.8	21+	4		11.7	74	71	[illegible]	36	5	4	0	0	0.9	24	11.6	W	22	8	9	13	6.0	55
MARQUETTE	226			19.1	10.5	14.8	0.5	32.2	1	3.9	21	1	0			52	- 32	21	10		0				[illegible]	[illegible]	26	8	7	15	6.6	49
MUSKEGON	191	995.6	1018.5	21.8	11.4	16.7	- 0.6	31.7	3	1.1	18	0	0	11.7	74	42	- 35	21	9	6	0	0	0.3	13	10.7	18	15	9	8	13	6.3	
SAULT STE MARIE	220	997.9	1017.4	17.6	6.7	12.2	- 1.1	30.6	3+	- 2.2	21	0	3	8.3	79	70	- 27	28	15	[illegible]	0	0	0.7	27	11.6	E	22+	5	6	19	7.1	58
MINNESOTA																																
DULUTH	435	966.1	1017.5	17.2	6.8	12.0	- 0.3	26.7	1	- 4.4	22	0	1	8.3	80	109	36	51	11	4	0	0	0.7	24	15.2	NE	26+	6	11	13	7.0	52
INTERNATIONAL FALLS	359	973.2	1016.6	17.8	5.4	11.7	0.1	25.6	3+	- 3.9	22	0	4	6.7	73	173	99	86	10	3	0	0	0.7	13	11.6	14	14	10	7	13	6.7	
MINNEAPOLIS	254	987.1	1017.4	20.4	10.7	15.6	- 0.2	29.4	2	1.7	20	0	0	10.0	71	53	- 9	26	11	5	0	0	0.4	19	11.6	15	14+	7	4	19	7.0	54
ROCHESTER	395	970.9	1017.9	20.3	10.1	15.2	- 0.7	29.4	1	2.2	23+	0	0	11.1	80	148	[illegible]	[illegible]	15	4	[illegible]	[illegible]	0.6	18	11.2	15	14	4	6	19	7.2	
ST CLOUD	313	980.4	1017.9	20.1	8.1	14.1	- 0.9	28.9	2+	- 2.2	20	0	2			71	10	29	14		0	0						9	1	20	7.1	

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No of days		Snow, Ice pellets		Wind		Fastest mile (1.6 kilometers)			No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy 4-7	Cloudy, 8-10		
MISSISSIPPI	M.	Mb.	Mb.	C.	C.	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M p.s							%
JACKSON	94	1003.7	1015.6	29.8	20.8	25.3	0.6	32.8	9	11.1	19	4	0	20.6	80	113	49	27	13	4	0	0	1.3	12	11.2	SE	4	5	8	17	6.7	34
MERIDIAN	88	1005.1	1016.0	30.8	20.2	25.6	1.2	33.3	10+	10.6	19	10	0	19.4	75	113	29	33	14	4	0	0	0.8	9	9.4	16	5+	6	8	16	6.8	
MISSOURI																																
COLUMBIA REGIONAL	270	984.8	1016.6	25.2	15.9	20.6	0.4	33.3	1	5.0	18	1	0	15.0	76	145	46	41	16	8	0	0	1.2	13	12.1	NW	17	1	4	25	8.4	32
KANSAS CITY	309	979.0	1015.4	23.2	15.3	19.3	- 1.4	30.6	21	5.0	18	0	0	15.6	82	262	155	103	18	9	0	0	1.1	12	12.5	SW	21	2	4	24	8.5	33
ST JOSEPH	247			23.3	14.6	18.9	- 1.4	31.7	21	2.8	18	0	0			224	137	96	20		0	0	0.6	10	10.3	12	24	1	5	24	8.4	
ST LOUIS	163	997.0	1017.0	25.9	16.3	21.1	0.3	32.8	1	5.6	18	1	0	17.8	85	89	19	51	9	3	0	0	1.2	15	10.3	W	17+	3	5	22	7.9	42
SPRINGFIELD	386	971.2	1015.9	27.2	16.2	21.7	0.4	33.3	1	2.8	18	2	0	17.2	79	120	22	23	11	6	0	0	1.8	16	9.8	S	26	2	10	18	7.6	43
MONTANA																																
BILLINGS	1087	893.3	1016.7	20.1	8.4	14.3	- 1.5	28.9	12+	0.0	14	0	1	5.6	61	56	26	32	8	3	T	0	1.4	26	13.9	SW	25	12	6	12	5.4	62
GLASGOW	696	934.6	1016.2	20.2	7.1	13.7	- 0.1	29.4	29+	- 1.7	16	0	1	6.1	65	36	12	19	6	1	0	0	0.6	7	14.3	30	13	9	8	13	5.5	
GREAT FALLS	1116	889.9	1016.7	21.1	7.9	14.6	0.4	31.1	6	- 0.6	15+	0	3	3.9	55	33	2	15	5	1	152	76	2.2	24	14.8	SW	21	8	6	16	6.2	67
HAVRE	788		1012.8	21.8	6.4	14.1	1.0	32.8	6	- 2.2	17	1	2			22	- 3	11	7	5	0	0			16.1	W	11	11	8	11	5.4	79
HELENA	1167	882.8	1017.9	20.1	4.7	12.4	- 0.9	29.4	6	- 2.8	17	0	4	2.2	55	11	- 13	4	6	2	33	T	1.7	28	15.2	SW	20	12	2	16	5.9	66
KALISPELL	904	913.3	1017.7	20.9	4.3	12.7	0.1	32.8	6+	- 5.6	17	2	7	3.3	59	18	- 8	7	8	1	0	0	0.4	13	11.6	4	13	11	2	17	6.1	
MILES CITY	801	923.1	1015.8	20.7	8.6	14.7	- 1.4	30.0	6	0.6	14	0	0	7.8	68	102	78		9	3	T	0	0.4	34								
MISSOULA	972	906.2	1018.1	21.7	5.4	13.6	0.6	33.9	5	- 2.2	16	1	2	5.0	63	15	- 11	5	8	2	0	0	0.2	30	11.6	E	13	9	4	17	6.1	61
NEBRASKA																																
GRAND ISLAND	561	950.2	1015.8	21.8	11.8	16.8	- 1.6	31.1	1	3.9	17	0	0	12.2	77	213	158	65	16	7	0	0	0.7	10	13.4	26	1	7	3	20	7.4	
LINCOLN	360	973.6	1015.9	22.7	11.9	17.3	- 1.3	31.1	2	1.1	18	0	0	13.3	81	191	117	59	13	5	0	0	0.7	9	14.3	S	1	5	5	20	7.7	35
NORFOLK	471			21.3	10.9	16.1	- 2.2	30.0	10+	4.4	18	0	0			130	73	33	15		0	0						7	3	20	7.2	
NORTH PLATTE	846	918.7	1016.2	20.9	8.4	14.7	- 2.9	31.7	10+	- 1.1	17	0	1	9.4	76	101	59	50	12	5	0	0	1.2	6	16.5	SE	23	6	6	18	7.2	44
OMAHA	298	980.7	1016.0	23.3	12.4	17.9	- 1.5	30.6	21+	1.1	18	0	0	13.9	82	204	137	117	13	5	0	0	0.8	13	12.1	W	25	6	3	21	7.5	47
SCOTTSBLUFF	1206	880.8	1016.1	21.1	6.9	14.0	- 2.8	30.6	7	- 1.1	17	0	1	6.7	67	107	76	31	14	5	T	T	0.8	8	14.3	5	1	10	4	16	6.3	
VALENTINE	789			20.3	8.2	14.3	- 2.3	30.6	10+	0.6	17+	0	0			150	118	62	13		T	0			31.3	S	23	8	7	15	6.6	46
NEVADA																																
ELKO	1539	845.9	1015.7	24.7	3.1	13.9	- 0.5	32.2	5	- 3.3	26	1	5	- 3.3	35	5	- 4	3	4	1	0	0	0.7	28	13.0	13	5	16	10	4	3.4	
ELY	1906	810.4	1014.5	23.6	0.7	12.2	- 2.0	29.4	5	- 5.0	27	0	13	- 2.2	41	2	- 12	2	1	0	0	0	1.7	21	14.3	S	22	18	11	1	3.3	89
LAS VEGAS	659	936.0	1010.9	34.4	17.7	26.1	- 0.6	40.6	7	12.2	27	23	0	- 1.7	17	T	- 9	T	0	0	0	0	1.1	23	14.8	NW	25	27	2	1	0.9	97
RENO	1342	866.9	1015.3	27.1	2.3	14.7	- 0.2	32.8	6+	- 1.7	21	4	5	0.0	40	T	- 6	T	1	0	0	0	0.6	26	13.9	W	24	21	7	2	2.0	99
WINNEMUCCA	1311	870.0	1016.1	27.0	2.6	14.8	0.0	35.6	5	- 3.3	2	6	9	- 0.6	39	12	4	7	3	3	0	0	0.4	28	11.6	NW	24+	20	5	5	2.8	84
NEW HAMPSHIRE																																
CONCORD	104	1005.4	1018.0	22.0	7.7	14.9	- 0.3	33.9	3	- 2.2	22	3	3	10.0	75	45	- 50	25	6	2	0	0	1.0	29	12.1	W	9	7	12	11	6.1	58
MT WASHINGTON OBS	1909			6.6	0.5	3.6	- 1.4	17.2	5	- 9.4	21	0	17			176	- 2	64	17	1	15	T			39.3Y	W	8	4	2	24	8.4	27
NEW JERSEY																																
ATLANTIC CITY	20	1016.3	1018.6	25.0	13.2	19.1	- 0.4	33.9	2+	5.6	30	2	0	13.9	73	120	36	99	6	2	0	0	0.6	29	10.7	11	14	8	13	9	5.6	64
ATLANTIC CITY U	3			24.4	17.6	21.0	0.8	33.3	2	11.1	19	1	0			75	- 11	62	4						17.0	E	14					
NEWARK	2	1017.3	1018.2	26.3	16.9	21.7	2.1	35.0	4+	10.0	21	5	0	13.9	63	86	- 9	34	9	4	0	0	1.4	28	13.4	29	4	6	15	9	6.0	
TRENTON U	17			25.8	15.3	20.6	1.1	34.4	4+	8.3	21	5	0			97	8	65	6		0	0			12.1	NE	14	10	12	8	5.5	63
NEW MEXICO																																
ALBUQUERQUE	1619	838.8	1012.5	27.8	11.6	19.7	- 1.4	33.3	9+	3.3	28+	3	0	3.3	39	29	5	19	2	3	0	0	0.2	33	18.3	E	4	21	7	2	2.0	90
CLAYTON	1515			23.9	9.9	16.9	- 1.9	31.7	20	5.0	27	0	0			25	- 17	17	5		T	0						16	7	7	4.0	
ROSWELL	1112	889.9	1012.1	28.2	13.7	20.9	- 1.6	36.1	4	5.6	29+	6	0	11.7	61	65	27	24	6	3	0	0	0.4	13	16.1	SW	25	15	8	7	4.1	68
NEW YORK																																
ALBANY	84	1007.8	1018.4	22.9	8.7	15.8	- 0.6	33.9	4	- 1.7	21	4	2	10.6	76	34	- 57	10	10	2	0	0	1.2	25	11.2	S	22+	5	18	7	6.0	57
BINGHAMTON	485	960.7	1019.4	20.3	10.4	15.4	0.1	30.0	4+	0.6	21	0	0	11.1	77	79	4	21	9	4	0	0	1.4	25	10.3	NW	18	3	12	15	7.1	55
BUFFALO	215	992.9	1018.6	21.7	11.3	16.5	0.2	32.2	4	0.6	21	1	0	11.1	72	37	- 43	13	8	3	0	0	1.2	26	13.0	W	23+	4	14	12	6.8	66
NEW YORK U	40	1015.6	1018.6	25.7	16.0	20.8	0.6	35.6	3	8.3	21	4	0	12.8	64	70	- 28	42	6	1	0	0	0.8	29	11.6	NE	14					60
NEW YORK KENNEDY	4	1017.6	1018.4	24.1	14.9	19.6	- 0.3	33.9	2	7.8	21	1	0	13.3	70	77	- 29	43	5	0	0	0	1.2	27	12.5	19	22	8	14	8	5.5	
NEW YORK LA GUARDIA	3	1017.6	1018.7	24.8	16.7	20.7	0.3	33.9	4+	8.9	21	4	0	13.3	65	67	- 33	30	8	2	0	0	1.1	30	12.5	NE	15	7	14	9	5.8	
ROCHESTER	167	998.6	1018.8	22.8	11.1	16.9	0.1	35.0	4	1.7	21	5	0	11.7	74	36	- 28	18	7	3	0	0	1.7	26	12.1	SW	6	6	12	12	6.4	69
SYRACUSE	125	1003.4	1018.1	22.1	11.2	16.7	- 0.2	33.9	5+	1.7	21	5	0	12.2	76	116	44	51	11	3	0	0	1.1	26	12.1	W	18	4	16	10	6.5	56

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
NORTH CAROLINA	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm	Mm.			Mm	Mm	M.p.s.		M.p.s.							%
ASHEVILLE	652	944.1	1019.4	26.8	15.4	21.1	2.3	31.7	7	10.0	20	0	0	17.2	85	79	-13	28	9	2	0	0	0.3	3	10.3	34	18	5	16	9	6.5	59
CAPE HATTERAS R	2	1017.6	1018.1	27.9	20.8	24.4	1.0	31.1	1	15.0	28	0	0	20.6	80	77	-72	23	14	6	0	0	1.2	36	13.0	24	14	9	13	8	5.3	57
CHARLOTTE	224	991.2	1018.1	29.5	17.8	23.7	0.9	33.9	1	12.2	19	5	0	18.3	77	80	-9	63	5	2	0	0	0.6	1	13.0	N	3	8	15	7	5.3	77
GREENSBORO	273	987.5	1018.9	28.7	16.1	22.4	1.2	34.4	2	9.4	19	5	0	16.7	76	29	-64	13	7	2	0	0	0.5	2	8.0	NE	25+	10	10	10	5.5	62
RALEIGH	132	1002.4	1018.1	28.8	16.9	22.9	1.1	33.3	2	11.1	11	6	0	18.3	82	29	-69	25	5	4	0	0	0.5	6	6.7	35	18	13	11	6	4.7	70
WILMINGTON	9	1016.6	1017.8	30.6	19.6	25.1	1.1	33.9	8	15.6	19	8	0	21.1	83	142	-18	93	10	3	0	0	0.9	7	11.6	E	25	11	12	7	5.0	64
NORTH DAKOTA																																
BISMARCK	502	956.3	1016.4	19.8	5.3	12.6	-2.3	28.3	9	-3.3	16	0	4	6.7	73	59	29	38	7	3	0	0	0.1	2	14.3	NW	4	11	8	11	5.4	62
FARGO	273	983.7	1016.7	18.8	6.6	12.7	-2.2	25.0	2	-3.3	16	0	3	8.3	76	126	89	57	9	5	0	0	0.7	20	15.2	SE	23	9	8	13	5.8	62
WILLISTON	579	947.9	1016.4	19.6	6.5	13.1	-0.9	28.3	12	-5.0	16	0	3	6.1	67	78	49	45	9	4	0	0	0.7	31	15.2	SW	13+	12	4	14	5.2	66
OHIO																																
AKRON	368	974.9	1019.0	24.9	12.5	18.7	1.0	33.3	2	4.4	21+	3	0	13.3	73	53	-13	22	8	3	0	0	0.3	26	9.4	23	22+	10	9	11	5.4	
CINCINNATI ABBE OB	232			27.8	16.4	22.1	1.6	35.0	3	8.9	19+	4	0			34	-35	12	9		0	0			9.4	NW	22					60
CLEVELAND	237	989.5	1018.6	24.9	13.2	19.1	1.2	33.9	4+	2.2	21	4	0	13.3	72	68	-5	46	8	2	0	0	0.4	24	11.6	SW	22	11	8	11	5.5	64
COLUMBUS	247	989.2	1018.8	26.5	14.5	20.5	1.7	33.9	2	5.6	19	4	0	14.4	72	72	4	43	11	4	0	0	0.5	9	14.8	SW	22	9	8	13	5.8	57
DAYTON	305	982.7	1018.4	27.6	14.8	21.2	1.9	35.6	2	5.0	19	6	0	13.9	69	18	-48	7	9	2	0	0	0.4	17	11.2	SW	22	7	12	11	5.8	60
MANSFIELD	395			25.6	13.7	19.7	0.5	33.3	4+	5.6	19	4	0	13.3	71	35	-41	15	7	3	0	0	0.8	20	12.5	28	22	8	10	12	5.9	
TOLEDO	204	993.2	1018.4	25.4	10.5	18.0	0.6	34.4	3+	1.7	19	4	0	12.2	72	28	-26	21	5	3	0	0	0.4	30	10.3	NW	23+	9	9	12	5.7	63
YOUNGSTOWN	359	976.6	1019.0	23.4	11.6	17.5	0.6	32.2	3+	0.6	21	3	0	12.8	77	75	2	38	8	2	0	0	0.1	23	8.9	23	22	9	9	12	5.6	
OKLAHOMA																																
OKLAHOMA CITY	392	968.5	1014.2	25.9	16.9	21.4	-1.8	33.9	3	7.8	18	3	0	17.2	79	203	126	84	12	7	0	0	1.1	15	20.6	NW	4	6	12	12	6.7	45
TULSA	198	990.9	1014.8	26.9	17.8	22.4	-0.8	32.2	9+	6.1	18	2	0	18.3	82	167	65	62	12	6	0	0	1.9	16	17.0	NW	12	1	13	16	7.7	40
OREGON																																
ASTORIA	2	1016.3	1017.0	19.9	8.8	14.4	-0.1	31.7	10+	3.3	1	0	0	10.0	76	106	27	42	10	0	0	0	0.9	23	11.2	20	5	7	10	13	6.2	
BURNS U	1265			23.0	5.6	14.3	-0.6	32.8	5	-1.1	26	1	1			16	3	8	7		0	0						15	8	7	3.8	
EUGENE	109	1002.7	1016.3	24.1	10.0	17.1	0.7	34.4	10+	3.9	1	2	0	11.1	75	63	31	16	9	0	0	0	0.7	25	10.3	19	20	9	9	12	5.8	
MEACHAM	1234	878.4	1016.3	18.2	7.1	12.6	-0.6	31.7	5	1.1	26	0	0			75	38	20	10		0	0						14	4	12	4.6	
MEDFORD	396	968.8	1015.9	29.3	9.5	19.4	1.5	41.1	4	4.4	1	10	0	6.1	51	16	1	8	7	0	0	0	0.8	30	10.3	14	22+	17	5	8	3.6	
PENDLETON	452	962.8	1015.9	24.9	10.6	17.8	-0.1	35.0	11+	4.4	16	4	0	3.3	43	34	18	13	8	0	0	0	1.4	26	13.0	27	25+	11	8	11	4.9	
PORTLAND	6	1014.9	1016.3	24.4	11.6	18.0	1.2	36.1	4	6.7	1	2	0	10.6	66	84	42	19	10	0	0	0	0.6	26	13.0	SW	20	9	7	14	5.6	60
SALEM	60	1008.8	1016.2	24.5	8.9	16.7	-0.2	37.2	4	2.8	1	2	0	9.4	68	71	36	20	9	1	0	0	0.5	24	10.3	19	20	9	9	12	5.7	
SEXTON SUMMIT R	1169	885.2	1015.7	19.9	9.1	14.6	-0.8	31.1	4	3.3	30	0	0			79	47	35	9		T	0	0.1	3	17.9	16	19	15	7	8	3.8	
PACIFIC AREA																																
GUAM TAGUAC R	110			30.1	22.6	26.3	0.1	30.6	30+	21.1	26+	0	0			230	-109	36	28		0	0			9.8	SE	7+					51
JOHNSTON	2	1013.5	1014.2	28.6	24.8	26.7	-0.8	30.0	24	21.7	30	0	0	22.2	75	87	28	53	16	0	0	0	6.7	9	13.9	E	26	3	19	8	6.2	71
KOROR R	29			31.5	24.3	27.9	0.7	32.8	27+	23.3	19+	14	0			309	-55	48	25	4	0	0			7.6	NE	28+	0	3	27	9.3	61
KWAJALEIN	2	1009.8	1010.7	30.2	25.2	27.7	0.0	31.1	30+	22.8	29	0	0	23.9	80	212	-47	49	24	1	0	0	4.1	8	13.9	9	3	1	9	20	8.1	
MAJURO	3			29.2	24.3	26.8	-0.1	30.0	29+	22.8	28+	0	0			325	18	60	26		0	0			16.1	E	4	2	7	21	8.2	71
PAGO PAGO	4	1012.9	1013.2	29.7	23.9	26.8		30.6	27+	20.6	15	0	0	23.3	82	461	59	74	26	1	0	0			8.5	NE	3	0	6	24	8.8	49
PONAPE R	37			31.0	22.9	27.0	0.6	32.8	24	21.7	19+	9	0			131		22	22	0	0	0	3.7	9	14.8	E	19	2	17	11	6.5	79
TRUK MOEN ISLAND	2			30.9	24.2	27.6	0.7	32.2	13	20.0	20	1	0			288	-31	56	24	1	0	0			10.3	NE	4	0	2	28	9.5	51
WAKE	3	1014.2	1014.6	31.2	24.5	27.9	-0.2	32.8	1	21.7	22	4	0	22.8	76	79	-54	37	20	1	0	0	6.0	8	12.1	SE	22+	3	18	9	6.2	64
YAP R	13			30.4	23.6	27.0	-0.4	31.7	28+	22.2	30+	0	0			448	92	103	27	2	0	0			8.5	E	2	0	6	24	9.7	48
PENNSYLVANIA																																
ALLENTOWN	118	1005.1	1018.8	24.6	13.0	18.8	0.7	34.4	1	5.6	21	4	0	13.3	76	157	62	83	8	3	0	0	0.9	29	10.3	7	14+	10	12	8	6.5	
ERIE	223	992.2	1018.8	21.9	12.1	17.0	0.6	30.0	5+	2.8	21	0	0	12.8	77	56	-34	16	9	5	0	0	1.3	21	11.2	17	26	6	13	11	6.0	
HARRISBURG	103	1006.1	1018.8	25.8	14.8	20.3	0.9	34.4	3	8.3	19+	5	0	13.3	68	146	74	110	8	4	0	0	0.4	32	14.8	E	14	10	11	[illegible]	5.5	63
PHILADELPHIA	2	1017.3	1018.3	26.9	16.0	21.5	2.2	36.1	3	10.6	20+	5	0	15.0	71	86	-2	64	8	2	0	0	0.8	28	11.6	NE	14	11	9	10	5.4	61
PITTSBURGH	347	975.6	1019.1	24.9	13.3	19.2	1.3	33.3	1	4.4	19	5	0	12.8	70	90	26	47	10	6	0	0	0.7	32	12.5	25	5	7	11	12	5.8	62
SCRANTON	283	985.1	1019.0	22.6	11.2	16.9	-0.1	31.7	4+	3.3	21	0	0	11.1	70	92	17	33	6	5	0	0	0.4	20	8.9	NW	18	8	10	12	6.2	60
WILLIAMSPORT	160	1000.3	1019.3	23.3	11.8	17.6	-0.3	33.3	4+	3.9	21	3	0	13.3	80	140	57	72	9	7	0	0	0.7	30	8.0	26	11+	2	15	13	7.0	
RHODE ISLAND																																
BLOCK ISLAND	34			21.3	14.2	17.7	-0.1	28.3	3+	5.6	22+	0	0			78	-3	52	5		0	0						9	11	10	5.5	
PROVIDENCE	16	1015.6	1018.1	22.9	12.0	17.4	0.1	32.8	4+	2.8	22	3	0	12.8	76	77	-12	26	7	2	0	0	1.1	29	9.8	24	22+	7	12	11	5.8	68

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days		Average dew point	Average relative humidity	Precipitation			No. of days		Snow, Ice pellets		Wind		Fastest mile (1.6 kilometers)			No. of days sunrise to sunset			Sky cover tenths (sunrise to sunset)	Possible sunshine
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower			Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
SOUTH CAROLINA	M	Mb.	Mb	C.	C.	C	C	C.		C				C.	%	Mm.	Mm	Mm.			Mm.	Mm	M.p.s.		M.p.s							%
CHARLESTON	12	1015.6	1017.5	31.3	21.5	26.4	2.2	35.0	9	18.3	28	8	0	21.1	77	201	53	91	11	4	0	0	1.2	7	16.5Y	E	26	11	12	7	5.0	82
CHARLESTON U	3			29.3	22.9	26.1	1.1	32.8	9	20.6	28+	2	0			132	-29	42	8		0	0			15.6	NE	26					
COLUMBIA	65	1009.8	1017.8	31.7	20.1	25.9	1.8	35.6	8	17.2	20+	14	0	20.6	78	114	4	37	7	7	0	0	0.7	8	9.4	7	26	8	17	5	5.3	64
GRNVLLE-SPRTNBRG	292	984.1	1018.0	29.5	17.7	23.6	1.0	33.9	3	12.2	20+	7	0	17.2	74	192	93	158	7	5	0	0	0.7	3	10.7	E	3	8	13	9	5.5	68
SOUTH DAKOTA																																
ABERDEEN	395	969.5	1016.3	21.1	7.6	14.4	-1.5	32.8	1	-0.6	20+	1	3	9.4	74	89	54	40	7	6	0	0	0.1	12	14.3	23	2	5	11	14	6.7	
HURON	390	969.9	1016.3	20.9	7.9	14.4	-2.2	31.1	1	2.2	23+	0	0	9.4	75	68	29	27	11	4	0	0	0.5	15	13.4	SE	24	4	10	16	7.1	42
RAPID CITY	964	906.5	1017.0	20.8	7.1	13.9	-2.5	30.6	7	-0.6	17	0	1	6.1	64	37	12	18	11	4	0	0	1.1	35	15.2	NW	4	7	10	13	6.3	53
SIOUX FALLS	432	965.8	1017.1	21.4	9.8	15.6	-0.9	32.2	1	2.2	18	1	0	10.0	72	142	76	50	14	3	0	0	0.6	8	10.3	15	24+	5	6	19	7.2	
TENNESSEE																																
BRISTOL	459	965.1	1018.5	28.4	15.3	21.9	1.3	33.9	3+	6.1	19	4	0	16.7	80	43	-24	17	7	2	0	0	0.4	5	6.3	12	26	8	10	12	5.8	
CHATTANOOGA	203	993.2	1017.4	30.1	18.6	24.3	1.1	35.6	8	9.4	19	10	0	18.3	74	137	58	91	7	4	0	0	0.4	6	7.6	N	9+	6	12	12	6.4	59
KNOXVILLE	299	983.1	1017.5	28.6	17.8	23.2	0.9	34.4	1	8.9	19	5	0	18.3	78	83	19	30	7	3	0	0	0.7	3	12.5	SW	17	6	9	15	6.2	76
MEMPHIS	79	1006.1	1016.2	28.6	20.4	24.5	1.2	32.8	9	10.0	19	1	0	20.0	80	129	57	52	9	5	0	0	1.3	11	9.4	1	17	7	10	13	6.3	60
NASHVILLE	180	995.6	1017.0	30.1	19.1	24.6	1.9	35.0	3	8.3	19	11	0	18.3	75	40	-33	30	7	2	0	0	0.8	15	8.5	NW	17+	8	10	12	6.1	53
OAK RIDGE R	276			28.3	17.1	22.7	1.0	33.9	1	7.8	19	5	0			87	3	30	9		0	0			14.8Y		17	8	5	17	6.8	
TEXAS																																
ABILENE	544	951.6	1013.1	28.8	17.6	23.2	-1.2	35.0	3+	8.9	28	8	0	17.2	72	118	66	84	11	5	0	0	1.6	16	18.3	NE	4	9	11	10	5.3	63
AMARILLO	1098	891.3	1012.6	26.8	13.9	20.4	-1.7	35.0	20+	6.1	28	5	0	12.2	66	31	-17	20	9	4	0	0	1.3	18	15.6	W	24+	10	12	8	4.9	67
AUSTIN	182	991.2	1012.8	31.7	21.3	26.5	0.3	36.7	13	14.4	29	18	0	20.6	76	189	102	171	5	3	0	0	0.9	11	16.5	NW	5	7	11	12	6.3	58
BROWNSVILLE	6	1011.5	1012.0	32.2	22.9	27.6	0.2	35.0	12	18.9	6	20	0	22.8	79	117	-10	62	10	6	0	0	1.5	13	11.2	NW	5	5	14	11	6.4	73
CORPUS CHRISTI	12	1010.8	1012.3	31.8	23.5	27.7	0.6	35.6	12	19.4	29+	17	0	23.3	82	193	81	68	12	10	0	0	1.3	9	18.8	NW	5	2	17	11	6.6	50
DALLAS	147			29.5	20.3	24.9	-0.6	33.3	2	13.9	29+	11	0	20.0	76	179	108	86	9	3			1.7	12	12.5	35	5	7	10	13	6.4	
DEL RIO	313	976.3	1011.6	32.4	21.1	26.8	0.2	38.3	4	14.4	28	19	0	19.4	69	73	6	44	6	2	0	0	2.6	12	11.6	30	6	9	15	6	5.6	
EL PASO	1194	881.8	1010.6	33.9	14.8	24.4	0.8	37.8	4	5.6	28	25	0	8.3	40	T	-29	T	1	2	0	0	0.4	23	13.4	E	14	23	6	1	2.3	92
FORT WORTH	164	993.9	1014.0	29.2	19.8	24.5	-1.3	33.9	2	12.2	29	8	0	20.6	81	182	117	69	9	4	0	0	1.4	12	11.2	19	24+	7	10	13	6.1	
GALVESTON U	2			29.3	24.7	27.0	0.3	31.7	9	22.2	18	0	0			173	43	65	16		0	0			20.6	NE	4					53
HOUSTON INTERCON	29	1009.5	1013.2	30.4	20.8	25.6	-0.1	33.9	13	15.6	30	7	0	22.2	86	238	135	73	10	7	0	0	1.5	7	15.6	10	6	7	12	11	6.1	56
LUBBOCK	992	903.8	1013.0	27.5	15.1	21.3	-0.6	35.0	20	5.0	28	4	0	13.3	67	19	-41	15	4	4	0	0	1.3	13	11.2	35	6	10	15	5	4.8	78
MIDLAND	869	915.3	1012.2	29.1	15.3	22.2	-1.9	34.4	4+	6.1	28	9	0	13.3	64	28	-18	23	6	3	0	0	2.1	13	13.4	35	6	13	12	5	4.5	
PORT ARTHUR	5	1012.5		30.2	21.9	26.1	0.4	33.3	9	18.3	20+	3	0	23.3	88	291	167	107	16	7	0	0	1.7	10	17.0	NE	4	5	14	11	6.3	67
SAN ANGELO	580	947.2	1012.7	30.1	17.8	23.9	-1.8	37.2	3	10.0	28	7	0	17.2	71	107	40	61	7	4	0	0	1.5	16	15.6	5	4	10	12	8	5.5	
SAN ANTONIO	240	985.4	1012.8	30.8	21.7	26.3	0.4	34.4	13+	14.4	29	13	0	20.6	74	332	244	185	9	4	0	0	1.0	10	14.3	N	5	4	14	12	6.8	50
VICTORIA	32	1008.1	1012.3	31.3	22.8	27.1	0.9	35.0	2	17.2	29	15	0	22.8	81	183	75	76	11	7	0	0	1.1	8	19.2Y	N	5	5	15	10	6.5	
WACO	153	995.6	1013.2	31.4	20.9	26.2	0.1	36.1	2+	14.4	29	17	0	20.0	73	133	63	67	9	4	0	0	1.1	14	11.2	2	6	8	11	11	5.8	
WICHITA FALLS	303	977.7	1013.8	29.3	17.8	23.6	-1.7	36.1	3+	11.1	28	11	0	18.9	79	135	76	55	7	2	0	0	1.3	12	23.7	1	4	14	8	8	4.7	
UTAH																																
MILFORD	1533	847.3		25.8	4.0	14.9	-2.3	32.8	5	-1.7	24	2	4			4	-7	3	4		0	0			15.6	SW	20+	19	9	2	2.8	85
SALT LAKE CITY	1286	872.7	1015.1	23.4	9.4	16.4	-1.6	31.1	6+	5.6	27+	0	0	6.1	56	103	90	38	10	7	0	0	1.0	15	14.8	NW	1	13	8	9	4.6	78
WENDOVER	1291	871.7	1015.5	23.5	11.2	17.4	-1.9	31.1	6	6.1	26	0	0	0.6	36	10	2	8	4		0	0										
VERMONT																																
BURLINGTON	101	1005.4	1017.8	19.1	10.3	14.7	0.1	32.2	5	-0.6	21	1	1	10.6	79	12[illegible]	43	35	14	5	0	0	0.8	24	15.2	S	22	4	12	14	6.8	47
VIRGINIA																																
LYNCHBURG	279	985.4		27.1	16.0	21.6	1.2	33.9	2	7.8	19	2	0			64	-21	41	4		0	0			8.0	NE	30	12	10	8	5.0	61
NORFOLK	7	1017.3	1018.4	28.7	19.1	23.9	1.3	33.9	29	13.3	11	5	0	18.3	74	22	-85	12	5	2	0	0	0.8	9	9.8	11	13+	11	12	7	4.8	66
RICHMOND	50	1012.2	1018.5	28.7	16.1	22.4	1.2	34.4	1	8.3	11	5	0	17.8	79	46	-46	27	8	6	0	0	0.5	6	10.7	SW	2	7	14	9	5.9	69
ROANOKE	350	977.7	1019.1	27.8	15.3	21.6	0.9	35.0	2+	6.7	19	4	0	16.1	75	47	-36	19	7	3	0	0	0.4	26	8.0	33	18	8	15	7	5.4	
WALLOPS ISLAND	3			26.6	18.8	22.7		32.8	2	12.8	19	2	0			60		27	6		0	0			18.8Y	E	2					
WASHINGTON																																
OLYMPIA	59	1009.5	1016.8	22.3	7.4	14.9	0.2	32.8	5	0.0	1	1	1	9.4	74	55	2	17	10	0	0	0	0.6	20	9.4	18	20	8	9	13	6.0	
QUILLAYUTE	55	1009.5	1016.9	19.6	7.6	13.6	-0.4	30.0	4	1.7	1	0	0	10.0	83	92	-27	29	12	0	0	0	0.3	20	8.9	S	5	6	10	14	6.7	45
SEATTLE	6			21.0	11.6	16.3	-0.1	30.6	5	7.8	16	0	0			40	1	13	10		0	0			12.1Y	S	21					
SEATTLE-TACOMA	122	1000.3	1016.6	21.3	11.9	16.6	1.1	31.1	5	7.8	1	0	0	10.0	69	46	-6	14	11	0	0	0	0.2	8	8.5	SW	30+	8	9	13	6.1	66
SPOKANE	718	932.3	1015.5	21.9	8.9	15.4	-0.7	33.9	5	1.7	16	2	0	4.4	54	37	18	28	6	1	0	0	1.3	19	11.6	SW	20	12	8	10	5.0	69

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy 8-10		
WASHINGTON	M.	Mb	Mb	C.	C.	C	C.	C.		C.				C.	%	Mm	Mm.	Mm			Mm	Mm	M.p.s.		M.p.s							%
STAMPEDE PASS R	1206	881.1		14.6	6.2	10.4	- 0.7	27.2	5	0.6	30	0	0			102	- 9	30	13		0	0						11	6	13	5.8	
WALLA WALLA U	289			24.6	11.9	18.2	- 0.7	34.4	11+	6.1	15	3	0			41	21	14	9		0	0			11.6	SW	6	15	5	10	4.5	66
YAKIMA	321	977.7	1015.8	25.3	7.8	16.6	0.3	35.6	11+	0.6	16	4	0	5.6	54	21	12	9	6	0	0	0	1.8	30	12.5	30	6	13	8	9	4.8	
WEST INDIES																																
SAN JUAN P.R.	4	1012.9	1015.2	31.2	25.1	28.2	1.2	33.9	11+	23.3	4	7	0	22.2	73	80	- 92	17	16	7	0	0	3.0	10	21.0	SE	4	3	20	7	5.8	61
WEST VIRGINIA																																
BECKLEY	763	931.9	1018.9	24.2	13.2	18.7	1.0	31.7	2	5.0	19	0	0	14.4	80	59	- 24	16	12	4	0	0	1.1	18	9.8	14	17	7	11	12	6.1	
CHARLESTON	286	984.8	1018.5	27.7	14.6	21.2	1.1	35.0	3+	8.9	19+	5	0	16.1	77	99	25	59	8	5	0	0	0.2	16	10.3	20	5	8	9	14	6.2	
ELKINS	594	949.5		23.8	10.1	16.9	- 0.1	30.6	2+	3.3	11	0	0			93	15	32	7		0	0						5	13	12	6.6	
HUNTINGTON	252	988.2	1018.0	27.7	15.8	21.8	1.7	35.6	2	7.2	19	5	0	16.1	76	65	0	25	11	5	0	0	0.4	17	10.3	25	17	5	10	15	6.4	
PARKERSBURG U	187			26.9	14.6	20.7	0.7	36.1	3+	7.2	20	5	0			84	15	25	8		0	0			8.0	W	17					75
WISCONSIN																																
GREEN BAY	208	992.2	1017.9	21.2	9.3	15.3	- 0.6	32.8	1	- 1.1	20	3	1	11.1	79	74	0	45	11	3	0	0	0.7	25	14.3	SW	26	8	8	14	6.4	57
LA CROSSE	198	993.9	1018.3	22.2	11.8	17.0	0.2	32.2	1	2.2	20	1	0	12.8	80	93	5		13	4	0	0	0.6	17								
MADISON	262	986.5	1017.8	21.7	10.1	15.9	- 0.2	32.2	1	1.7	20	1	0	12.2	81	91	7	22	16	5	0	0	0.3	18	21.0	SE	21	5	9	16	7.0	48
MILWAUKEE	205	992.9	1017.8	22.0	13.4	17.7	2.0	34.4	1	6.1	20+	3	0	12.2	72	114	45	44	11	6	0	0	0.5	23	15.6	SE	21	6	9	15	6.8	52
WYOMING																																
CASPER	1627	839.5	1016.2	19.9	5.7	12.8	- 2.6	30.0	7	- 1.1	17	0	2	5.6	70	83	60	51	11	3	T	T	0.8	29	13.9	3	10	5	11	14	6.7	
CHEYENNE	1867	814.4	1016.4	18.3	6.2	12.3	- 2.5	26.1	7	- 0.6	27	0	1	3.3	60	115	87	70	11	5	T	T	1.2	31	16.5	NW	24	9	7	14	6.0	55
LANDER	1696	831.4	1016.5	18.7	5.4	12.1	- 2.9	28.3	7	0.0	17	0	1	3.9	62	119	93	56	12	6	T	0	0.4	24	13.4	SW	23	8	10	12	6.0	67
SHERIDAN	1208	880.8	1017.2	19.8	5.7	12.8	- 2.1	28.3	7+	- 2.8	17	0	4	6.1	67	71	41	27	8	3	81	51	0.9	32	12.5	NW	3	10	9	11	5.7	58

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
ALABAMA			
BIRMINGHAM	3	3	6
HUNTSVILLE	6	6	11
MOBILE	0	0	0
MONTGOMERY	0	0	0
ALASKA			
ANCHORAGE	573	1131	1009
ANNETTE	263	962	772
BARROW	933	2473	2705
BARTER ISLAND	995	2417	2586
BETHEL	581	1361	1313
BETTLES	674	1382	1387
BIG DELTA	601	1155	1145
COLD BAY	549	1545	1418
FAIRBANKS	533	936	1070
HOMER	568	1369	1225
JUNEAU	505	1252	1094
KING SALMON	529	1131	1204
KODIAK	558	1417	1101
KOTZEBUE	663	1646	1535
MC GRATH	574	1201	1212
NOME	679	1881	1639
ST. PAUL ISLAND	625	1845	1759
SUMMIT	772	1762	1664
TALKEETNA	617	1240	1109
UNALAKLEET	588	1790	1392
YAKUTAT	559	1383	1233
ARIZONA			
FLAGSTAFF	212	296	376
PHOENIX	0	0	0
TUCSON	0	0	0
WINSLOW	51	51	19
YUMA	0	0	0
ARKANSAS			
FORT SMITH	9	9	7
LITTLE ROCK	2	2	5
CALIFORNIA			
BAKERSFIELD	0	0	0
BISHOP	20	25	49
BLUE CANYON	134	208	193
EUREKA	230	825	770
FRESNO	0	0	0
LONG BEACH	1	1	7
LOS ANGELES	1	1	57
LOS ANGELES U	1	1	5
MT SHASTA R	167	237	246
OAKLAND	86	259	213
RED BLUFF	4	4	0
SACRAMENTO	0	0	5
SANDBERG R	64	101	50
SAN DIEGO	0	0	22
SAN FRANCISCO	76	305	243
SAN FRANCISCO U	137	575	481
SANTA MARIA	95	276	308
STOCKTON	0	0	0
COLORADO			
ALAMOSA	342	507	445
COLORADO SPRINGS	194	227	177
DENVER	166	174	130
GRAND JUNCTION	72	72	60
PUEBLO	84	86	55
CONNECTICUT			
BRIDGEPORT	35	35	42
HARTFORD	102	102	118
DELAWARE			
WILMINGTON	15	15	32
DIST.OF COLUMBIA			
WASHINGTON DULLES	24	24	43
WASHINGTON NATIONAL	4	4	14
FLORIDA			
APALACHICOLA U	0	0	0
DAYTONA BEACH	0	0	0
FORT MYERS	0	0	0
JACKSONVILLE	0	0	0
KEY WEST	0	0	0
LAKELAND U	0	0	0
MIAMI	0	0	0
ORLANDO	0	0	0
PENSACOLA	0	0	0
TALLAHASSEE	0	0	0
TAMPA	0	0	0
WEST PALM BEACH	0	0	0
GEORGIA			
ATHENS	0	0	6
ATLANTA	1	1	8
AUGUSTA	0	0	0
COLUMBUS	0	0	0
MACON	0	0	0
ROME	3	3	11
SAVANNAH	0	0	0

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
IDAHO			
BOISE	103	123	139
LEWISTON	80	87	141
POCATELLO	237	267	212
ILLINOIS			
CAIRO	17	17	11
CHICAGO O HARE	72	72	115
CHICAGO MIDWAY	70	71	65
MOLINE	78	78	90
PEORIA	54	54	78
ROCKFORD	99	102	121
SPRINGFIELD	30	30	56
INDIANA			
EVANSVILLE	11	11	34
FORT WAYNE	62	69	102
INDIANAPOLIS	20	20	68
SOUTH BEND	60	64	128
IOWA			
BURLINGTON	57	57	78
DES MOINES	68	68	107
DUBUQUE	132	134	172
SIOUX CITY	98	98	123
WATERLOO	149	150	170
KANSAS			
CONCORDIA	95	95	73
DODGE CITY	99	99	41
GOODLAND	188	192	108
TOPEKA	58	58	55
WICHITA	58	58	32
KENTUCKY			
COVINGTON	27	28	44
LEXINGTON	21	22	40
LOUISVILLE	13	13	35
LOUISIANA			
ALEXANDRIA	0	0	0
BATON ROUGE	0	0	0
LAKE CHARLES	0	0	0
NEW ORLEANS	0	0	0
SHREVEPORT	0	0	0
MAINE			
CARIBOU	373	426	533
PORTLAND	231	240	282
MARYLAND			
BALTIMORE	24	24	27
MASSACHUSETTS			
BLUE HILL OBS R	153	167	131
BOSTON	94	96	84
WORCESTER	202	216	178
MICHIGAN			
ALPENA	304	381	450
DETROIT	114	127	91
DETROIT METRO	98	108	116
FLINT	153	179	197
GRAND RAPIDS	136	144	149
HOUGHTON LAKE	280	331	401
LANSING	179	195	169
MARQUETTE U	244	340	374
MUSKEGON	155	166	189
SAULT STE MARIE	376	490	512
MINNESOTA			
DULUTH	354	492	489
INTERNATIONAL FALLS	364	410	542
MINNEAPOLIS	185	189	235
ROCHESTER	197	215	241
ST CLOUD	255	280	283
MISSISSIPPI			
JACKSON	0	0	0
MERIDIAN	0	0	0
MISSOURI			
COLUMBIA REGIONAL	42	42	42
KANSAS CITY	53	53	42
ST JOSEPH	57	57	54
ST LOUIS	31	31	35
SPRINGFIELD	31	31	41
MONTANA			
BILLINGS	226	233	246
GLASGOW	255	270	308
GREAT FALLS	226	259	320
HAVRE	235	265	360
HELENA	317	387	394
KALISPELL	314	433	558
MILES CITY	209	212	242
MISSOULA	262	327	411

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
NEBRASKA			
GRAND ISLAND	123	125	113
LINCOLN	99	100	83
NORFOLK	141	145	140
NORTH PLATTE	219	229	156
OMAHA	90	90	77
SCOTTSBLUFF	249	267	168
VALENTINE	236	243	172
NEVADA			
ELKO	236	260	335
ELY	326	386	350
LAS VEGAS	0	0	0
RENO	193	236	235
WINNEMUCCA	200	227	247
NEW HAMPSHIRE			
CONCORD	244	268	243
MT WASHINGTON OBS	793	1660	1774
NEW JERSEY			
ATLANTIC CITY	64	64	35
ATLANTIC CITY U	16	16	23
NEWARK	18	18	34
TRENTON U	32	32	39
NEW MEXICO			
ALBUQUERQUE	43	43	7
CLAYTON	119	123	73
ROSWELL	27	27	0
NEW YORK			
ALBANY	200	205	166
BINGHAMTON	200	232	233
BUFFALO	171	187	183
NEW YORK U	29	29	29
NEW YORK KENNEDY	64	64	42
NEW YORK LA GUARDIA	30	30	30
ROCHESTER	162	178	161
SYRACUSE	164	178	149
NORTH CAROLINA			
ASHEVILLE	7	7	50
CAPE HATTERAS R	0	0	0
CHARLOTTE	2	2	10
GREENSBORO	4	4	24
RALEIGH	2	2	12
WILMINGTON	0	0	0
NORTH DAKOTA			
BISMARCK	316	332	305
FARGO	309	344	280
WILLISTON	291	306	331
OHIO			
AKRON	78	92	126
CINCINNATI ABBE OB	17	17	37
CLEVELAND	73	85	121
COLUMBUS	35	38	84
DAYTON	31	33	70
MANSFIELD	51	60	89
TOLEDO	114	133	122
YOUNGSTOWN	120	145	149
OKLAHOMA			
OKLAHOMA CITY	37	37	12
TULSA	24	24	10
OREGON			
ASTORIA	213	602	515
BURNS U	229	310	324
EUGENE	90	196	211
MEACHAM	322	554	514
MEDFORD	28	40	121
PENDLETON	97	114	116
PORTLAND	59	112	223
SALEM	106	221	216
SEXTON SUMMIT R	244	502	391
PENNSYLVANIA			
ALLENTOWN	72	74	91
ERIE	141	168	208
HARRISBURG	34	35	51
PHILADELPHIA	18	18	38
PITTSBURGH	55	65	121
SCRANTON	140	153	141
WILLIAMSPORT	119	140	110
RHODE ISLAND			
BLOCK ISLAND	97	99	99
PROVIDENCE	125	130	103
SOUTH CAROLINA			
CHARLESTON	0	0	0
CHARLESTON U	0	0	0
COLUMBIA	0	0	0
GRNVLLE-SPRTNBRG	1	1	9
SOUTH DAKOTA			
ABERDEEN	239	241	235
HURON	227	232	191
RAPID CITY	246	262	221
SIOUX FALLS	178	179	193

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
TENNESSEE			
BRISTOL	12	12	37
CHATTANOOGA	3	3	9
KNOXVILLE	10	10	10
MEMPHIS	8	8	7
NASHVILLE	8	8	10
OAK RIDGE R	11	11	20
TEXAS			
ABILENE	[illegible]	6	0
AMARILLO	56	56	20
AUSTIN	0	0	0
BROWNSVILLE	0	0	0
CORPUS CHRISTI	0	0	0
DALLAS	1	1	0
DEL RIO	0	0	0
EL PASO	7	7	0
FORT WORTH	1	1	0
GALVESTON U	0	0	0
HOUSTON INTERCON	0	0	0
LUBBOCK	31	31	8
MIDLAND	15	15	0
PORT ARTHUR	0	0	0
SAN ANGELO	1	1	0
SAN ANTONIO	0	0	0
VICTORIA	0	[illegible]	0
WACO	0	0	0
WICHITA FALLS	10	10	0
UTAH			
MILFORD	194	202	127
SALT LAKE CITY	140	141	110
WENDOVER	104	106	86
VERMONT			
BURLINGTON	256	283	260
VIRGINIA			
LYNCHBURG	9	9	33
NORFOLK	0	0	9
RICHMOND	5	5	21
ROANOKE	12	12	32
WALLOPS ISLAND	2	2	15
WASHINGTON			
OLYMPIA	184	451	390
QUILLAYUTE	250	758	635
SEATTLE	116	258	236
SEATTLE-TACOMA	111	295	332
SPOKANE	193	257	264
STAMPEDE PASS R	426	1081	988
WALLA WALLA U	80	89	85
YAKIMA	128	183	204
WEST VIRGINIA			
BECKLEY	55	73	145
CHARLESTON	19	20	46
ELKINS	110	134	195
HUNTINGTON	18	18	46
PARKERSBURG U	34	34	46
WISCONSIN			
GREEN BAY	221	236	267
LA CROSSE	123	131	157
MADISON	180	209	226
MILWAUKEE	111	126	191
WYOMING			
CASPER	296	332	259
CHEYENNE	323	407	278
LANDER	332	370	248
SHERIDAN	299	326	304

COOLING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals January through this month
	This month	Period January through this month	
ALABAMA			
BIRMINGHAM	376	1733	
HUNTSVILLE	367	1702	
MOBILE	462	2568	
MONTGOMERY	438	2256	
ALASKA			
ANCHORAGE	0	0	
ANNETTE	0	0	
BARROW	0	0	
BARTER ISLAND	0	0	
BETHEL	0	0	
BETTLES	0	0	
BIG DELTA	0	14	
COLD BAY	0	0	
FAIRBANKS	0	39	
HOMER	0	0	
JUNEAU	0	0	
KING SALMON	0	3	
KODIAK	0	0	
KOTZEBUE	0	0	
MC GRATH	0	4	
NOME	0	0	
ST. PAUL ISLAND	0	0	
SUMMIT	0	0	
TALKEETNA	0	0	
UNALAKLEET	0	0	
YAKUTAT	0	0	
ARIZONA			
FLAGSTAFF	0	143	
PHOENIX	598	3696	
TUCSON	445	2451	
WINSLOW	93	949	
YUMA	587	3635	
ARKANSAS			
FORT SMITH	299	1653	
LITTLE ROCK	330	1926	
CALIFORNIA			
BAKERSFIELD	355	2537	
BISHOP	80	1063	
BLUE CANYON	33	470	
EUREKA U	0	1	
FRESNO	218	1840	
LONG BEACH	112	896	
LOS ANGELES	83	405	
LOS ANGELES U	157	985	
MT SHASTA R	19	430	
OAKLAND	25	130	
RED BLUFF	247	1883	
SACRAMENTO	181	1317	
SANDBERG R	92	929	
SAN DIEGO	121	554	
SAN FRANCISCO	37	128	
SAN FRANCISCO U	34	92	
SANTA MARIA	24	107	
STOCKTON	160	1450	
COLORADO			
ALAMOSA	0	52	
COLORADO SPRINGS	13	442	
DENVER	21	630	
GRAND JUNCTION	101	1161	
PUEBLO	83	1022	
CONNECTICUT			
BRIDGEPORT	131	980	
HARTFORD	99	1030	
DELAWARE			
WILMINGTON	183	1405	
DIST.OF COLUMBIA			
WASHINGTON DULLES	168	1201	
WASHINGTON NATIONAL	288	1646	
FLORIDA			
APALACHICOLA U	490	2518	
DAYTONA BEACH	483	2621	
FORT MYERS	533	3148	
JACKSONVILLE	434	2385	
KEY WEST	549	3771	
LAKELAND U	475	2725	
MIAMI	611	3434	
ORLANDO	501	3122	
PENSACOLA	473	2609	
TALLAHASSEE	480	2419	
TAMPA	510	2933	
WEST PALM BEACH	517	3349	
GEORGIA			
ATHENS	320	1610	
ATLANTA	323	1575	
AUGUSTA	382	1902	
COLUMBUS	426	2102	
MACON	446	2236	
ROME	311	1685	
SAVANNAH	429	2277	
HAWAII			
HILO	345	2465	
HONOLULU	484	3441	
KAHULUI	[illegible]	2672	
LIHUE	424	3011	
IDAHO			
BOISE	51	889	
LEWISTON	79	981	
POCATELLO	14	482	
ILLINOIS			
CAIRO	281	1705	
CHICAGO O HARE	128	914	
CHICAGO MIDWAY	[illegible]	[illegible]	
MOLINE	93	848	
PEORIA	121	962	
ROCKFORD	84	803	
SPRINGFIELD	184	1157	
INDIANA			
EVANSVILLE	265	1488	
FORT WAYNE	124	905	
INDIANAPOLIS	172	111	
SOUTH BEND	126	849	
IOWA			
BURLINGTON	108	962	
DES MOINES	98	1122	
DUBUQUE	65	667	
SIOUX CITY	50	1009	
WATERLOO	60	816	
KANSAS			
CONCORDIA	86	1219	
DODGE CITY	114	1469	
GOODLAND	34	837	
TOPEKA	115	1131	
WICHITA	149	1505	
KENTUCKY			
COVINGTON	170	1010	
LEXINGTON	245	1218	
LOUISVILLE	280	1471	
LOUISIANA			
ALEXANDRIA	375	2018	
BATON ROUGE	455	2546	
LAKE CHARLES	418	2293	
NEW ORLEANS	448	2537	
SHREVEPORT	305	1943	
MAINE			
CARIBOU	17	307	
PORTLAND	40	502	
MARYLAND			
BALTIMORE	173	1200	
MASSACHUSETTS			
BLUE HILL OBS R	65	663	
BOSTON	84	901	
WORCESTER	62	617	
MICHIGAN			
ALPENA	60	332	
DETROIT	115	966	
DETROIT METRO	104	767	
FLINT	84	581	
GRAND RAPIDS	96	756	
HOUGHTON LAKE	60	393	
LANSING	92	645	
MARQUETTE U	59	383	
MUSKEGON	75	560	
SAULT STE MARIE	49	220	
MINNESOTA			
DULUTH	18	175	
INTERNATIONAL FALLS	12	334	
MINNEAPOLIS	47	761	
ROCHESTER	37	549	
ST CLOUD	34	440	
MISSISSIPPI			
JACKSON	382	2279	
MERIDIAN	399	2111	
MISSOURI			
COLUMBIA REGIONAL	170	1222	
KANSAS CITY	110	1185	
ST JOSEPH	96	1273	
ST LOUIS	187	1334	
SPRINGFIELD	216	1263	
MONTANA			
BILLINGS	16	592	
GLASGOW	10	538	
GREAT FALLS	20	570	
HAVRE	15	462	
HELENA	3	311	
KALISPELL	13	258	
MILES CITY	19	724	
MISSOULA	15	447	
NEBRASKA			
GRAND ISLAND	53	1054	
LINCOLN	53	1041	
NORFOLK	31	994	
NORTH PLATTE	22	699	
OMAHA	74	1084	
SCOTTSBLUFF	21	641	
VALENTINE	24	836	
NEVADA			
ELKO	2	473	
ELY	0	200	
LAS VEGAS	424	3013	
RENO	3	381	
WINNEMUCCA	15	585	
NEW HAMPSHIRE			
CONCORD	57	642	
MT WASHINGTON OBS	0	0	
NEW JERSEY			
ATLANTIC CITY	112	1043	
ATLANTIC CITY U	168	908	
NEWARK	205	1438	
TRENTON U	159	1232	
NEW MEXICO			
ALBUQUERQUE	124	1270	
CLAYTON	51	742	
ROSWELL	174	1444	
NEW YORK			
ALBANY	71	751	
BINGHAMTON	50	501	
BUFFALO	78	675	
NEW YORK U	171	1265	
NEW YORK KENNEDY	137	909	
NEW YORK LA GUARDIA	164	1205	
ROCHESTER	96	847	
SYRACUSE	79	793	
NORTH CAROLINA			
ASHEVILLE	163	952	
CAPE HATTERAS R	334	1673	
CHARLOTTE	296	1495	
GREENSBORO	229	1317	
RALEIGH	254	1423	
WILMINGTON	372	1903	
NOR3H DAKOTA			
BISMARCK	11	411	
FARGO	13	448	
WILLISTON	13	467	
OHIO			
AKRON	104	817	
CINCINNATI ABBE OB	225	1207	
CLEVELAND	119	824	
COLUMBUS	160	1017	
DAYTON	191	1133	
MANSFIELD	129	912	
TOLEDO	103	733	
YOUNGSTOWN	81	638	
OKLAHOMA			
OKLAHOMA CITY	216	1593	
TULSA	249	1725	
OREGON			
ASTORIA	7	13	
BURNS U	15	407	
EUGENE	26	235	
MEACHAM	18	222	
MEDFORD	92	844	
PENDLETON	72	831	
PORTLAND	45	403	
SALEM	29	231	
SEXTON SUMMIT R	48	271	
PACIFIC AREA			
GUAM TAG AC R	439	3839	
JOHNSTON	458	3582	
KOROR R	523	4724	
KWAJALEIN	513	4723	
MAJURO	464	4418	
PAGO PAGO	465	4469	
PONAPE R	473	4485	
TRUK MOEN ISLAND	507	4660	
WAKE	520	4077	
YAP R	476	4503	
PENNSYLVANIA			
ALLENTOWN	103	928	
ERIE	76	496	
HARRISBURG	148	1121	
PHILADELPHIA	193	1377	
PITTSBURGH	108	841	
SCRANTON	72	643	
WILLIAMSPORT	83	691	
RHODE ISLAND			
BLOCK ISLAND	[illegible]	[illegible]	
PROVIDENCE	84	861	
SOUTH CAROLINA			
CHARLESTON	447	2278	
CHARLESTON U	428	2189	
COLUMBIA	413	1974	
GRNVLLE-SPRTNBRG	391	1476	
SOUTH DAKOTA			
ABERDEEN	33	761	
HURON	22	688	
RAPID CITY	15	599	
SIOUX FALLS	38	864	
TENNESSEE			
BRISTOL	212	1068	
CHATTANOOGA	334	1629	
KNOXVILLE	282	1383	
MEMPHIS	350	2060	
NASHVILLE	351	1634	
OAK RIDGE R	254	1282	
TEXAS			
ABILENE	277	1982	
AMARILLO	173	1388	
AUSTIN	447	2351	
BROWNSVILLE	504	2962	
CORPUS CHRISTI	511	2925	
DALLAS	363	2310	
DEL RIO	463	2707	
EL PASO	340	1761	
FORT WORTH	342	2226	
GALVESTON U	476	[illegible]	
HOUSTON INTERCON	401	2267	
LUBBOCK	197	1521	
MIDLAND	229	1644	
PORT ARTHUR	426	2217	
SAN ANGELO	314	2213	
SAN ANTONIO	437	2490	
VICTORIA	476	2765	
WACO	429	2299	
WICHITA FALLS	298	1957	
UTAH			
MILFORD	16	598	
SALT LAKE CITY	44	1045	
WENDOVER	61	1164	
VERMONT			
BURLINGTON	68	652	
VIRGINIA			
LYNCHBURG	188	1139	
NORFOLK	307	1669	
RICHMOND	231	1501	
ROANOKE	192	1185	
WALLOPS ISLAND	241	1169	
WASHINGTON			
OLYMPIA	5	67	
QUILLAYUTE	1	12	
SEATTLE	13	131	
SEATTLE-TACOMA	21	140	
SPOKANE	39	530	
STAMPEDE PASS R	4	30	
WALLA WALLA U	79	979	
YAKIMA	41	585	
WEST INDIES			
SAN JUAN	539	4506	
WEST VIRGINIA			
BECKLEY	81	572	
CHARLESTON	181	1106	
ELKINS	41	425	
HUNTINGTON	212	1255	
PARKERSBURG U	169	1134	
WISCONSIN			
GREEN BAY	63	625	
LA CROSSE	59	759	
MADISON	58	594	
MILWAUKEE	84	687	
WYOMING			
CASPER	5	400	
CHEYENNE	0	293	
LANDER	[illegible]	410	
SHERIDAN	[illegible]	376	

STORM SUMMARY

SEPTEMBER 1973

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				@ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				Ø ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS
Alabama																												4	
Alaska												?																	
Arizona *																													
Arkansas	2	2			4																					1			
California												5	?																
Colorado	3	2						4	5							4													
Connecticut	4	2			6																							?	
Delaware										1						5													
Florida												4		2															
Georgia *																													
Hawaii *																													
Idaho *																													
Illinois	3	2			?			?	?		2	?	?	3		?	?												
Indiana	1	1			4				4				4																
Iowa	8	3			5		1	5	5			5	5		3														
Kansas	15	4	3	36	7			5	5		1	6	5	1		4										2		6	6
Kentucky	1	1			5			3	3			4	3			4	3												
Louisiana	5	4		11	5																							5	7
Maine												4																	
Maryland											1	4		1	1	5													
Massachusetts	1	1			3				1	1		4°	C			4												3°	C
Michigan												4				3													
Minnesota	2	2		6	5																								
Mississippi	2	2			5							3	C															5	C
Missouri	3	3		1	5									1		?												5	6
Montana												2				2													
Nebraska	3	2		8	7			3	5			4	5			5	3												5
Nevada *																													
New Hampshire *																													
New Jersey														1	2	?												?	
New Mexico								5								4													
New York	2	1			3			3°	C			4		3	9	5													
North Carolina	2	1			5			5	4		1	5	4																
North Dakota																4												7	7
Ohio												4																	
Oklahoma	3	3		14	5			5	5		3	5			4	4												5	
Oregon	1	1						?	?								?												
Pacific Area ‡																													
Pennsylvania										1		5				4											8	4	
Puerto Rico & VI										1		6°	C															6°	C
Rhode Island												1				4												5	C°
South Carolina									3		1	5																7	4
South Dakota	1	1			4																								
Tennessee												4			3														
Texas	5	4			5			4	6	2	22	6					4											6	8
Utah									4			4°	C																
Vermont *																													
Virginia												3				2													
Washington									4																				
West Virginia *																													
Wisconsin								6	5			5	5	1	1	5													
Wyoming	1	1						5°	C																				

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

SEPTEMBER 1973

Herbert J. Thompson and Raymond J. Haley
Office of Hydrology

The most serious flooding during September occurred in the Kansas River Basin. Serious flooding was also reported in the lower Missouri Basin in Missouri, the Arkansas Basin in Kansas, the Santee River Basin in South Carolina, and the Neches and Guadalupe Basins in Texas. Significant rainfall occurred over most of the Pacific Northwest to end the serious drought. However, streamflow in that area was still abnormally low.

Hydrologic events of unusual significance or involving loss of life or property damage are discussed in more detail below.

Basin or Stream	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	HUDSON BAY DRAINAGE		
Souris River Basin	Torrential rains fell in the vicinity of Bottineau, N.D., on the 1st. Bottineau reported 5.03 inches for the 24-hour period, with significant local flooding along Oak and Willow Creeks. Several million dollars of agricultural damage were indicated. However, no reporting stations went over flood stage.	0	N.A.
Red River of North Basin	During the period 1st-3d up to 10 inches of rain fell over the Upper Wild Rice River, which flooded the town of Mahnomen, Minn. Stores and basements were flooded, and boats were required for crossing streets.	0	N.A.
	ATLANTIC SLOPE DRAINAGE		
Santee River Basin	On the 13th-14th a deep short wave trough aloft moved across the Carolinas. At the surface an east-west frontal system was located along the North Carolina-South Carolina border. A low formed over north Georgia and moved east along the front, bringing excessive rainfall to a broad area. Amounts ranged from 3.5 to over 9 inches, with unofficial reports of up to 11 inches. This rainfall occurred over a period of about 15-17 hours. Flash flooding developed on many small streams in Laurens, Greenville, Spartanburg, Union, Greenwood, and Cherokee Counties. Families were evacuated from mobile homes in the communities of Laurens, Spartanburg, Gaffney, and Whitmire. Fair Forest Creek in Spartanburg and Duncan Creek in Whitmire flooded. However, residential damage was light - estimated at $35,000. An average of 7.1 inches over the watershed with a 9-inch center just west of Laurens, S.C., caused severe flash flooding along Reedy Fork Creek and Little River, with major damage to the Plaza shopping center in Laurens. Nearly all of this damage was to commercial establishments and amounted to more than $4,600,000. The Riegal Textile Power Plant Dam on the Saluda River near Ware Shoals, S.C., reported the highest stage since 1929. Rainfall associated with this storm was the greatest 24-hour amount recorded	0	4,768

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	ATLANTIC SLOPE DRAINAGE-Continued		
	since the 10.72 inches observed on Sept. 26, 1929, and approached the 100-year, 24-hour duration, rainfall of 7.5 inches published in Weather Bureau Technical Paper No. 40.		
	EAST GULF OF MEXICO DRAINAGE		
Tombigbee River Basin	At Aliceville, Alabama, on Lubbub Creek, 5.9 inches of rain fell in 45 minutes, with some damage to commercial establishments and to streets. Up to 26 inches of water was observed over the flooded area.	0	9
	Missouri Basin		
Platte River (Missouri)	Rainfall over the area during September ranged from 5 to over 13 inches, most of which fell during the last week of the month. Many of the streams in the area went over flood stage, but significant damage was confined to the Platte and Little Platte Rivers. Damage was estimated at $224,000 along the Little Platte and $136,000 along the Platte, mostly to corn and soybean crops.		
Kansas River Basin	An unusually wet month, with totals ranging from 200 to 600 percent of normal over the Basin, culminated in the most serious flooding since 1951. On the lower Smoky Hill River at Abilene and Enterprise, Kansas, the crest stage was the third highest of record. Only the record 1951 flood and the 1903 flood were higher. The crest at Barneston on the Big Blue River was the third highest of record and the highest since 1947. The crest at Minneapolis, Kans., on the Solomon River was only 0.5 feet below the record 1951 crest. Major agricultural damage occurred with industrial, commercial, and public property, and highway losses heavy in some basins. In the Smoky Hill Basin 105,000 acres were flooded with nearly $9 million in losses, including more than $1 million to industrial and commercial property. In the Solomon River Basin from 8 to 10,000 acres were flooded, with $110,000 agricultural, $250,000 industrial - commercial, and $220,000 public property damage. Estimated damage in the Big Blue Basin where 14,700 acres were flooded was $2.6 million, including $1.6 million to public property. In the Little Blue Basin more than $2,100,000 agricultural damage occurred, with 29,000 acres flooded. Damage in the Republican Basin was a relatively minor $132,000 even though more than 25,000 acres were reported flooded. Along the main stem of the Kansas River 60,000 acres were flooded, with over $4 million damage, including $2 million to agriculture and $1.5 mil-	2	18,575

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	Missouri Basin-Continued		
	to railroads and highways. Two flood-related fatalities were noted when a car was washed off a secondary highway near Ellsworth.		
	Lower Missouri Basin		
	The general rainfall discussed above caused some flooding along the lower Missouri River and some tributaries. Nearly all damage was agricultural in nature, primarily to crops not yet harvested. Except for the Marais Des Cygnes Basin in Kansas, where damage was estimated at $274,000, it was difficult to differentiate between damage caused by the late September flooding and subsequent, more serious flooding in October. However, as an approximation there was nearly $1 million damage in the Chariton Basin, $500,000 in the north Grand Basin, and more than $2 million along the lower Missouri main stem, which was attributed to the late September flooding.	0	4,000
	Arkansas Basin		
Upper Arkansas River Basin, Kinsley to Great Bend, Ks.	Excessive rainfall, with amounts up to nearly 8 inches, occurred over the Arkansas and Coon Creek watershed in the vicinity of Kinsley, Kansas, during the period 24th-28th. Flooding occurred along Coon Creek and the Arkansas River from Kinsley to Great Bend. Damage was primarily to newly planted wheat, milo and alfalfa, with 40,000 acres inundated. Some residential and road damage was also noted.	0	1,149
Arkansas Basin Hutchinson to Oxford, Ks.	Rain occurred over this area 60 percent of the time during September, with record or near-record monthly totals at numerous points. These totals varied from 6.44 inches (170 percent of normal) at Erie to 16.28 inches (600 percent of normal) at Lyons. Excessive rain during the period 22d-28th, with a 10-inch center over the Rattlesnake Creek Basin, caused extensive flooding. Most damage occurred along Cow Creek and the Arkansas River around Hutchinson, with 50,000 acres inundated. More than half of the damage was to agricultural crops with substantial damage to public property, railroads, highways, and bridges.	0	7,045
	Red River Basin		
Sulphur River Basin	Three periods of rainfall occurred during the month in northeastern Texas. From 4 to 5 inches the 5th-7th, 1 to 2 inches on the 12th-14th, and up to 7 inches on the 27th-28th produced flooding along the Sulphur River. Some agricultural damage occurred amounting to $11,000 in Titus	0	24

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

SEPTEMBER 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	Red River Basin-Continued		
	County and $13,000 in Franklin County where 2,300 acres were inundated.		
	WEST GULF OF MEXICO DRAINAGE		
Neches River Basin	Rainfall from tropical storm Delia amounted to about 7 inches over the basin on the 4th-5th. Agricultural, residential, and road damage was extensive.	0	5,500
Trinity River Basin	Rainfall from tropical storm Delia amounted to 4 to 6 inches over the basin below Lake Livingston on the 4th-5th. There was crop, residential, and road damage.	0	1,000
Guadalupe River Basin	On the night of the 26th-27th, a line of thunderstorms formed from the Encinal area northeastward to San Antonio and Seguin. Heavy rainfall occurred during the night along this line. In fact, rainfall above 5 inches was common. Locally heavy amounts reported were: Seguin 9.47 inches, Geronimo 9.25, Derby 8.20, Catarina 6.96, Dilley 6.86, Floresville 6.80, McQueeney 11.25, New Braunfels 6.44, and San Antonio 7.28. In the San Antonio metropolitan area rainfall network, Las Palmas, on the southwest portion of San Antonio, reported 13 inches, and Houston Terrace on the eastern edge of the city reported 10.40. The 7.28 inches at San Antonio set a new 24-hr. rainfall record for this station. Also, new records were set for the period of 1 hour, with 3.16 inches; and in 2 hours, 5.21 inches. Flooding occurred across the San Antonio metropolitan area, with all major and minor streams out of banks. The San Antonio River was reported out of banks over several portions of the city, however, no widespread flooding occurred from the river. Olmos Creek above Olmos Dam reached a stage of 12.4 feet (Flood Stage 10 feet) at Dresden Drive. The water in storage at Olmos Dam reached a height of 32 feet (top of dam 49 feet), with two gates open at the dam. This dam has no spillway. This is the record height for water in storage in the dam and equals the previous record established in 1946, which was the highest since completion of the dam. There were three persons drowned during the storm. The damage in Bexar County and San Antonio is estimated to be $3 million. In the counties, several bridges were completely washed out but, in general, roads and streets were damaged, some 200 automobiles received flood damage, around 25 homes were flooded along Olmos Creek, and there was flooding of numerous businesses over the city. Salado Creek at Loop 410 reached a record height of 28.84 feet. This is a new record for this stream gage. The previous record was 20.14 feet set on September 10, 1921, and flood marks from the past on July 5, 1819.	4	3,800

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Damage Estimate in Thousands of Dollars
	WEST GULF OF MEXICO DRAINAGE-Cont'd.		
	At Seguin heavy flooding occurred along Walnut and Geronimo Creeks. The Guadalupe River at Seguin reached 27 feet and flooded homes along the banks. Damage occurred along the creeks to homes and automobiles. The discharge from Geronimo Creek backed water upstream over the Guadalupe-Blanco River Authority Dam just south of Seguin, and destroyed the floodgates on top of the dam. Damage estimates are $800,000 in the Seguin area due to the flooding of homes, crops, damage to dam floodgates, and roads in Guadalupe County. There was a heavy discharge that moved down Cibolo Creek. The stage at Falls City on the 28th reached the record height of 35.44 feet. This may be compared with the previous record of 35 feet in October 1913. There was one drowning near Cestohowa on the creek.		
	PUERTO RICO		
Humacao and Fajardo Rivers	The remnants of tropical storm Christine caused heavy rainfall over the southeastern portion of the island with largest amounts concentrated over the Humacao River and headwaters of the Fajardo River. Storm totals ranged up to the 9.52 inches observed at Humacao. In Yabucoa, 40 people were evacuated and 25 homes were damaged. In Humacao, 60 families were evacuated and 500 homes were damaged. In Maunabo, 6 bridges, 4 sewer systems, and 14 homes were damaged. In Las Piedras, 41 homes were damaged and 21 people were evacuated. In Carolina, 23 homes were damaged. Agricultural and road damage was reported from many areas.	0	N.A.

FLOOD STAGE DATA

(All dates in September unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest	
		From—	To—	Stage	Date
	Ft.			Ft.	
ATLANTIC SLOPE DRAINAGE					
Broad:					
Blair, S.C.	14	11	17	20.2	15
Reedy:					
Greenville, S.C.	9	14	14	10.0	14
Saluda:					
Chappells, S.C.	14	15	16	20.84	15
Iowa River:					
Iowa City, Iowa	12	29	Oct. 9	14.80	30
North Raccoon River:					
Perry, Iowa	13	27	Oct. 4	17.29	30
Jefferson, Iowa	10	26	Oct. 7	15.9	29
Raccoon River:					
Van Meter, Iowa	13	29	Oct. 3	15.9	Oct. 1
Des Moines SW 18th, Iowa	12	29	Oct. 3	12.7	Oct. 2
Cedar Creek:					
Bussey, Iowa	16.5	29	29	17.32	29
Des Moines River:					
Saylorville, Iowa	13	29	Oct. 5	15.98	Oct. 2
Des Moines 14th St., Iowa	21	29	Oct. 4	23.34	Oct. 2
Eddyville, Iowa	15	29	30	16.78	29
Missouri Basin					
Boyer River:					
Logan, Iowa	19	26	26	20.5	26
Platte River:					
Grand Island, Nebr.	4	28	30	# 4.35	29
West Nishnabotna River:					
Hancock, Iowa	8	26	27	10.5	27
Nishnabotna River:					
Hamburg, Iowa	18	26	28	24.07	27
Nemaha River:					
Falls City, Nebr.	20	26 28	27 29	25.33 26.90	26 28
One Hundred and Two River:					
Rosendale, Mo.	13	26	27	13.5	27
Little Platte River:					
Smithville, Mo.	24	25 28	27 30	30.76 29.02	25 29
Platte River:					
Agency, Mo.	20	25	Oct. 2	23.6	29
Buffalo Creek:					
Jamestown, Kans.	16	26	29	#17.87	28
Elk Creek:					
Clyde, Kans.	12	26	27	#15.21	26
Republican River:					
Hardy, Nebr.	11	3 28	4 29	12.43 11.42	4 29
Concordia, Kans.	10	26	27	10.08	26
Clay Center	15	26	Oct. 2	20.75	28
Mulberry Creek:					
Salina, Kans.	26	26	29	27.40	26
Saline River:					
Tescott, Kans.	25	26	Oct. 1	#29.5	27
Solomon River:					
North Fork	15	28	29	#15.80	29
Beloit, Kans.	20	28	29	#23.15	28
Glasco, Kans.	22	27	Oct. 1	25.5	28
Minneapolis, Kans.	26	26	30	33.6	26
Niles, Kans.	24	26	Oct. 1	#30.37	28
Missouri Basin					
Lyons Creek:					
Woodbine, Kans.	17	26 28	27 28	28.64 #19.04	27 28
Smoky Hill River:					
Lindsborg, Kans.	21	26	28	23.83	28
Mentor, Kans.	16	27	29	#20.3	28
New Cambria, Kans.	25	27	Oct. 2	#29.18	29
Abilene, Kans.	22	28	Oct. 3	26.97	29
Enterprise, Kans.	21	27	Oct. 5	#26.4	30
Junction City, Kans.	22	28	Oct. 4	26.83	Oct. 1
Clarks Creek:					
Junction City, Kans.	16	26	27	#17.50	26
Turkey Creek:					
Wilber, Nebr.	11	4 26	6 29	12.10 #13.61	5 26
Mill Creek:					
Washington, Kans.	18	26	29	27.97	26
Little Blue River:					
Deweese, Nebr.	8	2 26 28	4 26 29	12.73 # 8.25 #13.00	3 26 28
Fairbury, Nebr.	10	26	Oct. 2	11.87 12.44	26 Oct. 1
Hanover, Kans.	14	26	Oct. 2	#19.70	28
Black Vermillion River:					
Frankfort, Kans. (Hway 9)	19	26	29	26.88	27
Fancy Creek:					
Winkler, Kans.	11	26	26	#15.10	26
Big Blue River:					
Beatrice, Nebr	16 28	26 29	27 29	#19.80 #17.55	26 28
Barneston, Nebr.	18	26	30	#28.52	26
Marysville, Kans.	35	26	29	39.86	26
Blue Rapids, Kans.	1101	26	30	1112.58	28
Mill Creek:					
Paxico, Kans.	19	23 25 27	24 27 28	27.0 32.2 22.7	23 26 28
Soldier Creek:					
Topeka, Kans.	12	26	28	#17.48	28
Delaware River:					
Muscotah, Kans.	27	28	29	#27.66	28
Wakarusa River:					
Lawrence, Kans.	23	25 26	26 30	#29.2 #30.7	25 28
Stranger Creek:					
Easton, Kans.	15	25 26	25 29	#17.40 #18.50	25 29
Tonganoxie, Kans.	22	25	30	24.60	28
Kansas River:					
Topeka, Kans.	21	27	28	#21.76	27
Lecompton, Kans.	17	27	28	#18.55	28
Lawrence, Kans.	18	27	28	#19.4	28
23d St.Br., Kans. City, Ks.	23	27	0	28.9	29
Blue River:					
Bannister Rd., Kansas City, Mo.	21	25 28	25 28	22.87 22.92	25 28
Little Blue River:					
Lake City, Mo.	18	28	29	19.94	29
Grand River:					
Pattonsburg, Mo.	25	26	27	27.03	26
Gallatin, Mo.	21	25	27	21.6	27

FLOOD STAGE DATA

(All dates in September unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From—	To—	Crest Stage	Crest Date
	Ft.			Ft.	
Missouri Basin-Continued					
Grand River: (Continued)					
Chillicothe, Mo.	24	25	28	27.6	27
Sumner, Mo.	26	25	Oct. 6	32.96 32.36	[illegible] Oct. 3
Brunswick, Mo.	12	25	Oct. 8	22.6	30
Chariton River:					
Prairie Hill, Mo.	15	25	[illegible]	16.6	[illegible]
Salt Creek:					
Lyndon, Kans.	10	25	26	#11.4	26
Pottawatomie Creek:					
Garnett, Kans.	26	25 28	25 29	#26.12 28.4	[illegible] 28
Lane, Kans.	23	28	30	#26.90	29
Marais Des Cygnes River:					
Quenemo, Kans.	28	27	29	30.67	28
Pomona 2 S. Kans.	20	27	29	#21.91	28
Ottawa, Kans.	27	27	[illegible]	#33.4	28
Osawatomie, Kans.	28	25	Oct. 2	35.9	30
Lacygne, Kans.	25	26	Oct. 1	#31.32	Oct. 2
State Line, Kans.	25	27	Oct. 5	#29.9	Oct. 3
Missouri River:					
Rulo, Nebr.	17	26	29	20.35	27
St. Joseph, Mo.	17	26	30	21.2	27-29
Leavenworth, Kans.	[illegible]	27	30	22.0	29
Kansas City, Mo.	22	28	30	24.75	29
Sibley, Mo.	22	27	[illegible]	30.08	29
Napoleon, Mo.	17	27	[illegible]	24.15	29
Lexington, Mo.	22	25	Oct. 5	30.0	29
Waverly, Mo.	18	25	Oct. 10	28.0	29
Miami, Mo.	18	27	Oct. 8	26.6	30
Glasgow, Mo.	25	27	Oct. 8	36.3	30
Boonville, Mo.	21	26	Oct. 8	27.83	Oct. 1
Jefferson City, Mo.	23	29	Oct. 7	26.07	Oct. 2
Hermann, Mo.	21	28	Oct. 25	27.98	Oct. 19
St. Charles, Mo.	25	30	Oct. 26	29.8	Oct. 20
Ohio Basin					
South Chickamauga Creek:					
Chickamauga, Tenn.	10	13	14	10.72	14
White Basin					
Cache:					
Patterson, Ark.	7	8	21	8.4	15
Arkansas Basin					
Halstead, Kans.	[illegible]	27	Oct. 2	20.85	29
Sedgwick, Kans.	18	28	Oct. 3	23.8	[illegible]
S. Fork Ninnescah:					
Murdock, Kans.	8	26	[illegible]	11.5	27
Ninnescah:					
Peck, Kans.	17	27	28	18.18	28
Chikaskia:					
Blackwell, Kans.	26	25	30	31.89	27
Cimarron:					
Dover, Okla.	17	28	28	17.9	28
Guthrie, Okla.	10	27	29	11.56	28
Cottonwood:					
Florence, Kans.	22	28	28	22.1	28
Plymouth, Kans.	28	26	30	33.51	28
Emporia, Kans.	20	26	Oct. 2	25.81	28
Arkansas Basin-Continued					
Neosho:					
Americus, Kans.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Neosho Rapids, Kans.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Iola, Kans.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chanute, Kans.	[illegible]	[illegible]	30	#28.39	29
Oswego, Kans.	[illegible]	[illegible]	[illegible]	[illegible]	1
Arkansas:					
[illegible], Kans.	[illegible]	[illegible]	[illegible]	[illegible]	27
Great Bend, Kans.	[illegible]	28	[illegible]	[illegible]	29
Hutchinson, Kans.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Wichita, Kans.	[illegible]	28	[illegible]	#13.6	Oct. [illegible]
Oxford, Kans.	14	28	30	14.90	[illegible]
Arkansas City, Kans.	17	[illegible]	[illegible]	#21.93	[illegible]
Ponca City, Okla.	[illegible]	[illegible]	Oct. [illegible]	#14.2	[illegible]
Red River Basin					
Blue:					
[illegible], Okla.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Clear Boggy Creek:					
Caney, Okla.	[illegible]	27	[illegible]	[illegible]	[illegible]
Sulphur:					
Hagansport, Tex.	[illegible]	[illegible] 29	[illegible] Oct. [illegible]	46.92 46.95	[illegible] [illegible]
Naples, Tex.	22	13	[illegible]	[illegible]	[illegible]
Atchafalaya Basin					
Atchafalaya:					
Morgan City, La.	7	[illegible]	[illegible]	[illegible]	[illegible]
WEST GULF OF MEXICO DRAINAGE					
Mermentau:					
Mermentau, La.	5	[illegible]	22	#[illegible]	[illegible]
Sabine:					
Orange, Tex.	4	[illegible]	[illegible]	[illegible]	[illegible]
Angelina:					
Lufkin, Tex. (Near)	8	[illegible]	21	9.88	[illegible]
Neches:					
Diboll, Tex. (Near)	10	[illegible]	Oct. 4	11.35	[illegible]
Lawsons Crossing, Tex.	[illegible]	[illegible]	9	5.5	[illegible]
East Fork Trinity:					
Crandall, Tex.	[illegible]	[illegible]	Oct. [illegible]	16.03 14.71 16.95	29 Oct. 10 Oct. 14
Chambers Creek:					
Corsicana, Tex. (Near)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Trinity:					
Rosser, Tex.	26	[illegible]	29	26.82	[illegible]
Moss Bluff, Tex.	[illegible]	[illegible]	12	5.6	[illegible]
Navasota:					
Bryan, Tex. (Near)	12	27	Oct. 2	[illegible]	[illegible]
Navidad:					
Ganado, Tex. (Near)	21	[illegible]	[illegible]	[illegible]	[illegible]
Cibolo Creek:					
Falls City, Tex.	12	[illegible]	[illegible]	[illegible]	[illegible]
Guadalupe:					
Gonzales, Tex.	[illegible]	[illegible]	[illegible]	26.6	[illegible]
Dupont, Tex.	[illegible]	[illegible]	[illegible]	22.39	[illegible]
Frio:					
Derby, Tex. (Near)	[illegible]	[illegible]	[illegible]	6.5	18
Tilden, Tex.	[illegible]	[illegible]	Oct. 5	21.24	Oct. 2
Calliham, Tex.	12	[illegible]	Oct. [illegible]	27.6	Oct. 1

FLOOD STAGE DATA

(All dates in September unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest	
		From–	To–	Stage	Date
	Ft			Ft	
WEST GULF OF MEXICO DRAINAGE (Continued)					
Atascosa:					
Whitsett, Tex.	[illegible]	26	Oct. 1	22.5	30
Nueces:					
Cotulla, Tex.	15	26	30	15.46	29
Tilden, Tex.	14	26	Nov. 5	22.4	Oct. 8
WEST GULF OF MEXICO DRAINAGE (Continued)					
Nueces-Continued:					
Three Rivers, Tex. (Near)	25	28	Oct. 16	37.44	Oct. 11
Mathis Bridge, Tex.	15	27	Nov. 4	30.1	Oct. 12
Calallen, Tex.	7	28	Nov. 7	11.0	Oct. 13
Mercedes, Tex.	21	22	24	21.3	22

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction *	Resultant Wind Speed M.p.s.
SURFACE	27	86	10.8	9.4	20	.7
1000	25	164	11.9	9.3	22	.9
950	27	587	12.0	7.3	27	3.4
900	27	1,038	9.8	4.6	28	5.4
850	27	1,512	7.6	-.7	29	7.5
800	27	2,010	6.2	-4.8	28	9.0
750	27	2,538	4.4	-9.7	28	10.7
700	26	3,099	2.6	-13.7	28	12.8
650	26	3,696	.6	-16.4	28	14.7
600	26	4,335	-2.9	-19.2	28	16.8
550	26	5,019	-7.2	-22.7	28	18.7
500	26	5,754	-12.1	-27.2	28	20.4
450	26	6,552	-17.4	-31.5	28	22.9
400	26	7,424	-23.8	-37.6	28	24.6
350	24	8,395	-30.9	-43.0	28	26.6
300	24	9,468	-39.1	-49.0	28	28.5
250	24	10,693	-48.4		28	30.8
200	24	12,136	-55.8		28	32.9
175	24	12,982	-58.1		29	28.5
150	24	13,947	-60.2		28	26.2
125	23	15,082	-62.5		28	21.3
100	22	16,453	-61.6		28	16.7
80	22	17,835	-61.6		28	11.4
70	22	18,665	-60.3		29	8.9
60	22	19,630	-58.5		28	7.3
50	22	20,783	-56.2		28	4.8
40	19	22,207	-53.9		27	3.7
30	19	24,067	-51.1		28	.6
25	19	25,257	-49.7		24	.7
20	18	26,719	-47.8		10	1.7
15	17	28,621	-45.9		11	4.1
10						
7						

ALBUQUERQUE, N. MEX.
839 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,619	13.1	3.7	08	.9
1000						
950						
900						
850						
800	30	2,023	14.9	-.8	28	.8
750	30	2,566	11.9	-4.0	29	[illegible]
700	30	3,139	7.6	-6.3	29	6.7
650	30	3,745	3.0	-7.5	27	6.4
600	30	4,388	-1.6	-10.1	27	7.4
550	30	5,076	-5.7	-18.7	27	7.6
500	30	5,817	-9.9	-26.2	28	8.1
450	30	6,622	[illegible]	-31.3	28	9.2
400	30	7,502	-21.6	-38.2	28	9.2
350	30	8,474	[illegible]	-44.3	28	10.4
300	30	9,554	-37.4	-51.5	28	13.5
250	30	10,792	-45.1		27	18.8
200	29	12,253	-53.7		27	22.4
175	29	13,102	-58.2		27	21.7
150	28	14,061	-63.1		27	18.4
125	28	15,171	-67.4		27	14.6
100	28	16,507	-69.0		28	7.7
80	28	17,847	-66.9		29	3.2
70	28	18,659	-64.4		32	1.2
60	28	19,608	-62.1		06	1.1
50	27	20,742	-59.2		08	1.8
40	26	22,149	-57.0		07	3.7
30	25	23,982	-54.2		09	5.3
25	25	25,158	-51.9		09	5.3
20	24	26,612	-49.6		09	6.3
15	22	28,511	-47.0		08	4.5
10	15	31,241	-44.0		08	5.0
7						

AMARILLO, TEXAS
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,095	14.9	[illegible]	22	[illegible]
1000						
950						
900						
850	30	1,544	15.9	9.8	24	4.3
800	30	2,019	14.7	6.0	25	5.2
750	30	2,562	11.5	1.7	25	5.8
700	30	3,136	8.0	-1.8	26	5.5
650	30	3,743	3.8	-6.5	27	5.5
600	30	4,388	-.8	-10.7	27	4.9
550	30	5,078	-4.7	[illegible]	26	5.4
500	30	5,822	-9.2	-23.3	26	6.3
450	30	6,630	-14.1	-29.4	26	[illegible]
400	30	7,513	-20.7	-35.7	26	9.8
350	30	8,489	-27.8	-41.8	25	12.0
300	30	9,576	-35.8	-49.1	25	15.4
250	30	10,823	-43.9		26	20.0
200	30	12,290	-53.2		25	22.6
175	30	13,140	-58.5		26	22.7
150	30	14,097	-63.6		26	20.0
125	30	15,205	-67.7		26	15.5
100	29	16,543	-68.7		26	7.8
80	26	17,883	-67.4		25	3.3
70	26	18,695	-64.5		26	1.3
60	26	19,644	-61.6		04	.7
50	26	20,783	-58.6		09	2.3
40	26	22,192	-56.2		08	3.4
30	26	24,034	-52.9		08	5.4
25	24	25,210	-50.7		09	5.4
20	23	26,677	-48.2		09	5.3
15	20	28,565	-45.8		08	4.7
10	13	31,323	-43.1		11	2.6
7						

• ANCHORAGE, ALASKA
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	45	6.7	5.2	[illegible]	.7
1000	23	113	8.4	3.0	[illegible]	.7
950	30	[illegible]	[illegible]	1.4	[illegible]	1.1
900	30	949	[illegible]	-1.1	17	2.2
850	30	1,412	.8	[illegible]	17	3.5
800	30	1,896	-2.2	[illegible]	17	4.8
750	30	2,407	-4.8	[illegible]	[illegible]	5.9
700	30	2,947	-7.9	-13.2	17	5.7
650	30	3,519	-11.5	[illegible]	17	[illegible]
600	30	4,129	-15.5	-22.1	18	6.1
550	30	4,780	-19.5	[illegible]	18	[illegible]
500	30	5,482	-24.4	-33.1	19	6.7
450	30	6,242	-29.7	-38.3	19	5.9
400	30	7,071	-35.6	-42.9	20	[illegible]
350	30	7,990	-42.4	-44.4	20	5.6
300	30	9,013	-49.6		20	7.3
250	30	10,194	-53.4		22	9.0
200	30	11,636	-51.5		23	[illegible]
175	30	12,505	[illegible]		23	10.1
150	30	13,509	-50.6		23	9.2
125	30	14,700	-50.2		23	9.4
100	30	16,157	-50.2		23	[illegible]
80	29	17,619	-50.4		23	[illegible]
70	29	18,491	-50.2		23	[illegible]
60	29	19,497	-50.4		23	[illegible]
50	28	20,681	-50.7		23	[illegible]
40	27	22,137	-50.9		23	4.7
30	25	[illegible]	-51.4		23	3.8
25	25	25,187	-51.4		25	2.2
20	25	26,636	-51.4		26	1.7
15	23	28,509	-50.3		34	1.1
10	20	31,181	-48.2		35	1.8
7	11	33,564	-45.7		30	1.7

• ANNETTE, ALASKA
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.9
1000	[illegible]	123	[illegible]	6.7	[illegible]	[illegible]
950	[illegible]	546	[illegible]	[illegible]	[illegible]	[illegible]
900	[illegible]	992	[illegible]	[illegible]	[illegible]	[illegible]
850	[illegible]	1,458	3.2	[illegible]	[illegible]	5.7
800	[illegible]	[illegible]	.8	[illegible]	[illegible]	6.4
750	[illegible]	2,464	-1.6	-8.7	[illegible]	[illegible]
700	[illegible]	3,011	-4.6	-13.9	[illegible]	[illegible]
650	[illegible]	3,592	-7.6	-18.7	[illegible]	7.8
600	[illegible]	4,211	-11.0	[illegible]	[illegible]	[illegible]
550	[illegible]	4,874	-15.1	[illegible]	[illegible]	11.3
500	[illegible]	5,589	-19.7	-30.5	[illegible]	12.9
450	[illegible]	6,364	-24.8	-33.5	[illegible]	13.3
400	[illegible]	7,210	-30.9	-39.5	[illegible]	[illegible]
350	[illegible]	8,146	[illegible]	[illegible]	[illegible]	[illegible]
300	[illegible]	9,192	[illegible]		[illegible]	[illegible]
250	[illegible]	10,395	[illegible]		[illegible]	[illegible]
200	[illegible]	11,835	-54.3		[illegible]	[illegible]
175	[illegible]	12,691	-54.3		[illegible]	10.5
150	[illegible]	13,680	[illegible]		[illegible]	[illegible]
125	[illegible]	14,850	-54.0		[illegible]	[illegible]
100	[illegible]	[illegible]	-53.8		[illegible]	[illegible]
80	[illegible]	[illegible]	-53.5		[illegible]	[illegible]
70	[illegible]	[illegible]	-53.5		[illegible]	[illegible]
60	[illegible]	[illegible]	-54.0		[illegible]	[illegible]
50	[illegible]	20,727	-54.9		[illegible]	[illegible]
40	[illegible]	22,155	-54.6		31	[illegible]
30	[illegible]	24,000	-53.9		34	[illegible]
25	[illegible]	25,167	-53.1		01	[illegible]
20	[illegible]	26,616	-51.9		35	[illegible]
15	[illegible]	28,461	-50.4		31	[illegible]
10	[illegible]	31,120	-45.2		[illegible]	[illegible]
7	[illegible]	33,549	-41.4			

ATHENS, GEORGIA
989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	19.1	18.5	04	1.3
1000						
950	30	595	20.6	17.5	13	1.7
900	30	1,062	18.3	14.9	16	1.9
850	30	1,551	15.4	10.8	16	1.7
800	30	2,064	13.0	6.0	16	1.2
750	30	2,605	10.1	1.7	18	1.2
700	30	3,176	6.8	-2.3	24	1.0
650	30	3,782	3.8	-7.4	27	1.2
600	30	4,428	.5	-12.3	27	2.2
550	30	5,122	-3.1	-17.6	28	3.3
500	30	5,871	-7.7	-23.3	27	4.5
450	30	6,683	-12.5	-27.3	27	5.6
400	30	7,571	-18.9	-31.8	28	6.4
350	30	8,555	-26.0	-39.3	29	7.7
300	30	9,649	-34.5	-47.0	29	10.0
250	29	10,902	-44.4		30	13.3
200	29	12,361	-55.1		30	15.9
175	28	13,204	-60.4		30	14.9
150	28	14,153	-65.5		30	13.1
125	28	15,249	-70.2		30	9.8
100	28	16,566	-71.7		30	5.1
80	28	17,892	-67.8		34	2.4
70	28	18,702	-64.3		03	.9
60	27	19,648	-62.0		06	2.2
50	27	20,783	-59.1		08	3.6
40	25	22,195	-56.1		09	5.3
30	25	24,039	-52.2		09	6.3
25	22	25,225	-50.4		09	6.1
20	21	26,689	-48.5		09	7.1
15	18	28,587	-46.6		10	8.5
10	13	31,300	-44.2		08	10.3
7	5	33,766	-40.3			

• BARROW, ALASKA
1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	.4	-.4	15	.9
1000	28	79	1.3	.3	15	1.9
950	30	487	.4	-1.8	20	2.7
900	30	920	-1.1	-4.3	21	3.6
850	30	1,374	-3.4	-6.7	23	4.3
800	30	1,851	-6.0	-9.7	23	5.1
750	30	2,355	-8.8	-13.5	23	5.5
700	30	2,886	-12.1	-16.9	23	6.1
650	30	3,450	-15.4	-20.6	23	7.2
600	30	4,050	-19.2	-23.9	23	8.0
550	30	4,692	-23.3	-29.3	23	9.6
500	30	5,382	-28.2	-34.2	23	9.6
450	30	6,130	-33.6	-38.2	23	10.3
400	30	6,947	-39.3	-41.8	22	11.1
350	30	7,853	-45.2		22	11.5
300	30	8,865	-51.6		23	12.3
250	30	10,041	-53.4		23	11.9
200	30	11,487	-50.2		23	11.1
175	30	12,361	-49.2		23	10.2
150	30	13,374	-48.8		24	8.3
125	30	14,573	-48.7		23	8.0
100	29	16,038	-49.3		23	7.4
80	28	17,508	-49.3		23	6.8
70	26	18,383	-49.2		23	6.3
60	25	19,392	-49.3		23	6.2
50	25	20,587	-49.5		23	5.9
40	21	22,033	-50.0		24	5.7
30	18	23,924	-49.9		24	5.8
25	12	25,132	-50.1		24	5.3
20	6	26,579	-50.9			
15						
10						
7						

BARTER IS., ALASKA
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	15	1.1	.4	07	1.2
1000	29	86	3.1	.9	10	1.2
950	30	501	3.6	-1.9	14	1.9
900	30	939	2.0	-4.8	19	1.6
850	30	1,398	-.4	-6.3	23	2.4
800	30	1,881	-3.3	-9.1	24	3.4
750	30	2,389	-6.4	-12.4	24	4.0
700	30	2,925	-9.4	-17.6	23	4.4
650	30	3,494	-12.8	-21.3	23	5.5
600	30	4,100	-16.7	-24.8	23	7.2
550	30	4,748	-21.0	-28.5	24	8.5
500	30	5,446	-25.7	-33.5	23	9.6
450	30	6,202	-31.0	-38.7	23	10.6
400	30	7,026	-37.3	-42.2	24	11.8
350	30	7,938	-44.1	-43.8	24	12.9
300	30	8,953	-51.5		24	13.4
250	30	10,124	-54.8		24	13.4
200	30	11,561	-51.8		24	12.2
175	30	12,430	-50.4		24	10.7
150	30	13,437	-49.9		24	9.9
125	30	14,632	-49.3		24	8.5
100	30	16,095	-49.0		24	8.1
80	29	17,562	-49.4		24	7.0
70	29	18,438	-49.2		24	6.7
60	29	19,448	-49.7		24	6.8
50	29	20,642	-49.5		24	6.5
40	29	22,102	-50.1		24	5.7
30	28	23,979	-50.2		25	4.6
25	28	25,168	-50.7		26	4.0
20	28	26,623	-50.8		25	3.3
15	23	28,518	-50.4		28	2.2
10	14	31,168	-48.7		26	1.6
7						

BETHEL, ALASKA
1002 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	39	5.5	4.0	16	[illegible]
1000	21	87	6.1	[illegible]	21	1.1
950	30	477	6.3	1.6	17	2.7
900	30	917	3.1	-.8	18	3.6
850	30	1,378	-.4	-5.2	18	3.6
800	30	1,861	-2.8	-9.6	18	[illegible]
750	30	2,370	-5.3	[illegible]	19	3.5
700	30	2,909	-8.5	-17.4	19	3.4
650	30	3,480	-11.8	-21.6	20	3.4
600	30	4,089	-15.4	-25.7	21	2.7
550	30	4,740	-19.8	-30.3	21	3.0
500	30	5,440	-24.8	-35.8	21	3.4
450	30	6,198	-30.4	-40.6	22	4.1
400	30	7,026	-36.5	-45.9	22	4.4
350	30	7,941	-43.2	-45.8	23	[illegible]
300	30	8,962	-49.4		23	[illegible]
250	30	10,142	-54.0		24	[illegible]
200	30	11,585	-50.7		23	[illegible]
175	30	12,458	-49.7		23	[illegible]
150	30	13,467	-49.8		23	7.5
125	30	14,660	-49.6		23	7.2
100	30	16,121	-49.8		23	6.8
80	30	17,581	-50.0		23	[illegible]
70	30	18,456	-50.3		23	[illegible]
60	30	19,461	-50.1		22	[illegible]
50	30	20,652	-50.0		23	[illegible]
40	30	22,111	-50.1		23	[illegible]
30	29	23,981	-50.4		23	[illegible]
25	28	25,171	-50.5		24	[illegible]
20	28	26,625	-50.9		25	[illegible]
15	27	28,497	-50.1		29	[illegible]
10	19	31,119	-48.6		30	[illegible]
7						

• BISMARCK, N. DAK.
957 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	503	7.6	6.3	[illegible]	[illegible]
1000						
950	24	584	9.6	5.4	[illegible]	[illegible]
900	30	1,013	11.1	3.8	27	[illegible]
850	30	[illegible]	9.8	[illegible]	[illegible]	[illegible]
800	30	1,991	7.8	[illegible]	[illegible]	[illegible]
750	30	2,521	5.2	-5.9	29	[illegible]
700	30	[illegible]	1.7	-8.2	29	[illegible]
650	30	3,676	-1.1	-12.7	29	[illegible]
600	30	4,311	-4.3	-15.9	29	[illegible]
550	30	4,991	-8.5	[illegible]	[illegible]	[illegible]
500	30	5,724	-13.5	-25.3	[illegible]	9.7
450	[illegible]	6,517	-19.0	-30.7	[illegible]	[illegible]
400	30	7,383	-25.2	-37.7	27	11.3
350	30	8,341	-32.6	-42.9	27	13.4
300	[illegible]	9,406	-41.0	-49.7	27	[illegible]
250	29	10,616	-49.8		26	18.8
200	29	12,054	-55.5		26	21.6
175	29	12,904	-56.3		26	19.1
150	29	13,879	-58.1		27	15.9
125	29	15,025	-59.2		27	13.6
100	29	16,422	-59.7		26	10.5
80	[illegible]	17,816	-59.5		[illegible]	7.0
70	29	18,653	-59.1		[illegible]	[illegible]
60	29	19,621	-58.8		[illegible]	[illegible]
50	[illegible]	[illegible]	-57.4		[illegible]	[illegible]
40	[illegible]	22,183	-55.9		[illegible]	[illegible]
30	[illegible]	24,031	[illegible]		[illegible]	[illegible]
25	[illegible]	25,211	[illegible]		[illegible]	[illegible]
20	[illegible]	[illegible]	-48.8		[illegible]	[illegible]
15	[illegible]	28,564	-46.2		[illegible]	[illegible]
10	[illegible]	31,261	-42.6			
7						

BOISE, IDAHO
916 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	871	12.0	2.4	14	1.9
1000						
950						
900	30	1,017	15.1	2.2	13	1.1
850	30	1,501	14.4	-.9	29	1.1
800	30	2,011	11.2	-3.0	27	1.5
750	30	2,546	7.6	-5.5	27	2.9
700	30	3,110	3.8	-8.9	27	4.1
650	30	3,708	-.2	-11.8	28	4.9
600	30	4,344	-4.3	-17.4	27	5.6
550	30	5,024	-8.6	-22.3	27	6.8
500	30	5,756	-13.2	-27.3	29	6.6
450	29	6,551	-18.8	-33.0	29	7.9
400	29	7,418	-25.1	-38.4	29	9.6
350	29	8,376	-32.5	-44.9	29	11.1
300	29	9,442	-40.6	-50.2	29	13.5
250	29	10,662	-48.5		29	17.2
200	29	12,109	-54.5		29	17.5
175	29	12,961	-56.4		28	16.4
150	29	13,935	-58.7		28	15.3
125	29	15,075	-60.4		28	12.5
100	29	16,458	-62.1		28	9.0
80	29	17,842	-61.0		28	4.7
70	29	18,673	-60.5		28	3.1
60	28	19,632	-59.9		31	1.7
50	27	20,779	-58.6		01	1.3
40	27	22,185	-57.1		04	1.3
30	27	24,018	-54.4		02	1.0
25	26	25,189	-52.4		29	1.9
20	25	26,645	-49.8		29	2.6
15	22	28,535	-47.9		26	2.7
10	10	31,297	-43.9		26	2.0
7						
5						

BOOTHVILLE, LA.
1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	1	25.3	23.3	12	1.0
1000	29	124	25.4	23.3	13	2.2
950	29	575	22.7	20.4	14	4.5
900	29	1,046	20.0	16.5	16	4.7
850	29	1,538	16.8	13.2	16	4.1
800	29	2,054	14.6	9.2	17	3.4
750	29	2,598	12.2	4.8	17	2.7
700	29	3,174	9.1	.6	19	1.9
650	29	3,785	5.7	-2.4	20	1.8
600	29	4,437	2.0	-6.4	22	1.9
550	29	5,135	-1.7	-11.3	21	1.7
500	29	5,888	-6.0	-15.3	21	2.2
450	28	6,706	-11.1	-21.0	22	2.3
400	28	7,600	-17.0	-26.6	24	2.5
350	28	8,592	-23.8	-34.2	24	[illegible]
300	28	9,697	-32.1	-41.9	25	3.7
250	28	10,957	-42.4		28	4.9
200	28	12,426	-54.4		29	7.6
175	28	13,269	-60.6		30	8.7
150	28	14,213	-67.4		30	7.9
125	28	15,297	-73.2		31	6.0
100	26	16,593	-74.8		34	2.4
80	28	17,903	-69.9		04	4.3
70	28	18,705	-66.7		08	5.6
60	27	19,642	-63.7		09	6.1
50	27	20,772	-59.5		09	9.1
40	26	22,179	-57.2		08	9.8
30	23	24,012	-53.6		09	12.7
25	23	25,191	-51.3		09	13.4
20	21	26,656	-48.1		09	13.1
15	18	28,564	-46.0		08	13.0
10	12	31,287	-42.4		09	12.5
7						
5						

• BROWNSVILLE, TEXAS
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	7	23.9	22.4	15	.5
1000	30	102	25.9	24.0	16	1.9
950	30	555	23.5	21.5	[illegible]	4.5
900	30	1,027	21.0	17.3	17	4.0
850	30	1,521	18.1	12.3	19	3.4
800	30	2,039	15.6	8.0	[illegible]	2.5
750	30	2,585	12.7	3.1	[illegible]	[illegible]
700	30	3,161	9.4	-.3	21	1.5
650	30	3,773	6.0	-4.1	24	[illegible]
600	30	4,424	2.3	-7.1	25	.9
550	30	5,122	-2.0	-10.9	24	1.4
500	30	5,875	-6.1	-17.5	[illegible]	1.2
450	30	6,693	-10.6	-24.3	24	[illegible]
400	30	7,589	-16.4	-29.5	[illegible]	1.7
350	30	8,584	-23.0	[illegible]	[illegible]	2.4
300	30	9,692	-31.3	-44.8	27	[illegible]
250	30	10,956	-41.7	-54.0	30	[illegible]
200	30	12,430	-53.8		31	[illegible]
175	30	13,275	-60.5		31	[illegible]
150	30	14,218	-68.1		32	[illegible]
125	29	15,295	-75.4		[illegible]	[illegible]
100	29	16,575	-77.2		[illegible]	[illegible]
80	27	17,874	-71.1		[illegible]	[illegible]
70	27	18,672	-67.6		[illegible]	[illegible]
60	24	19,602	-65.2		[illegible]	[illegible]
50	24	20,721	-61.8		[illegible]	[illegible]
40	[illegible]	22,114	-58.1		[illegible]	[illegible]
30	[illegible]	23,944	-54.3		[illegible]	[illegible]
25	[illegible]	25,119	-51.7		[illegible]	[illegible]
20	[illegible]	26,578	-48.3		[illegible]	[illegible]
15	[illegible]	28,483	-45.6		[illegible]	[illegible]
10	[illegible]	31,214	-41.2		09	[illegible]
7	[illegible]	33,656	-39.1			
5	[illegible]	[illegible]	-36.3			

BUFFALO, N. Y.
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	218	13.0	[illegible]	22	[illegible]
1000						
950	30	595	14.3	[illegible]	[illegible]	[illegible]
900	30	1,050	11.7	5.5	[illegible]	[illegible]
850	30	1,527	9.5	.8	[illegible]	[illegible]
800	30	2,028	7.2	[illegible]	[illegible]	[illegible]
750	30	2,557	5.1	[illegible]	[illegible]	10.3
700	30	3,118	2.5	[illegible]	[illegible]	12.3
650	30	3,715	.1	-14.3	[illegible]	13.9
600	30	4,352	-3.1	-17.3	[illegible]	14.9
550	30	5,036	-7.2	-22.4	[illegible]	16.1
500	30	5,773	-11.8	-26.6	[illegible]	17.7
450	29	6,571	-17.0	-31.5	[illegible]	[illegible]
400	29	7,444	-23.3	-37.6	[illegible]	[illegible]
350	29	8,411	-30.5	-42.7	[illegible]	[illegible]
300	29	9,485	-38.8	-46.4	[illegible]	[illegible]
250	28	10,718	-47.9		[illegible]	[illegible]
200	28	12,160	-56.1		[illegible]	[illegible]
175	28	13,004	-58.7		[illegible]	[illegible]
150	28	13,968	-60.5		[illegible]	[illegible]
125	28	[illegible]	-62.7		[illegible]	[illegible]
100	28	16,474	-62.7		[illegible]	[illegible]
80	27	17,860	-61.7		[illegible]	[illegible]
70	[illegible]	18,693	-60.1		[illegible]	[illegible]
60	[illegible]	19,659	-58.6		[illegible]	[illegible]
50	[illegible]	20,810	-56.6		[illegible]	[illegible]
40	[illegible]	22,240	-54.2		[illegible]	[illegible]
30	[illegible]	24,105	-50.9		[illegible]	[illegible]
25	[illegible]	25,293	-49.1		[illegible]	[illegible]
20	[illegible]	[illegible]	-47.1		[illegible]	[illegible]
15	16	28,669	-45.4		[illegible]	[illegible]
10	5	31,361	-44.3			
7						
5						

CAPE HATTERAS, N. C.
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	[illegible]	[illegible]	[illegible]	[illegible]	1.9
1000	[illegible]	156	[illegible]	[illegible]	[illegible]	2.1
950	[illegible]	603	[illegible]	[illegible]	[illegible]	1.8
900	[illegible]	1,070	[illegible]	[illegible]	[illegible]	[illegible]
850	[illegible]	1,557	[illegible]	[illegible]	[illegible]	[illegible]
800	[illegible]	2,069	[illegible]	[illegible]	[illegible]	[illegible]
750	[illegible]	2,608	[illegible]	[illegible]	[illegible]	[illegible]
700	[illegible]	3,178	[illegible]	-3.8	27	3.0
650	[illegible]	3,784	[illegible]	[illegible]	[illegible]	[illegible]
600	[illegible]	4,430	[illegible]	[illegible]	[illegible]	4.0
550	[illegible]	5,123	[illegible]	[illegible]	[illegible]	4.5
500	[illegible]	5,870	[illegible]	[illegible]	[illegible]	5.6
450	[illegible]	6,680	[illegible]	[illegible]	[illegible]	6.5
400	[illegible]	7,565	[illegible]	[illegible]	[illegible]	7.6
350	[illegible]	8,545	[illegible]	[illegible]	[illegible]	7.4
300	[illegible]	9,634	[illegible]	[illegible]	[illegible]	9.2
250	[illegible]	10,877	[illegible]		[illegible]	10.3
200	[illegible]	12,332	-55.6		[illegible]	12.2
175	[illegible]	[illegible]	-60.3		[illegible]	13.2
150	[illegible]	14,124	-65.1		[illegible]	12.7
125	[illegible]	15,226	-68.4		[illegible]	8.7
100	[illegible]	16,564	-68.1		[illegible]	6.3
80	[illegible]	17,912	[illegible]		[illegible]	3.2
70	[illegible]	18,729	-62.8		[illegible]	1.5
60	[illegible]	19,689	-60.3		[illegible]	1.5
50	[illegible]	20,833	-57.6		[illegible]	3.4
40	[illegible]	22,251	-54.6		[illegible]	5.0
30	26	24,109	[illegible]		[illegible]	5.9
25	26	25,301	-49.2		[illegible]	[illegible]
20	25	26,773	-47.2		[illegible]	6.0
15	23	28,686	[illegible]		[illegible]	6.2
10	[illegible]	[illegible]	[illegible]			
7						
5						

RAWINSONDE DATA

Average monthly values

	* CARIBOU, MAINE 99[illegible] MB						CHARLESTON, S. C. 1016 MB						CHATHAM, MASS. 1017 MB						* COLD BAY, ALASKA 1004 MB						DAYTON, OHIO 984 MB					
Standard pressure surface mb	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	191	8.1	6.2	24	1.7	30	13	22.1	20.6	01	1.3	30	16	15.7	12.8	34	1.1	30	30	7.4	6.5	21	2.3	30	299	15.3	13.4	10	.9
1000							30	148	23.2	21.7	05	1.3	30	155	15.9	11.7	33	2.1	17	120	6.6	4.3	22	3.1						
950	30	552	9.2	5.[illegible]	27	5.3	30	596	21.3	17.2	08	1.7	30	590	13.7	7.6	31	3.9	30	479	4.6	3.3	24	3.0	30	601	18.4	11.7	21	2.0
900	30	999	7.2	1.8	28	6.7	30	1,064	18.6	14.2	08	1.7	30	1,044	11.6	3.2	29	5.0	30	918	1.9	.5	24	3.4	30	1,064	15.9	10.0	25	3.2
850	30	1,468	4.7	-1.7	28	7.2	30	1,553	15.6	10.3	07	1.7	30	1,520	9.3	-.5	29	6.6	30	1,377	-.6	-3.4	23	3.7	30	1,547	13.1	5.1	25	4.5
800	30	1,961	2.3	-5.1	28	9.7	30	2,066	13.1	6.3	06	1.3	30	2,022	7.2	-4.2	29	8.4	30	1,860	-2.5	-8.6	22	3.3	30	2,056	11.0	.9	26	6.2
750	30	2,481	.4	-8.6	28	10.6	30	2,606	10.3	1.3	04	.9	30	2,551	5.5	-7.4	28	10.3	30	2,371	-4.6	-14.2	23	3.7	30	2,592	8.3	-3.9	27	6.9
700	30	3,032	-2.1	-12.2	28	12.7	30	3,178	7.0	-3.0	15	.2	30	3,113	3.4	-11.5	28	12.4	30	2,911	-7.1	-16.6	26	4.5	30	3,159	5.3	-7.0	27	8.0
650	30	3,619	-4.6	-15.8	28	14.4	30	3,784	4.4	-9.9	27	1.0	30	3,712	.9	-14.9	28	13.6	30	3,486	-10.3	-20.1	26	5.2	30	3,762	2.1	-9.3	27	8.7
600	30	4,245	-8.1	-19.9	28	16.2	30	4,432	1.1	-14.3	29	1.3	30	4,351	-2.3	-19.5	28	14.5	30	4,099	-13.7	-22.6	26	6.0	30	4,404	-1.5	-13.2	27	9.6
550	30	4,916	-12.1	-24.2	28	17.8	30	5,127	-2.5	-19.7	28	2.0	30	5,037	-6.6	-22.6	28	15.9	30	4,755	-17.9	-27.5	25	6.3	30	5,092	-5.4	-17.0	27	10.5
500	30	5,638	-16.7	-28.1	28	20.1	30	5,877	-7.2	-24.1	29	3.3	30	5,774	-11.4	-27.5	28	16.7	30	5,461	-22.8	-32.0	25	5.6	30	5,834	-10.0	-22.8	27	11.4
450	30	6,423	-21.4	-34.0	28	22.2	30	6,690	-12.3	-29.0	29	4.4	30	6,574	-16.8	-31.8	28	17.9	30	6,225	-28.2	-37.9	27	6.7	30	6,639	-15.0	-28.8	27	12.6
400	30	7,281	-27.5	-40.2	28	23.7	30	7,579	-18.7	-33.9	30	5.1	30	7,448	-23.1	-37.4	28	19.0	30	7,059	-34.5	-44.7	27	7.5	30	7,519	-21.3	-34.0	27	13.5
350	30	8,232	-34.0	-45.4	28	26.7	30	8,564	-25.6	-40.2	30	6.5	30	8,414	-30.6	-43.8	28	19.7	29	7,976	-41.4	-40.2	26	7.9	30	8,493	-28.4	-40.6	28	13.5
300	29	9,295	-41.3	-48.4	28	28.7	30	9,659	-34.3	-47.7	30	7.9	30	9,488	-39.0	-49.8	27	22.4	29	9,004	-48.3		27	10.8	30	9,576	-36.9	-48.4	28	15.9
250	29	10,5[illegible]4	-48.1		28	29.9	30	10,907	-44.2		31	10.5	30	10,714	-48.1		27	24.4	29	10,191	-52.2		25	14.7	30	10,813	-46.4		28	17.6
200	28	11,972	-53.1		28	25.8	30	12,367	-55.4		31	12.1	30	12,156	-56.2		28	25.3	29	11,638	-50.7		26	14.5	30	12,263	-55.9		28	21.4
175	27	12,840	-54.9		28	25.5	30	13,208	-60.8		31	12.7	30	12,999	-59.3		28	23.0	29	12,510	-50.3		26	13.7	30	13,105	-59.7		29	21.9
150	27	13,822	-56.4		28	23.5	30	14,155	-65.9		31	11.5	30	13,957	-62.4		28	20.5	28	13,515	-50.8		25	12.6	30	14,060	-63.3		28	19.1
125	27	14,980	-56.7		28	18.7	30	15,249	-70.4		32	8.6	30	15,080	-63.3		28	18.5	25	14,684	-50.5		25	10.8	30	15,174	-66.1		28	16.2
100	27	16,393	-56.8		28	13.3	30	16,569	-71.3		31	4.0	30	16,453	-63.0		28	13.2	25	16,138	-50.8		26	8.9	30	16,525	-66.3		28	11.7
80	26	17,814	-56.2		28	8.7	30	17,899	-67.7		35	1.7	30	17,829	-61.8		28	9.2	25	17,593	-50.8		25	6.6	30	17,884	-64.0		28	6.2
70	26	18,663	-56.0		28	7.1	30	18,709	-64.8		03	1.7	29	18,659	-60.6		28	7.1	25	18,462	-51.0		24	5.6	30	18,706	-62.1		28	4.9
60	26	19,646	-55.2		29	5.5	29	19,653	-61.6		06	3.4	29	19,624	-58.7		28	4.9	23	19,459	-51.0		25	5.2	29	19,660	-60.1		29	3.0
50	26	20,814	-54.0		28	4.1	29	20,790	-59.0		08	5.3	28	20,780	-56.5		27	3.7	21	20,658	-51.0		24	4.3	28	20,807	-58.0		29	1.6
40	25	22,254	-52.1		27	2.3	28	22,204	-55.4		09	6.9	27	22,206	-54.8		27	1.5	18	22,103	-51.4		22	2.1	28	22,225	-54.8		30	1.2
30	24	24,129	-49.4		24	1.0	27	24,052	-52.0		09	7.3	26	24,058	-51.6		08	.5	17	23,977	-51.2		22	1.8	28	24,081	-51.5		36	.6
25	21	25,332	-48.1		16	.8	27	25,239	-49.8		09	7.4	24	25,245	-50.2		08	1.6	17	25,163	-51.0		21	1.1	26	25,270	-49.6		03	.8
20	18	26,812	-46.7		12	.9	25	26,708	-48.1		08	7.9	23	26,709	-48.1		07	2.6	14	26,627	-50.6		33	.8	24	26,736	-47.7		06	1.9
15	15	28,735	-44.1		13	1.0	24	28,616	-45.2		09	7.9	21	28,620	-45.7		09	2.9	10	28,518	-49.4		06	1.5	22	28,645	-46.0		09	2.8
10	13	31,470	-40.7										17	31,336	-42.0		09	3.3	5	31,175	-45.8				21	31,369	-42.2		11	2.4
7													10	33,727	-39.6															

	DEL RIO, TEXAS 976 MB						DENVER, COLO. 839 MB						DODGE CITY, KANS. 925 MB						EL PASO, TEXAS 882 MB						ELY, NEV. 811 MB					
SURFACE	30	314	22.3	19.8	11	2.2	30	1,611	10.1	4.4	24	.6	30	791	14.7	11.4	13	.3	30	1,193	17.8	7.7	27	.3	30	1,908	3.9	-3.8	19	3.2
1000																														
950	30	552	21.8	19.1	15	4.7																								
900	30	1,021	19.4	16.5	16	6.7							30	1,020	14.8	12.1	18	.7												
850	30	1,512	17.2	13.8	17	5.4							30	1,504	14.6	7.4	24	2.3	30	1,507	19.9	5.9	18	1.1						
800	30	2,029	14.7	10.1	17	3.5	30	2,011	11.8	1.8	31	1.4	30	2,016	12.9	4.8	25	3.2	30	2,028	17.5	2.8	23	1.4	30	2,018	9.2	-1.9	19	2.4
750	30	2,574	12.9	2.6	18	.3	30	2,549	9.4	-1.2	31	2.5	30	2,557	10.2	.2	25	5.1	30	2,577	14.0	-.5	26	2.6	30	2,556	9.6	-4.2	25	.4
700	30	3,150	9.1	-1.3	33	2.4	30	3,118	6.3	-6.0	31	4.3	30	3,127	6.5	-4.8	26	5.6	30	3,153	9.5	-3.1	27	3.6	30	3,125	6.0	-7.5	27	2.8
650	30	3,761	5.5	-6.1	34	2.5	30	3,723	2.5	-9.5	30	5.0	28	3,736	3.2	-9.3	26	6.1	30	3,763	4.6	-4.9	27	3.6	30	3,728	2.3	-10.8	27	4.9
600	30	4,411	1.6	-10.4	31	2.3	30	4,364	-2.0	-12.4	29	5.6	28	4,379	-1.0	-12.3	25	6.5	30	4,410	-.1	-9.2	28	4.1	30	4,369	-2.1	-14.0	27	6.2
550	30	5,108	-2.2	-15.9	28	2.2	30	5,050	-6.8	-18.3	28	6.3	28	5,068	-5.5	-17.4	25	7.0	30	5,102	-4.0	-17.8	29	4.8	30	5,055	-6.3	-20.7	27	7.0
500	30	5,859	-6.4	-21.2	28	2.9	30	5,788	-11.5	-24.6	27	7.0	28	5,809	-9.9	-24.4	24	8.1	30	5,848	-8.1	-24.0	29	6.8	30	5,794	-11.0	-26.2	28	8.9
450	30	6,675	-11.6	-25.4	28	3.5	30	6,587	-17.0	-30.1	27	8.0	28	6,614	-15.4	-30.6	24	9.6	30	6,658	-13.5	-30.0	29	8.2	30	6,596	-16.3	-31.5	29	11.1
400	30	7,567	-17.6	-32.2	28	5.1	30	7,460	-23.1	-35.9	26	9.6	28	7,492	-21.9	-37.4	25	10.7	30	7,544	-19.8	-35.7	28	9.7	30	7,471	-22.9	-37.6	29	12.4
350	30	8,557	-24.0	-37.8	27	7.5	30	8,427	-30.5	-42.7	26	10.9	28	8,464	-29.0	-43.8	25	12.3	29	8,524	-26.5	-41.5	27	13.4	30	8,438	-30.3	-44.3	29	14.0
300	30	9,662	-31.8	-45.2	26	10.5	30	9,500	-39.1	-50.7	26	12.0	28	9,545	-36.9	-49.5	25	14.6	29	9,617	-34.3	-48.8	27	17.8	30	9,512	-38.9	-51.0	29	15.8
250	30	10,926	-41.5	-53.2	26	11.9	30	10,727	-47.6		27	15.2	27	10,785	-45.2		24	16.6	29	10,869	-43.3		26	21.7	30	10,740	-47.3		29	17.4
200	30	12,402	-53.2		26	13.8	30	12,179	-53.9		26	19.0	27	12,248	-53.2		25	21.5	29	12,337	-53.9		26	24.0	28	12,201	-53.7		28	18.9
175	30	13,250	-59.6		26	13.9	30	13,031	-56.7		26	19.2	27	13,100	-57.4		25	22.8	29	13,184	-59.5		26	23.3	28	13,052	-57.4		28	18.6
150	30	14,198	-66.4		26	12.7	30	14,002	-59.7		26	16.3	26	14,066	-62.0		25	18.6	29	14,134	-65.6		26	19.2	28	14,017	-60.9		28	15.2
125	30	15,285	-72.7		26	8.7	30	15,134	-62.7		26	13.2	26	15,182	-66.2		25	15.6	29	15,229	-70.9		26	14.7	28	15,143	-63.5		28	12.2
100	29	16,582	-74.9		26	3.1	29	16,504	-64.6		27	7.4	26	16,531	-67.1		26	9.1	28	16,540	-71.9		27	7.6	28	16,507	-64.8		28	6.8
80	28	17,897	-70.5		04	2.4	28	17,866	-63.7		29	3.0	25	17,885	-65.3		27	2.9	27	17,866	-69.0		30	.7	28	17,872	-63.3		29	2.8
70	28	18,698	-66.5		08	5.1	26	18,683	-62.4		30	1.8	25	18,702	-62.9		29	1.3	26	18,673	-65.8		09	2.3	28	18,696	-62.4		33	.7
60	28	19,638	-63.7		10	6.4	25	19,635	-60.7		32	1.2	25	19,657	-60.8		02	1.0	26	19,616	-62.9		09	3.7	28	19,651	-60.7		04	1.3
50	28	20,766	-60.4		09	7.6	25	20,776	-58.8		33	.9	25	20,799	-58.1		05	1.3	23	20,745	-60.1		08	5.6	28	20,790	-59.3		05	1.8
40	28	22,165	-57.8		08	9.9	25	22,184	-56.4		32	1.2	24	22,215	-55.8		08	1.2	23	22,144	-58.0		08	8.2	27	22,202	-56.3		04	2.1
30	28	23,997	-53.7		09	12.2	25	24,029	-52.6		01	.5	22	24,062	-52.6		07	2.3	22	23,973	-54.1		09	11.0	26	24,048	-52.5		05	.8
25	27	25,172	-51.8		09	13.1	25	25,213	-50.8		09	.4	21	25,238	-50.5		07	2.6	22	25,149	-52.0		09	11.0	25	25,225	-50.8		05	1.5
20	27	26,630	-48.3		09	13.6	24	26,670	-48.8		07	1.1	20	26,698	-48.2		08	2.9	20	26,601	-49.3		09	10.8	25	26,685	-48.7		06	1.9
15	25	28,535	-45.5		09	14.3	22	28,578	-46.8		08	1.8	19	28,600	-45.9		09	2.8	19	28,506	-46.4		08	9.3	23	28,588	-46.6		08	2.1
10	18	31,268	-42.0		09	10.6	9	31,367	-42.1				11	31,366	-42.6				8	31,254	-43.5				14	31,313	-44.4		06	3.5
7	5	33,688	-38.9																						8	33,684	-41.7			

	EMPALME, MEXICO 1009 MB						* FAIRBANKS, ALASKA 993 MB						FLINT, MICH. 990 MB						FORT WORTH, TEXAS 993 MB						GLASGOW, MONT. 935 MB					
SURFACE	28	12	26.6	21.2	13	.2	30	135	4.8	.7	02	.6	30	236	12.8	10.4	19	.6	30	180	21.1	19.1	12	.7	30	696	8.8	5.5	06	1.3
1000	28	89	27.7	21.2	15	.6	7	156	5.5	3.2																				
950	28	544	26.3	16.9	17	1.5	30	498	6.7	-.7	13	1.4	30	588	14.8	8.0	25	2.3	30	561	20.5	17.0	19	3.1						
900	28	1,020	24.6	11.3	18	.6	30	941	4.5	-3.1	17	2.3	30	1,044	12.6	6.0	27	4.3	30	1,028	18.9	14.7	19	4.7	30	1,016	11.3	3.8	36	.9
850	28	1,519	21.9	7.4	10	.3	30	1,404	1.2	-5.0	20	2.3	30	1,522	10.0	2.0	27	6.1	30	1,518	16.6	9.9	19	4.2	30	1,493	10.0	.4	30	2.5
800	28	2,043	18.2	5.4	13	.7	30	1,889	-2.1	-7.1	20	2.7	30	2,025	7.5	-1.4	27	7.7	30	2,033	14.0	5.3	21	3.0	30	1,995	7.3	-1.8	29	3.0
750	28	2,592	14.4	3.7	18	1.4	30	2,399	-5.3	-10.4	20	3.4	30	2,555	5.7	-7.2	27	9.3	30	2,576	11.0	2.1	22	2.1	30	2,524	4.5	-4.1	28	4.0
700	29	3,171	10.7	-.4	18	1.8	30	2,937	-8.4	-14.2	21	4.4	30	3,117	3.3	-9.4	27	11.1	30	3,148	7.6	-2.1	24	2.6	30	3,082	1.0	-6.7	28	5.6
650	29	3,784	6.4	-4.3	17	2.4	30	3,509	-11.8	-17.6	21	4.9	30	3,715	.4	-13.1	27	12.6	30	3,756	4.5	-6.2	24	2.8	30	3,675	-2.0	-11.3	28	6.3
600	28	4,436	2.1	-10.4	17	1.7	30	4,117	-15.7	-22.7	21	5.4	30	4,353	-3.2	-16.5	27	13.8	30	4,404	.7	-11.5	24	3.7	30	4,308	-5.5	-16.2	28	7.7
550	28	5,133	-2.0	-16.5	05	.3	30	4,768	-20.0	-28.0	21	5.7	30	5,036	-7.3	-19.8	28	15.2	30	5,098	-2.9	-19.3	24	3.9	30	4,986	-9.2	-20.9	28	8.1
500	29	5,885	-6.0	-23.9	36	2.5	30	5,469	-24.9	-33.5	21	6.3	30	5,773	-11.6	-24.7	28	15.7	30	5,848	-6.8	-23.3	23	5.4	30	5,717	-14.0	-25.7	28	8.1
450	28	6,703	-11.6	-29.8	34	3.5	30	6,227	-30.2	-37.9	21	7.0	30	6,573	-16.8	-29.6	28	16.9	30	6,662	-12.0	-28.9	23	6.5	30	6,509	-19.4	-29.8	28	8.7
400	28	7,596	-17.3	-34.8	31	3.8	30	7,054	-36.4	-43.6	22	6.6	30	7,447	-22.9	-33.9	28	18.3	30	7,553	-18.0	-33.2	24	7.7	30	7,373	-26.0	-36.8	29	9.5
350	28	8,587	-24.3	-40.8	27	5.8	30	7,970	-43.3	-47.0	23	6.6	30	8,414	-29.9	-40.4	28	20.5	30	8,540	-24.8	-38.5	24	10.7	30	8,329	-33.3	-43.5	28	11.2
300	29	9,689	-32.7	-47.6	26	9.2	30	8,988	-50.9		22	8.2	29	9,494	-38.4	-46.9	28	22.1	30	9,641	-32.9	-45.6	25	14.5	29	9,391	-42.0	-50.0	28	12.4
250	29	10,948	-41.9		25	12.4	30	10,160	-55.2		22	9.7	29	10,723	-47.8		28	24.5	30	10,898	-42.7		25	17.0	29	10,601	-50.7		27	13.6
200	28	12,423	-53.2		24	13.3	30	11,593	-52.6		23	10.2	29	12,167	-56.2		28	27.3	30	12,369	-53.4		26	20.0	29	12,038	-55.2		28	15.1
175	28	13,271	-59.5		24	13.6	29	12,452	-51.1		23	9.6	29	13,009	-59.1		28	26.9	30	13,217	-59.4		26	19.7	29	12,889	-55.7		28	15.2
150	28	14,219	-66.5		24	12.7	29	13,456	-50.3		23	9.5	29	13,971	-61.3		28	23.5	30	14,168	-65.7		26	17.5	29	13,867	-57.3		28	13.4
125	29	15,306	-72.3		28	8.4	29	14,646	-50.4		23	8.8	29	15,098	-62.9		28	18.1	30	15,261	-70.9		26	13.8	29	15,017	-58.5		28	11.7
100	29	16,608	-74.3		28	2.1	29	16,104	-49.9		23	8.0	29	16,469	-63.4		28	13.2	30	16,577	-71.8		26	6.4	29	16,419	-58.9		28	9.7
80	29	17,921	-70.1		05	3.1	28	17,560	-49.9		23	7.4	29	17,845	-62.0		28	7.7	29	17,902	-68.9		28	1.8	27	17,827	-58.7		29	6.7
70	28	18,723	-66.8		08	6.0	28	18,433	-50.0		23	6.9	29	18,673	-60.7		29	5.1	29	18,708	-65.2		08	1.0	27	18,666	-58.7		30	5.1
60	28	19,661	-64.0		10	8.2	27	19,437	-50.3		23	6.9	28	19,631	-59.2		29	4.1	28	19,655	-61.8		09	2.1	27	19,636	-58.5		30	3.9
50	29	20,786	-61.2		09	9.2	25	20,621	-50.6		24	6.2	27	20,784	-57.0		29	2.9	28	20,792	-59.2		09	3.7	26	20,794	-57.7		33	2.4
40	28	22,184	-58.3		08	11.9	25	22,074	-51.0		24	4.9	27	22,205	-54.8		29	1.7	27	22,200	-57.0		08	5.7	26	22,207	-56.1		34	2.0
30	25	24,009	-54.2		09	14.7	25	23,944	-51.5		24	4.5	27	24,057	-51.6		27	1.4	27	24,038	-52.9		09	8.7	26	24,046	-54.0		33	2.2
25	24	25,184	-51.5		09	14.8	25	25,128	-51.6		25	3.0	27	25,245	-49.8		30	2.0	26	25,225	-50.7		09	8.0	26	25,220	-52.5		32	1.9
20	23	26,643	-48.9		09	13.9	24	26,586	-51.4		25	2.0	26	26,712	-47.9		30	1.4	24	26,683	-48.5		09	7.9	26	26,670	-50.4		30	2.6
15	22	28,544	-46.3		09	14.7	22	28,489	-49.5		28	1.1	23	28,603	-46.1		06	.5	20	28,587	-46.0		08	8.0	25	28,563	-47.5		29	4.7
10	17	31,251	-43.0		09	14.4	18	31,160	-46.9		33	1.8	8	31,274	-43.9				11	31,350	-42.4				20	31,264	-43.2		27	7.1
7							5	33,650	-44.4																					

RAWINSONDE DATA

Average monthly values

GRAND JUNCTION, COLO.
853 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction *	Resultant Wind Speed M.p.s.
SURFACE	30	1,472	13.1	-.3	12	2.5
1000						
950						
900						
850	24	1,516	14.1	.0	12	2.7
800	30	2,013	14.2	-1.3	17	2.7
750	30	2,554	11.0	-4.0	24	2.3
700	30	3,126	6.8	-6.2	26	3.4
650	30	3,730	2.5	-9.7	26	4.8
600	30	4,372	-2.1	-12.9	26	5.4
550	30	5,057	-6.9	-17.8	27	6.3
500	30	5,795	-11.4	-24.2	27	8.0
450	30	6,595	-16.6	-30.1	27	9.6
400	30	7,470	-22.8	-36.0	27	11.5
350	30	8,437	-30.2	-41.9	27	12.6
300	30	9,512	-38.7	-48.7	27	14.0
250	30	10,741	-47.3		27	16.7
200	30	12,195	-53.5		27	19.7
175	30	13,049	-56.2		27	19.3
150	30	14,022	-59.5		27	17.0
125	30	15,153	-62.9		27	13.9
100	30	16,522	-64.5		27	8.0
80	30	17,887	-63.8		28	3.1
70	30	18,710	-61.9		33	1.0
60	29	19,668	-61.0		02	.9
50	29	20,807	-58.8		03	1.6
40	29	22,216	-56.3		05	.9
30	27	24,061	-52.5		02	1.3
25	26	25,243	-50.9		08	1.5
20	25	26,701	-49.1		08	1.6
15	24	28,596	-47.2		08	1.9
10	11	31,282	-43.9			
7						

• GREAT FALLS, MONT.
890 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,118	10.2	4.3	22	3.0
1000						
950						
900						
850	30	1,498	11.2	.1	25	4.5
800	30	2,002	7.8	-1.8	27	4.1
750	30	2,531	4.3	-4.[illegible]	27	4.[illegible]
700	30	3,089	1.2	-7.6	28	5.2
650	30	3,682	-1.9	-10.7	28	6.7
600	30	4,315	-5.6	-14.4	28	6.7
550	30	4,993	-9.3	-18.8	28	7.8
500	30	5,723	-14.0	-25.1	28	9.1
450	29	6,515	-19.5	-30.5	28	10.5
400	29	7,378	-26.0	-36.2	28	10.7
350	29	8,333	-33.6	-42.[illegible]	27	10.3
300	29	9,392	-42.2	-49.[illegible]	27	11.5
250	28	10,602	-50.9		27	14.1
200	28	12,037	-55.4		27	15.4
175	28	12,886	-56.7		28	13.7
150	28	13,861	-57.7		28	12.8
125	28	15,009	-59.0		28	12.0
100	26	16,404	-59.9		28	9.3
80	25	17,798	-59.6		28	6.9
70	24	18,633	-58.7		27	5.1
60	23	19,597	-58.3		29	3.3
50	23	20,744	-58.1		30	2.6
40	23	22,155	-56.8		32	2.0
30	23	23,987	-54.7		31	2.3
25	21	25,156	-53.6		31	2.4
20	19	26,597	-51.2		30	2.9
15	19	28,479	-48.5		28	4.8
10	17	31,180	-44.1		27	6.6
7	15	33,601	-40.2		26	8.2

GREEN BAY, WIS.
993 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	21[illegible]	10.9	9.5	32	.7
1000						
950	30	577	12.9	8.[illegible]	27	1.1
900	30	1,030	10.7	4.8	26	2.9
850	30	1,505	8.7	-.6	27	5.6
800	30	2,006	7.0	-3.3	27	7.7
750	30	2,535	5.0	-6.5	27	9.1
700	30	3,096	2.4	-9.4	27	11.2
650	30	3,692	-.4	-11.7	27	11.9
600	30	4,328	-3.7	-15.7	27	13.3
550	30	5,011	-7.7	-21.7	27	14.1
500	30	5,746	-12.2	-26.0	27	15.9
450	29	6,540	-17.1	-29.7	28	17.2
400	29	7,412	-23.5	-34.2	27	19.3
350	29	8,377	-30.7	-41.5	27	21.4
300	29	9,450	-39.1	-45.8	27	24.3
250	29	10,675	-48.6		27	27.3
200	29	12,113	-56.7		28	30.8
175	28	12,955	-58.8		28	27.4
150	28	13,919	-60.5		28	24.2
125	28	15,052	-61.7		28	18.3
100	28	16,430	-62.4		28	12.4
80	27	17,809	-60.9		29	8.9
70	26	18,642	-59.8		29	4.4
60	25	19,610	-58.7		29	3.5
50	25	20,759	-57.2		30	2.9
40	25	22,177	-55.3		30	2.2
30	24	24,029	-51.6		28	2.0
25	23	25,219	-50.2		29	2.0
20	21	26,681	-47.9		30	1.7
15	20	28,594	-45.9		27	2.5
10	17	31,313	-43.2		32	1.1
7						

GREENSBORO, N. C.
987 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	275	17.0	15.5	04	.5
1000						
950	30	5[illegible]6	19.6	14.8	3[illegible]	1.3
900	30	1,072	17.6	11.8	32	.8
850	30	1,559	14.6	9.2	30	1.4
800	30	2,070	12.0	3.5	29	2.3
750	30	2,609	9.6	-1.6	29	2.7
700	30	3,179	6.8	-6.5	29	2.9
650	30	3,784	3.6	-9.8	29	3.1
600	30	4,430	.1	-13.2	28	3.7
550	30	5,123	-3.7	-17.8	29	5.1
500	30	5,869	-8.3	-23.[illegible]	28	5.8
450	30	6,679	-13.6	-28.9	28	7.2
400	30	7,564	-19.8	-35.2	29	8.5
350	30	8,544	-27.0	-4[illegible]	28	10.0
300	30	9,633	-35.5	-48.6	29	11.7
250	30	10,876	-45.4		30	13.8
200	30	12,332	-55.2		30	16.5
175	30	13,175	-60.0		30	16.4
150	30	14,126	-64.7		30	14.7
125	30	15,229	-68.2		30	11.8
100	30	16,563	-69.4		29	7.6
80	30	17,904	-66.2		31	4.0
70	30	18,719	-63.3		31	2.6
60	30	19,673	-60.9		01	1.2
50	30	20,814	-58.2		05	1.8
40	29	22,228	-55.3		08	2.8
30	27	24,083	-51.5		09	4.2
25	27	25,270	-50.0		09	4.2
20	26	26,738	-48.1		09	3.5
15	23	28,649	-46.0		10	5.5
10	13	31,364	-43.0		09	5.3
7						

GUADALUPE IS., MEXICO
1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	23	17.6	13.6	34	[illegible]
1000	30	122	17.1	12.2	33	[illegible]
950	30	558	14.9	8.8	31	[illegible]
900	30	1,019	18.5	-.6	3[illegible]	[illegible]
850	30	1,510	19.1	-4.[illegible]	29	[illegible]
800	30	2,028	[illegible]	-5.[illegible]	28	[illegible]
750	30	2,575	14.5	-8.0	26	[illegible]
700	30	3,154	11.5	-10.2	28	[illegible]
650	30	3,769	8.0	-13.3	24	1.5
600	30	4,424	3.7	-16.7	24	[illegible]
550	30	5,124	-.7	-2[illegible]	24	1.8
500	30	5,878	-5.8	-25.7	24	1.6
450	30	6,695	-11.8	-30.6	24	2.3
400	30	7,584	-18.9	-36.5	28	2.6
350	30	8,567	-26.4	-42.8	29	3.5
300	30	9,659	-34.6	-49.9	27	4.8
250	30	10,908	-43.9		28	6.0
200	29	12,370	-54.3		28	8.0
175	29	13,215	-59.8		28	7.[illegible]
150	29	14,165	-65.6		24	7.1
125	29	15,259	-70.9		25	5.6
100	28	16,573	-73.1		25	3.5
80	27	17,890	-69.5		06	2.2
70	24	18,694	-66.1		07	4.1
60	25	19,636	-63.6		08	5.4
50	25	20,764	-60.6		08	6.3
40	24	22,160	-57.8		07	7.7
30	24	23,992	-53.7		07	10.3
25	22	25,170	-52.0		07	9.7
20	16	26,632	-48.8		08	11.2
15	9	28,520	-46.6			
10						
7						

• GUAM, MARIANA IS.
1000 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	111	25.3	23.5	09	2.8
1000	12	115	25.2	23.6	09	2.9
950	30	561	23.8	21.3	09	7.9
900	30	1,034	21.1	17.6	10	7.8
850	30	1,527	18.3	13.7	10	7.4
800	30	2,046	15.6	11.0	09	7.0
750	30	2,592	12.8	6.8	09	7.6
700	30	3,170	9.8	2.3	10	7.6
650	30	3,783	6.5	-2.6	09	7.7
600	30	4,435	2.4	-6.0	09	6.9
550	30	5,134	-1.9	-9.8	09	6.5
500	30	5,886	-6.1	-15.2	09	5.7
450	30	6,705	-10.8	-18.7	08	4.6
400	30	7,600	-16.5	-24.5	09	3.2
350	30	8,594	-23.4	-31.7	08	2.7
300	30	9,700	-32.1	-41.0	06	1.6
250	30	10,960	-42.3		34	1.3
200	30	12,428	-55.0		28	3.8
175	30	13,268	-61.9		29	5.3
150	30	14,205	-69.1		29	6.2
125	30	15,277	-75.4		29	2.8
100	30	16,565	-76.0		08	6.0
80	29	17,861	-73.1		09	10.4
70	28	18,650	-69.9		09	10.8
60	27	19,575	-66.9		09	11.0
50	26	20,682	-63.9		09	10.9
40	24	22,057	-61.1		09	12.9
30	24	23,864	-56.8		08	15.1
25	23	25,025	-54.8		09	17.4
20	22	26,465	-51.2		09	21.3
15	18	28,348	-47.6		09	26.2
10	7	31,061	-42.0			
7						

HILO, HAWAII
1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	21.8	20.1	24	1.6
1000	30	148	22.4	18.9	28	.7
950	30	593	19.1	17.0	05	2.1
900	30	1,057	15.9	14.1	07	3.4
850	30	1,541	12.9	10.9	07	3.6
800	30	2,049	10.8	5.9	07	3.3
750	30	2,588	10.0	-4.1	08	3.5
700	30	3,160	8.8	-10.2	08	3.5
650	30	3,771	6.4	-13.2	09	3.0
600	30	4,422	2.7	-17.2	09	2.7
550	30	5,121	-1.4	-21.2	09	2.8
500	30	5,873	-6.3	-25.9	09	2.8
450	29	6,687	-11.6	-29.6	09	2.4
400	29	7,578	-18.1	-35.5	10	2.0
350	29	8,564	-25.8	-41.8	14	2.4
300	29	9,658	-34.8	-49.8	17	2.6
250	29	10,903	-45.0		22	3.5
200	29	12,357	-56.4		23	5.0
175	29	13,194	-61.8		22	5.3
150	28	14,134	-67.1		22	5.2
125	28	15,221	-71.9		20	2.7
100	27	16,527	-74.3		10	3.1
80	27	17,833	-71.7		09	7.8
70	27	18,626	-69.2		09	9.5
60	27	19,553	-66.5		10	11.3
50	27	20,667	-62.9		09	11.8
40	27	22,050	-60.2		09	14.6
30	27	23,866	-55.4		09	18.4
25	27	25,034	-53.3		09	20.3
20	26	26,484	-50.4		09	21.8
15	23	28,375	-47.4		09	23.4
10	13	31,086	-42.0		09	25.2
7						

HUNTINGTON W. VA.
989 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	16.4	15.2	08	.2
1000						
950	30	594	19.4	12.6	22	1.8
900	30	1,059	17.0	10.6	25	3.2
850	30	1,545	14.2	7.5	27	4.1
800	30	2,055	12.3	.8	28	4.7
750	30	2,594	9.5	-2.4	27	5.7
700	30	3,163	6.5	-7.2	27	6.0
650	30	3,768	2.8	-8.9	27	6.7
600	30	4,411	-.8	-12.6	27	6.7
550	30	5,101	-4.9	-16.9	27	7.6
500	30	5,845	-9.0	-24.2	27	8.9
450	30	6,653	-14.2	-29.2	27	10.5
400	30	7,536	-20.5	-33.4	28	11.5
350	30	8,513	-27.7	-40.1	27	12.9
300	29	9,596	-36.2	-48.6	28	14.5
250	29	10,836	-45.8		28	16.9
200	29	12,290	-55.3		28	20.3
175	28	13,131	-59.2		28	20.9
150	28	14,087	-63.3		29	19.2
125	28	15,198	-66.5		28	15.7
100	28	16,547	-66.7		28	10.8
80	27	17,903	-64.9		28	5.9
70	27	18,723	-62.1		28	3.8
60	26	19,683	-60.2		28	2.5
50	26	20,828	-57.4		32	1.4
40	25	22,244	-55.0		01	.9
30	23	24,104	-51.5		09	1.9
25	23	25,293	-49.5		07	2.1
20	21	26,760	-48.1		07	2.6
15	16	28,673	-45.3		10	2.7
10	5	31,334	-44.0			
7						

• INTERNATIONAL FALLS, MINN.
973 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	359	7.7	5.3	23	1.2
1000						
950	30	560	10.4	6.1	24	2.5
900	30	1,009	8.4	2.3	26	4.0
850	30	1,480	6.2	-2.1	28	5.3
800	30	1,976	4.3	-6.0	29	6.8
750	30	2,499	2.0	-8.9	29	7.5
700	30	3,053	-.8	-13.3	29	9.1
650	30	3,642	-3.2	-15.6	29	10.2
600	30	4,272	-6.5	-19.0	28	11.2
550	30	4,948	-10.0	-23.2	28	13.2
500	30	5,677	-14.3	-27.5	28	14.9
450	30	6,468	-19.8	-33.3	28	16.1
400	30	7,331	-26.2	-39.3	28	18.1
350	30	8,285	-33.6	-44.5	28	19.2
300	30	9,346	-41.4	-50.6	27	21.4
250	29	10,565	-49.1		27	23.8
200	29	12,008	-54.8		27	25.5
175	29	12,860	-55.8		28	22.3
150	29	13,838	-57.2		28	18.8
125	28	14,996	-58.5		28	14.2
100	27	16,389	-59.1		29	12.2
80	27	17,790	-58.5		29	8.2
70	27	18,631	-57.9		30	6.4
60	27	19,605	-57.2		30	5.0
50	27	20,761	-56.0		32	2.5
40	26	22,183	-55.0		32	1.8
30	25	24,029	-52.2		30	2.1
25	24	25,207	-50.4		29	2.7
20	24	26,672	-47.8		26	5.0
15	21	28,579	-44.3		27	5.6
10	16	31,320	-40.0		27	5.1
7	7	33,771	-35.3			

JACKSON, MISS.
1004 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	100	21.2	19.6	11	1.2
1000	26	140	21.4	19.6	13	1.2
950	30	579	21.2	17.2	14	4.1
900	30	1,047	19.1	15.1	14	4.1
850	30	1,537	16.3	11.4	16	3.8
800	30	2,052	13.9	7.3	17	3.1
750	30	2,595	11.3	3.3	18	2.5
700	30	3,168	8.3	-.5	18	2.3
650	30	3,778	4.9	-4.1	20	2.1
600	30	4,427	1.4	-8.5	22	2.8
550	30	5,124	-2.2	-14.2	22	3.4
500	30	5,875	-6.7	-19.5	24	3.7
450	30	6,690	-11.7	-23.3	24	5.2
400	30	7,583	-17.7	-29.2	25	6.0
350	30	8,571	-24.6	-35.6	26	7.4
300	30	9,672	-33.0	-45.0	26	8.9
250	29	10,930	-42.9		27	12.2
200	29	12,398	-54.2		27	14.3
175	29	13,243	-60.3		28	14.3
150	29	14,189	-66.6		28	13.3
125	29	15,278	-71.7		28	9.4
100	29	16,586	-73.3		29	4.4
80	29	17,904	-69.4		36	1.6
70	28	18,708	-65.2		08	2.0
60	28	19,654	-62.2		07	3.0
50	27	20,791	-59.4		09	4.7
40	27	22,197	-57.2		08	6.8
30	26	24,033	-53.6		09	9.3
25	26	25,212	-51.4		09	10.3
20	23	26,681	-48.3		09	10.9
15	23	28,584	-46.5		09	10.4
10	18	31,299	-43.7		08	10.[illegible]
7	8	33,682	-39.0			

JOHN F. KENNEDY INT. AP NY
1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	17.9	12.9	36	1.0
1000	30	157	17.3	12.4	34	1.1
950	30	594	15.6	9.1	32	2.3
900	30	1,052	13.4	5.6	30	3.8
850	30	1,532	11.0	3.2	30	6.2
800	30	2,036	9.1	-1.7	30	7.9
750	30	2,570	7.3	-6.5	29	9.3
700	30	3,136	5.2	-10.6	29	11.4
650	30	3,737	1.9	-13.1	29	12.7
600	30	4,379	-1.6	-16.5	29	13.6
550	30	5,066	-5.5	-21.0	29	13.8
500	30	5,808	-10.1	-25.0	29	14.5
450	30	6,612	-15.5	-29.4	29	15.1
400	30	7,490	-21.9	-34.9	29	15.7
350	30	8,462	-28.9	-41.2	29	16.5
300	30	9,543	-37.4	-48.1	29	19.3
250	30	10,775	-47.3		29	21.2
200	30	12,221	-56.3		29	23.0
175	29	13,065	-58.7		29	22.7
150	29	14,027	-61.6		29	17.4
125	28	15,154	-63.9		30	16.0
100	28	16,519	-64.2		30	11.7
80	27	17,886	-62.2		30	8.5
70	27	18,714	-60.9		30	5.9
60	26	19,680	-58.6		31	4.5
50	25	20,831	-56.6		29	2.5
40	22	22,254	-54.2		28	3.1
30	22	24,113	-51.1		17	.5
25	22	25,302	-49.8		08	2.2
20	20	26,763	-47.8		10	1.6
15	18	28,664	-45.6			
10						
7						

JOHNSTON IS., PACIFIC AREA
1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	26.4	22.2	09	6.2
1000	30	130	25.0	21.8	09	7.2
950	30	579	21.4	19.7	09	8.4
900	30	1,047	18.5	15.5	09	8.5
850	30	1,536	15.5	11.4	09	8.1
800	30	2,049	13.2	6.0	08	6.9
750	30	2,591	11.4	1.3	08	5.8
700	30	3,166	9.0	-5.6	08	4.8
650	30	3,776	6.0	-11.0	09	4.2
600	30	4,428	2.4	-15.4	09	4.7
550	30	5,125	-1.8	-19.6	09	4.3
500	30	5,877	-6.5	-25.0	09	3.6
450	30	6,692	-12.0	-30.0	10	2.4
400	30	7,582	-18.1	-35.0	10	1.3
350	30	8,568	-25.4	-40.2	23	1.7
300	30	9,664	-34.3	-47.5	27	4.0
250	30	10,913	-44.4		27	8.6
200	29	12,369	-56.3		27	12.2
175	29	13,204	-62.6		27	11.3
150	29	14,142	-67.7		26	8.9
125	29	15,229	-71.1		24	4.3
100	29	16,541	-73.6		11	2.3
80	27	17,851	-71.5		09	7.7
70	27	18,644	-69.3		09	9.6
60	27	19,571	-66.4		09	11.3
50	27	20,685	-63.2		09	12.1
40	27	22,068	-60.1		09	13.4
30	27	23,880	-56.2		09	17.0
25	23	25,043	-54.0		09	19.4
20	23	26,486	-50.7		09	23.1
15	20	28,377	-47.0		09	26.5
10	17	31,093	-41.9		09	31.7
7						

KEY WEST, FLA.
1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	26.7	23.3	12	2.4
1000	30	122	26.7	23.7	12	2.8
950	30	574	23.2	21.2	13	3.6
900	30	1,046	20.3	17.1	13	3.8
850	30	1,538	17.2	13.0	14	3.5
800	30	2,054	14.7	8.5	14	3.4
750	30	2,598	11.9	5.3	13	3.0
700	30	3,174	8.7	.4	14	2.2
650	30	3,784	5.5	-2.7	14	2.1
600	30	4,435	1.8	-8.0	14	1.6
550	30	5,132	-2.1	-14.2	14	1.2
500	30	5,883	-6.7	-19.[illegible]	14	.9
450	30	6,699	-11.8	-24.[illegible]	02	.9
400	30	7,591	-17.7	-30.8	36	1.1
350	30	8,579	-24.8	-37.6	34	2.0
300	30	9,678	-33.1	-45.1	34	2.1
250	30	10,934	-43.2		35	4.2
200	30	12,399	-54.9		36	6.5
175	30	13,241	-61.1		36	7.5
150	30	14,182	-67.9		01	8.4
125	30	15,264	-73.1		02	7.4
100	30	16,566	-73.8		05	6.1
80	30	17,881	-69.6		07	6.6
70	28	18,683	-67.1		08	8.0
60	28	19,620	-64.4		08	10.8
50	26	20,744	-61.2		09	13.0
40	25	22,141	-57.9		09	15.2
30	24	23,981	-53.4		09	16.3
25	23	25,166	-50.3		09	16.7
20	23	26,630	-47.9		09	17.9
15	22	28,547	-44.1		09	20.7
10	12	31,274	-40.1			
7						

+ KOROR, CAROLINE IS.
1007 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	30	27.8	24.5	09	1.9
1000	30	95	26.6	24.0	10	2.1
950	30	548	23.5	21.3	11	3.1
900	30	1,020	20.6	17.8	11	3.4
850	30	1,513	17.8	14.0	11	3.8
800	30	2,031	15.3	11.2	11	4.2
750	30	2,577	12.4	8.3	10	4.7
700	30	3,154	9.2	4.9	10	5.[illegible]
650	30	3,766	5.9	2.3	10	6.1
600	30	4,418	2.3	-1.0	10	6.7
550	30	5,117	-1.5	-4.7	10	5.9
500	30	5,872	-5.6	-9.8	10	5.4
450	30	6,692	-10.2	-15.7	10	5.9
400	30	7,592	-15.6	-22.2	09	5.1
350	30	8,590	-22.3	-29.6	09	5.0
300	30	9,701	-30.6	-39.3	08	4.8
250	30	10,968	-41.0		07	4.5
200	30	12,444	-53.8		05	4.8
175	30	13,288	-61.1		04	5.0
150	30	14,227	-68.8		04	4.1
125	30	15,299	-76.2		07	2.1
100	29	16,573	-78.2		09	7.3
80	29	17,864	-72.5		08	7.3
70	29	18,658	-68.1		09	4.2
60	29	19,589	-66.1		09	4.8
50	29	20,703	-63.5		10	4.4
40	29	22,083	-60.4		10	7.9
30	29	23,892	-56.5		10	9.3
25	27	25,053	-54.9		10	18.6
20	23	26,495	-51.2		10	19.[illegible]
15	21	28,377	-47.8		10	21.5
10	10	31,088	-42.7			
7						

KWAJALEIN, MARSHALL IS.
1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point *	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	27.1	23.8	08	[illegible]
1000	30	104	26.4	23.4	09	5.3
950	30	556	23.0	21.4	09	7.[illegible]
900	30	1,027	20.1	17.9	09	7.[illegible]
850	30	1,519	17.3	15.7	09	8.[illegible]
800	30	2,036	14.8	11.2	09	8.5
750	30	2,582	12.3	6.4	09	8.[illegible]
700	30	3,158	9.3	2.4	09	8.[illegible]
650	30	3,770	6.0	-.7	09	7.8
600	30	4,422	2.1	-4.1	09	7.7
550	30	5,120	-1.9	-9.4	09	6.4
500	30	5,873	-6.1	-15.0	09	4.7
450	30	6,691	-10.9	-21.1	10	3.2
400	30	7,586	-16.9	-26.8	11	1.8
350	30	8,576	-23.9	-33.[illegible]	35	.9
300	30	9,683	-32.2	-41.[illegible]	24	1.6
250	30	10,942	-42.7	-51.4	26	3.5
200	30	12,406	-55.3	-63.5	28	6.8
175	30	13,245	-62.3		27	8.3
150	30	14,180	-69.4		28	9.8
125	30	15,249	-75.9		26	8.4
100	27	16,527	-78.3		10	4.4
80	26	17,818	-73.0		10	7.1
70	25	18,606	-70.2		10	6.4
60	24	19,528	-67.4		09	6.7
50	24	20,636	-64.4		09	6.9
40	23	22,016	-61.0		09	9.0
30	21	23,820	-57.5		10	9.7
25	21	24,976	-56.3		09	12.5
20	20	26,404	-53.3		09	16.5
15	18	28,275	-49.4		09	14.7
10	11	30,965	-42.7		09	14.[illegible]
7	6	33,374	-39.[illegible]			

RAWINSONDE DATA

Average monthly values

LAKE CHARLES, LA.
1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	22.5	21.3	08	2.1
1000	30	115	23.3	21.5	10	3.0
950	30	563	21.5	18.6	14	4.7
900	30	1,032	19.4	15.6	16	4.9
850	30	1,523	16.9	10.2	16	4.3
800	30	2,039	14.3	6.7	16	4.0
750	30	2,582	11.9	2.5	18	3.3
700	30	3,157	8.5	-1.7	19	3.5
650	30	3,767	5.0	-5.6	19	3.6
600	30	4,416	1.6	-9.2	20	3.0
550	29	5,115	-2.3	-12.8	20	3.0
500	29	5,866	-6.4	-19.3	19	3.1
450	28	6,686	-11.2	-23.7	22	2.7
400	28	7,580	-17.2	-29.9	24	3.7
350	28	8,571	-24.0	-37.6	24	5.0
300	28	9,674	-32.3	-45.7	26	6.2
250	28	10,935	-42.1	-49.9	27	7.4
200	28	12,407	-53.8		28	9.5
175	28	13,253	-59.9		28	9.2
150	28	14,200	-66.5		28	9.2
125	28	15,288	-72.4		28	7.0
100	28	16,589	-73.8		27	1.7
80	28	17,903	-69.7		04	2.4
70	28	18,707	-65.5		09	4.4
60	28	19,651	-62.8		09	4.7
50	28	20,782	-59.8		09	7.1
40	27	22,187	-57.1		08	8.4
30	26	24,016	-53.7		08	11.6
25	26	25,195	-51.3		09	12.5
20	23	26,652	-49.0		09	12.1
15	21	28,553	-45.9		09	12.0
10	10	31,264	-42.2			
7						

LANDER, WYO.
831 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,697	7.6	3.2	25	1.1
800	30	2,014	9.5	.0	31	1.1
750	30	2,548	7.0	-3.3	32	1.5
700	30	3,112	4.0	-7.5	29	3.0
650	30	3,711	.1	-10.5	27	4.4
600	30	4,348	-3.9	-13.9	27	5.7
550	30	5,029	-8.4	-19.5	27	7.0
500	30	5,762	-13.4	-24.6	27	7.8
450	30	6,555	-18.9	-31.0	27	9.3
400	30	7,422	-25.2	-38.7	27	10.3
350	30	8,380	-32.6	-45.0	27	10.9
300	30	9,445	-40.9	-49.0	27	12.1
250	30	10,662	-49.3		27	13.5
200	30	12,104	-55.7		27	16.9
175	30	12,953	-56.5		27	17.6
150	30	13,925	-59.0		27	16.1
125	30	15,064	-60.5		27	12.5
100	30	16,448	-62.2		28	7.5
80	29	17,827	-61.5		28	4.3
70	29	18,656	-61.4		31	2.5
60	29	19,614	-60.7		32	1.6
50	28	20,753	-59.1		36	1.1
40	26	22,158	-57.2		36	1.3
30	25	23,993	-53.3		32	1.6
25	25	25,172	-51.4		29	1.4
20	25	26,629	-49.1		28	1.7
15	22	28,510	-47.4		25	2.2
10	15	31,231	-44.2			

* LIHUE KAUAI, HAWAII
1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	36	24.6	20.6	05	4.0
1000	30	159	24.0	20.3	06	5.2
950	30	607	20.1	18.6	07	6.9
900	30	1,072	16.7	14.2	07	7.4
850	30	1,558	13.7	10.1	08	7.4
800	30	2,067	11.7	4.3	08	7.6
750	30	2,607	11.0	-6.3	08	6.6
700	30	3,181	9.6	-10.3	08	4.2
650	30	3,793	7.0	-14.7	08	3.0
600	30	4,446	3.4	-17.8	07	2.7
550	30	5,146	-.8	-21.3	07	2.0
500	30	5,899	-6.0	-25.6	08	1.8
450	30	6,716	-11.4	-30.2	10	1.7
400	30	7,607	-18.5	-35.1	19	1.4
350	30	8,591	-26.1	-42.0	19	2.5
300	30	9,683	-35.3	-49.4	21	3.1
250	30	10,927	-45.3		22	5.1
200	30	12,380	-56.0		23	7.2
175	30	13,219	-61.3		23	7.9
150	30	14,164	-66.1		22	6.1
125	29	15,261	-69.9		20	3.7
100	29	16,579	-72.8		11	3.4
80	28	17,893	-70.5		09	6.8
70	28	18,690	-68.3		09	8.9
60	28	19,621	-65.6		09	11.3
50	28	20,738	-62.6		09	12.7
40	27	22,124	-59.4		09	14.5
30	24	23,940	-55.2		09	18.2
25	22	25,114	-52.7		09	20.3
20	22	26,566	-49.8		09	21.3
15	20	28,458	-46.9		09	21.8
10	20	31,174	-42.1		09	21.0
7	15	33,610	-38.0		09	21.5

LITTLE ROCK, ARK.
1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	20.3	17.7	09	1.0
1000	30	134	21.2	19.5	13	.9
950	30	580	20.8	17.2	18	3.2
900	30	1,047	18.1	15.0	19	3.9
850	30	1,536	16.0	10.0	19	3.9
800	30	2,050	13.3	6.1	19	4.0
750	30	2,591	10.5	2.4	20	4.0
700	30	3,163	7.3	-2.7	22	4.3
650	30	3,771	4.5	-7.8	22	4.4
600	30	4,418	.9	-10.5	22	4.9
550	30	5,113	-3.3	-15.5	23	6.0
500	30	5,860	-7.6	-21.4	23	6.2
450	30	6,674	-12.3	-26.3	24	7.5
400	30	7,564	-18.4	-32.3	24	9.0
350	30	8,550	-25.4	-37.3	25	10.7
300	30	9,647	-33.8	-46.8	25	12.9
250	30	10,899	-43.4		26	15.2
200	30	12,367	-53.7		26	19.8
175	30	13,215	-59.3		27	19.1
150	30	14,167	-65.1		27	16.9
125	30	15,264	-69.9		27	12.3
100	30	16,587	-70.4		27	7.4
80	30	17,920	-67.5		29	2.8
70	30	18,733	-63.7		34	.9
60	30	19,684	-61.2		07	1.5
50	29	20,826	-58.3		09	2.7
40	29	22,239	-55.8		08	3.8
30	29	24,083	-52.8		09	6.3
25	28	25,269	-50.7		09	6.9
20	28	26,732	-48.3		08	7.6
15	26	28,635	-46.0		09	6.6
10	10	31,371	-44.0			

MCGRATH, ALASKA
996 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	103	4.2	1.0	27	.4
1000	11	125	6.3	2.7	17	.8
950	30	488	6.3	.2	16	1.3
900	30	930	3.7	-1.6	17	2.5
850	30	1,392	.7	-3.6	17	2.9
800	30	1,876	-2.6	-6.1	17	3.7
750	30	2,386	-5.5	-10.2	18	3.9
700	30	2,924	-8.6	-15.3	19	4.5
650	30	3,495	-12.0	-18.8	18	5.2
600	30	4,104	-15.7	-24.3	19	5.7
550	30	4,755	-19.9	-29.2	19	4.9
500	30	5,455	-24.9	-34.1	20	4.5
450	30	6,213	-30.2	-38.0	20	4.6
400	30	7,041	-36.4	-43.0	20	5.3
350	30	7,956	-43.2	-46.9	19	11.9
300	19	8,970	-50.3		19	9.8
250	16	10,160	-55.2		20	9.5
200	16	11,598	-50.6		22	9.8
175	16	12,471	-49.7		21	8.8
150	16	13,481	-49.4		21	8.5
125	15	14,670	-49.1		22	7.7
100	15	16,135	-49.5		22	6.8
80	14	17,615	-49.3		22	6.5
70	14	18,490	-49.4		22	6.2
60	14	19,501	-49.1		22	6.5
50	14	20,697	-49.3		23	6.3
40	14	22,160	-49.5		23	5.1
30	13	24,069	-49.5		24	3.3
25	12	25,281	-49.3		23	2.6
20	11	26,750	-48.9		27	2.3
15	10	28,654	-47.9			

MAJURO, MARSHALL IS.
*
1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	3	27.8	23.9	09	3.4
1000	29	103	26.9	22.5	09	4.2
950	29	555	23.5	20.2	10	5.9
900	29	1,027	20.4	17.2	09	7.0
850	29	1,519	17.6	13.2	09	7.5
800	29	2,037	15.6	10.0	09	7.9
750	29	2,584	13.0	5.0	09	7.9
700	29	3,161	10.0	.6	10	7.5
650	29	3,775	6.7	-2.0	10	7.6
600	29	4,428	3.1	-6.3	10	7.7
550	29	5,129	-.9	-8.3	10	6.2
500	29	5,884	-5.1	-13.7	09	4.9
450	29	6,705	-9.8	-20.1	09	4.3
400	29	7,605	-15.4	-26.2	09	2.6
350	29	8,603	-22.3	-32.5	09	1.9
300	29	9,714	-30.6	-40.3	08	1.2
250	29	10,982	-41.1	-47.3	29	1.8
200	29	12,459	-53.5		29	4.5
175	29	13,305	-60.4		29	6.5
150	29	14,248	-67.6		29	7.4
125	29	15,328	-74.2		28	4.8
100	28	16,615	-76.6		10	4.5
80	26	17,918	-71.1		09	5.3
70	26	18,716	-67.8		10	3.6
60	26	19,648	-65.7		09	2.7
50	26	20,764	-62.5		11	3.9
40	24	22,149	-59.7		09	5.0
30	24	23,964	-55.6		09	7.0
25	24	25,130	-53.8		09	9.1
20	23	26,572	-50.8		10	13.2
15	20	28,465	-46.8		09	21.2
10	6	31,175	-40.7			
7						
5						

* MEDFORD, OREG.
970 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	401	11.9	6.1	21	.4
950	30	573	14.2	5.6	26	.6
900	30	1,031	14.2	3.5	28	.5
850	30	1,512	12.2	.8	19	1.4
800	30	2,018	10.2	-3.9	22	2.0
750	30	2,552	7.5	-6.9	24	2.8
700	30	3,117	4.7	-12.3	26	4.8
650	30	3,718	1.5	-15.7	27	5.8
600	30	4,358	-2.1	-17.9	27	7.1
550	30	5,044	-6.4	-22.2	28	9.0
500	30	5,782	-11.3	-27.9	28	10.3
450	30	6,583	-16.5	-32.0	28	12.3
400	30	7,457	-23.1	-36.7	28	14.6
350	30	8,424	-30.6	-43.5	28	15.9
300	30	9,497	-39.4	-50.7	28	18.3
250	30	10,720	-48.7		28	19.2
200	30	12,162	-55.7		28	18.7
175	30	13,008	-57.9		27	20.2
150	29	13,972	-60.5		27	17.6
125	29	15,102	-62.2		27	12.9
100	29	16,478	-62.8		27	8.4
80	29	17,853	-62.0		27	5.0
70	29	18,682	-60.8		27	3.0
60	29	19,643	-60.0		29	1.4
50	28	20,784	-58.7		04	.4
40	28	22,192	-56.6		04	1.3
30	27	24,032	-53.7		05	1.5
25	26	25,211	-52.0		35	.5
20	26	26,665	-49.4		29	2.3
15	23	28,546	-47.5		28	3.2
10	23	31,246	-44.3		29	2.4
7	19	33,659	-40.5		26	.2
5	11	35,988	-38.2			

MERIDA, MEXICO
1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	11	23.1	22.9	12	.7
1000	28	108	25.1	23.8	12	2.7
950	28	561	23.9	20.7	14	5.0
900	28	1,033	21.7	16.5	13	4.4
850	28	1,528	19.0	12.6	13	3.6
800	28	2,048	16.3	8.8	13	3.2
750	28	2,595	13.2	4.6	14	3.1
700	28	3,172	9.8	.8	14	3.2
650	27	3,785	6.5	-3.5	13	2.6
600	27	4,438	2.6	-7.5	12	2.0
550	27	5,137	-1.6	-11.4	11	2.1
500	27	5,890	-5.8	-18.5	11	2.1
450	27	6,708	-10.7	-22.7	09	3.0
400	27	7,605	-16.5	-29.9	07	3.2
350	26	8,598	-23.6	-35.8	07	3.8
300	26	9,704	-31.8	-44.1	07	3.4
250	26	10,966	-41.8	-51.0	06	4.2
200	25	12,439	-53.7		05	4.9
175	24	13,283	-60.2		05	5.2
150	23	14,226	-67.7		04	5.6
125	22	15,306	-74.2		03	6.4
100	21	16,590	-76.2		04	6.7
80	19	17,895	-70.7		07	7.0
70	19	18,692	-68.4		08	8.5
60	19	19,623	-65.7		09	9.1
50	16	20,738	-62.4		09	11.5
40	11	22,123	-59.0		09	12.4
30	9	23,949	-54.1			
25	7	25,133	-51.7			
20	6	26,597	-48.1			

MIAMI, FLA.
1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	25.5	23.5	12	1.3
1000	30	132	25.9	23.3	12	2.4
950	30	584	23.0	20.5	13	3.9
900	30	1,055	20.2	16.4	13	3.4
850	30	1,547	17.2	12.4	13	2.9
800	30	2,063	14.5	9.3	13	2.4
750	30	2,607	11.7	4.8	13	2.3
700	30	3,182	8.7	.1	14	1.9
650	30	3,792	5.4	-3.3	13	1.5
600	30	4,442	1.7	-7.9	17	.7
550	30	5,139	-2.3	-12.4	18	.7
500	30	5,890	-6.7	-17.6	03	.3
450	30	6,705	-11.7	-22.6	35	.8
400	30	7,598	-17.5	-30.7	34	1.7
350	30	8,587	-24.6	-36.9	33	2.2
300	30	9,687	-33.1	-44.7	34	3.0
250	30	10,943	-43.1		34	4.1
200	29	12,408	-54.6		36	6.8
175	29	13,251	-60.7		36	8.1
150	28	14,195	-66.8		36	8.7
125	27	15,279	-71.9		02	7.7
100	27	16,587	-72.9		04	5.8
80	26	17,907	-69.1		07	5.5
70	26	18,710	-66.8		08	7.1
60	26	19,647	-64.3		08	9.9
50	26	20,772	-61.0		09	13.2
40	25	22,172	-56.8		09	14.7
30	25	24,010	-53.3		09	15.0
25	23	25,193	-50.8		09	15.5
20	20	26,659	-48.0		09	15.8
15	12	28,585	-45.1		08	19.2

MIDLAND, TEXAS
915 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	874	16.9	13.9	12	1.2
900	30	1,018	18.4	15.6	16	2.8
850	30	1,510	18.2	12.1	19	5.3
800	30	2,029	16.3	6.2	21	2.9
750	30	2,576	13.2	.7	28	1.3
700	30	3,152	9.0	-3.2	32	2.2
650	30	3,761	4.7	-5.7	32	3.1
600	30	4,408	.1	-10.4	32	3.6
550	30	5,100	-3.8	-19.4	30	4.6
500	30	5,847	-7.6	-24.6	28	6.6
450	30	6,660	-12.2	-29.8	27	7.9
400	30	7,551	-18.3	-34.5	27	10.0
350	30	8,538	-25.0	-40.2	26	13.5
300	30	9,636	-33.3	-47.5	26	17.0
250	30	10,892	-42.7		26	19.6
200	30	12,363	-53.6		26	22.4
175	30	13,210	-59.5		26	22.7
150	30	14,160	-65.8		26	19.3
125	30	15,253	-71.1		26	14.9
100	30	16,568	-71.7		26	5.3
80	30	17,893	-68.9		30	1.1
70	29	18,697	-65.5		07	1.7
60	29	19,643	-62.3		10	4.1
50	28	20,776	-59.6		08	4.6
40	27	22,176	-57.5		08	7.7
30	27	24,011	-53.2		09	10.2
25	25	25,190	-51.2		09	10.0
20	22	26,649	-48.2		09	9.9
15	20	28,548	-46.0		09	9.1
10	9	31,256	-42.8			

MONTERREY, MEXICO
962 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	423	21.7	20.7	36	.7
1000						
950	30	560	21.8	20.1	03	.9
900	30	1,030	20.1	17.1	13	.6
850	30	1,523	18.4	13.0	14	1.5
800	30	2,042	15.6	9.9	16	1.1
750	30	2,588	13.1	5.7	29	1.0
700	30	3,166	10.0	3.2	31	1.9
650	30	3,778	6.0	-.6	31	2.3
600	30	4,430	1.9	-3.9	32	1.8
550	30	5,128	-1.9	-9.4	31	1.3
500	30	5,881	-5.9	-15.1	29	1.0
450	30	6,700	-10.3	-21.5	28	1.2
400	29	7,596	-16.3	-27.4	30	2.6
350	29	8,592	-22.9	-35.7	29	3.3
300	29	9,700	-31.2	-43.2	27	3.9
250	29	10,965	-41.4		27	4.3
200	29	12,440	-53.8		28	4.1
175	29	13,285	-60.3		30	3.4
150	28	14,230	-67.4		29	2.0
125	28	15,308	-74.9		35	.8
100	27	16,591	-76.4		07	1.7
80	27	17,895	-71.1		07	5.6
70	26	18,693	-68.0		09	8.8
60	26	19,626	-65.4		10	9.5
50	24	20,744	-62.7		09	10.3
40	24	22,133	-58.7		09	12.7
30	24	23,959	-54.9		08	15.3
25	23	25,132	-52.0		09	16.9
20	23	26,587	-48.8		09	16.5
15	19	28,480	-46.1		09	17.6
10	8	31,211	-47.0			
7						

MONETT, MO.
965 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	438	17.6	16.6	13	1.7
950	30	576	18.4	16.6	18	2.6
900	30	1,040	17.0	13.5	21	6.3
850	30	1,526	14.5	9.9	22	5.8
800	30	2,038	12.5	5.6	23	5.7
750	30	2,578	9.7	2.2	23	5.0
700	30	3,149	6.5	-2.7	23	4.9
650	30	3,754	3.2	-7.8	23	5.7
600	30	4,399	-.5	-11.1	23	6.1
550	30	5,089	-4.7	-16.4	23	7.1
500	30	5,832	-9.2	-23.9	23	7.7
450	30	6,640	-14.0	-28.4	24	8.8
400	30	7,524	-20.1	-33.8	24	10.7
350	30	8,503	-27.3	-39.7	24	12.5
300	30	9,592	-35.5	-46.5	24	15.5
250	30	10,836	-44.8		25	18.4
200	30	12,295	-55.1		25	22.2
175	30	13,138	-59.9		26	22.6
150	30	14,090	-64.4		26	20.4
125	29	15,196	-68.1		26	14.4
100	28	16,531	-69.6		26	9.5
80	28	17,871	-66.9		29	4.0
70	28	18,683	-64.0		31	1.3
60	28	19,635	-61.1		34	1.1
50	28	20,774	-58.4		04	1.1
40	27	22,185	-56.1		07	1.7
30	26	24,020	-53.2		08	2.9
25	21	25,205	-50.9		09	3.0
20	20	26,667	-48.5		08	3.6
15	19	28,565	-46.7		09	3.9
10	7	31,253	-43.0			

MONTGOMERY, ALA.
1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	57	21.5	18.8	07	.9
1000	30	142	21.4	19.6	10	1.4
950	30	589	21.6	17.8	13	3.1
900	30	1,057	18.8	14.6	14	3.3
850	30	1,547	16.0	10.4	15	3.3
800	30	2,061	13.2	7.7	16	3.1
750	30	2,602	10.2	4.5	16	2.9
700	30	3,174	7.2	-2.4	16	2.3
650	30	3,781	4.4	-7.6	21	.8
600	30	4,429	1.0	-11.5	23	1.4
550	30	5,124	-2.7	-16.8	25	2.2
500	30	5,874	-7.1	-20.4	27	2.7
450	30	6,688	-12.0	-26.8	27	4.3
400	29	7,580	-18.0	-32.2	27	4.9
350	29	8,568	-25.0	-38.2	28	6.1
300	29	9,666	-33.5	-45.0	29	8.0
250	29	10,920	-43.5		29	11.4
200	28	12,384	-54.5		30	15.0
175	28	13,228	-60.3		30	15.4
150	28	14,174	-66.4		30	12.8
125	28	15,265	-71.2		30	9.4
100	28	16,578	-72.6		31	4.6
80	26	17,899	-68.8		35	2.0
70	26	18,706	-64.9		07	2.1
60	26	19,653	-61.9		07	3.2
50	25	20,790	-59.3		08	5.4
40	25	22,196	-56.8		09	7.0
30	21	24,032	-52.9		09	9.5
25	20	25,216	-51.1		09	9.7
20	19	26,679	-48.6		09	9.9
15	18	28,588	-45.5		09	10.3
10	12	31,322	-41.6		09	9.2

NASHVILLE, TENN.
997 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	180	19.0	17.9	09	.6
1000	6	190	20.7	17.7		
950	30	595	20.2	16.0	18	3.4
900	30	1,061	17.7	13.8	20	4.0
850	30	1,549	15.2	9.8	22	3.8
800	30	2,061	12.4	5.6	23	3.7
750	30	2,600	9.7	-.9	23	3.3
700	30	3,171	6.8	-6.3	24	2.6
650	30	3,776	3.5	-8.2	26	2.9
600	30	4,422	.0	-11.5	25	3.7
550	30	5,114	-3.9	-16.9	25	4.5
500	30	5,860	-8.5	-22.9	25	6.4
450	30	6,670	-13.4	-27.1	26	7.9
400	30	7,556	-19.5	-32.7	26	9.5
350	30	8,537	-26.6	-39.3	27	11.6
300	30	9,629	-35.0	-47.8	27	13.7
250	30	10,876	-44.5		28	16.4
200	30	12,336	-54.7		29	19.8
175	30	13,181	-59.6		29	19.9
150	30	14,133	-65.0		28	17.5
125	29	15,230	-68.8		28	13.8
100	29	16,561	-69.8		27	8.4
80	29	17,898	-67.2		30	3.5
70	29	18,711	-63.5		31	2.2
60	29	19,664	-60.8		35	1.3
50	29	20,806	-57.7		06	1.0
40	28	22,224	-55.4		08	2.2
30	28	24,071	-52.1		09	3.3
25	27	25,256	-50.1		08	4.0
20	25	26,717	-48.3		08	5.4
15	23	28,625	-45.9		09	5.7
10	20	31,343	-43.3		07	2.9
7	6	33,731	-38.0			

* NOME, ALASKA
1005 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	4.6	2.3	12	.9
1000	25	62	5.9	3.0	13	2.2
950	30	466	4.1	.7	15	4.8
900	30	904	1.4	-2.1	16	5.3
850	30	1,361	-1.3	-4.6	17	5.3
800	30	1,842	-4.1	-7.9	18	4.7
750	30	2,349	-7.0	-10.8	18	5.1
700	30	2,885	-9.8	-14.9	19	5.0
650	30	3,453	-13.2	-20.1	20	5.7
600	30	4,059	-16.9	-25.5	20	5.3
550	30	4,706	-21.3	-29.9	20	5.6
500	30	5,403	-26.0	-35.8	21	5.2
450	30	6,158	-31.4	-41.6	22	5.2
400	30	6,981	-37.6	-45.3	22	4.8
350	30	7,892	-44.2		22	3.7
300	30	8,908	-51.0		22	3.1
250	30	10,081	-55.0		23	5.0
200	29	11,519	-50.8		22	5.4
175	29	12,391	-50.0		23	5.8
150	29	13,400	-49.7		22	5.7
125	29	14,593	-49.7		22	6.1
100	29	16,053	-49.8		22	5.9
80	28	17,511	-49.9		21	5.7
70	27	18,383	-50.1		21	5.2
60	27	19,390	-50.3		21	5.3
50	27	20,581	-50.2		22	5.1
40	26	22,034	-50.4		22	4.9
30	23	23,911	-50.1		22	3.8
25	22	25,097	-50.4		23	3.3
20	22	26,553	-50.5		25	3.2
15	20	28,422	-49.8		30	2.0
10	8	31,207	-45.9			

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	NORTH PLATTE, NEBR. 919 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	847	10.6	8.6	04	1.4
1000						
950						
900	30	1,020	12.8	9.3	02	1.6
850	30	1,500	11.7	6.1	07	.6
800	30	2,007	10.1	2.9	29	.8
750	30	2,542	8.1	-1.7	29	2.5
700	30	3,109	4.8	-6.0	28	4.0
650	30	3,710	1.8	-10.2	27	5.3
600	30	4,351	-2.0	-13.4	27	5.8
550	30	5,037	-6.6	-17.2	26	6.6
500	30	5,775	-11.4	-22.3	26	9.4
450	30	6,576	-16.8	-28.4	25	10.4
400	30	7,449	-23.3	-35.0	25	11.2
350	30	8,415	-30.4	-41.4	25	13.3
300	30	9,490	-38.4	-49.1	25	14.4
250	30	10,719	-47.6		25	13.8
200	30	12,169	-54.1		25	19.4
175	30	13,021	-57.0		25	19.0
150	30	13,988	-60.3		25	17.3
125	30	15,118	-63.1		26	12.3
100	30	16,486	-64.0		27	6.9
80	30	17,858	-63.0		29	4.1
70	30	18,682	-61.8		30	2.1
60	30	19,640	-60.4		34	1.1
50	30	20,783	-58.2		34	1.4
40	28	22,203	-55.5		33	1.0
30	26	24,050	-52.3		34	1.3
25	26	25,235	-50.5		33	.5
20	26	26,697	-48.4		05	1.3
15	23	28,609	-46.0		04	1.2
10	6	31,249	-42.7			
7						
5						

Standard pressure surface (mb)	OAKLAND, CALIF. 1014 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	6	14.1	12.0	26	.9
1000	30	127	14.4	11.2	27	1.3
950	30	561	14.5	7.0	31	2.8
900	30	1,021	17.2	-1.0	33	3.4
850	30	1,508	16.5	-3.6	31	2.4
800	30	2,021	13.7	-6.5	30	2.6
750	30	2,562	11.3	-10.6	30	3.0
700	30	3,134	8.3	-13.0	30	3.2
650	30	3,743	5.3	-15.9	30	4.9
600	30	4,392	1.7	-19.0	30	7.0
550	30	5,087	-2.8	-22.3	29	7.9
500	30	5,835	-7.9	-26.9	29	9.6
450	30	6,645	-13.7	-31.3	29	11.3
400	30	7,528	-20.8	-37.5	29	12.4
350	30	8,503	-28.8	-44.6	29	11.6
300	29	9,581	-37.6	-52.1	29	13.6
250	29	10,814	-47.3		28	14.9
200	29	12,260	-56.1		28	16.9
175	29	13,102	-59.6		27	18.3
150	28	14,056	-63.1		28	16.7
125	28	15,170	-66.0		27	13.0
100	28	16,520	-66.7		28	8.2
80	28	17,875	-65.0		29	4.0
70	28	18,693	-63.1		31	1.6
60	28	19,646	-61.3		04	.8
50	28	20,784	-59.2		06	1.7
40	28	22,189	-56.9		06	2.1
30	27	24,024	-53.6		09	2.7
25	26	25,202	-51.6		08	2.2
20	26	26,658	-49.5		08	2.2
15	23	28,562	-47.2		07	3.0
10	9	31,239	-44.8			
7						
5						

Standard pressure surface (mb)	OMAHA, NEBR. 9[illegible]9 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	403	13.9	12.2	10	1.7
1000						
950	30	568	15.3	11.6	14	.6
900	30	1,027	14.3	9.0	23	2.7
850	30	1,509	12.3	5.4	25	4.1
800	30	2,016	10.2	1.4	25	5.0
750	30	2,551	7.9	-2.0	25	6.1
700	30	3,117	4.6	-5.6	25	7.3
650	30	3,719	1.8	-9.6	25	8.1
600	30	4,360	-1.8	-12.8	25	8.6
550	29	5,049	-6.1	-18.4	25	8.5
500	29	5,769	-10.4	-24.4	25	9.5
450	29	6,592	-15.7	-29.6	25	12.1
400	29	7,469	-22.3	-36.7	25	13.9
350	29	8,440	-29.5	-42.3	26	16.0
300	29	9,518	-38.1	-47.2	25	18.0
250	29	10,748	-47.1		25	19.7
200	29	12,199	-54.8		25	23.4
175	29	13,048	-57.7		25	22.7
150	29	14,013	-61.2		26	22.1
125	28	15,135	-63.9		27	15.6
100	27	16,502	-63.9		27	8.8
80	27	17,874	-62.5		28	5.1
70	27	18,700	-61.4		29	3.4
60	27	19,660	-59.7		31	2.6
50	27	20,805	-57.9		32	1.9
40	26	22,224	-55.4		31	2.3
30	21	24,073	-51.7		36	.9
25	21	25,261	-49.8		01	.4
20	20	26,726	-47.9		28	.2
15	18	28,627	-46.2		32	1.3
10	9	31,329	-42.1			
7						
5						

Standard pressure surface (mb)	PAGO PAGO, AMERICAN SAMOA • 1013 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	28.6	24.0	09	4.4
1000	30	123	26.3	20.3	09	4.8
950	30	575	22.9	17.8	08	6.1
900	30	1,045	19.6	14.7	07	5.8
850	30	1,535	16.4	11.4	07	5.8
800	30	2,050	14.2	7.6	06	5.2
750	30	2,594	11.5	3.8	06	4.9
700	30	3,168	8.5	-2.4	05	3.5
650	30	3,778	5.5	-7.8	04	2.7
600	30	4,428	1.8	-12.7	03	1.6
550	30	5,124	-2.1	-18.1	34	.9
500	30	5,875	-6.8	-23.1	28	1.0
450	30	6,690	-11.7	-27.6	25	2.1
400	30	7,582	-17.7	-33.9	25	3.6
350	30	8,570	-24.9	-40.0	25	5.6
300	30	9,669	-33.6	-47.5	25	7.8
250	30	10,922	-43.6		25	10.6
200	30	12,365	-55.0		25	14.2
175	29	13,226	-60.6		25	14.4
150	29	14,171	-66.8		25	13.7
125	29	15,257	-72.8		26	10.6
100	29	16,553	-75.3		27	8.1
80	28	17,855	-72.2		27	6.8
70	29	18,648	-68.8		27	7.3
60	28	19,576	-66.5		27	7.6
50	28	20,689	-63.3		27	6.5
40	27	22,075	-59.9		28	5.4
30	26	23,888	-55.7		29	4.8
25	26	25,056	-53.2		31	2.3
20	26	26,505	-49.7		04	1.5
15	23	28,404	-45.0		07	5.7
10	16	31,137	-40.3		09	7.9
7						
5						

Standard pressure surface (mb)	• PEORIA, ILL. 9[illegible] MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	260	15.7	13.4	15	[illegible]
1000						
950	30	585	17.3	12.5	19	2.7
900	30	1,046	15.3	10.3	21	4.2
850	30	1,529	12.5	6.8	23	4.9
800	30	2,038	10.8	1.0	24	5.9
750	30	2,574	8.2	-1.0	25	6.5
700	30	3,141	5.2	-4.4	25	7.3
650	30	3,743	2.2	-8.5	25	8.2
600	30	4,386	-1.4	-12.4	26	8.4
550	30	5,074	-5.5	-17.8	26	9.7
500	30	5,816	-10.0	-23.7	26	10.2
450	30	6,620	-15.1	-29.3	26	11.4
400	30	7,500	-21.4	-35.2	26	13.1
350	30	8,474	-28.8	-40.7	26	14.7
300	30	9,555	-37.4	-47.0	26	17.1
250	30	10,788	-47.1		26	21.2
200	30	12,234	-56.3		27	25.1
175	30	13,075	-60.2		27	25.4
150	30	14,028	-63.3		27	22.2
125	30	15,142	-65.7		27	16.4
100	30	16,496	-65.7		27	11.6
80	30	17,856	-64.1		28	6.6
70	29	18,680	-62.4		29	3.7
60	29	19,637	-60.3		31	2.4
50	29	20,781	-57.7		31	.9
40	29	22,196	-55.4		33	1.1
30	28	24,042	-51.9		32	.6
25	27	25,233	-50.1		01	.8
20	27	26,699	-48.0		08	.9
15	27	28,605	-45.8		06	1.7
10	25	31,332	-42.2		09	2.3
7	17	33,776	-40.0		29	.8
5	7	36,107	-36.0			

Standard pressure surface (mb)	• PITTSBURGH, PA. 977 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	359	14.8	12.5	18	.2
1000						
950	30	594	16.6	12.1	27	2.0
900	30	1,055	14.8	8.8	28	4.0
850	30	1,537	11.7	5.2	28	5.8
800	30	2,043	9.8	-1.5	28	7.2
750	30	2,577	7.6	-5.9	28	9.0
700	30	3,143	5.0	-7.8	28	10.6
650	30	3,745	1.7	-10.9	28	11.4
600	30	4,386	-2.1	-13.7	28	11.9
550	30	5,072	-6.1	-18.7	28	12.3
500	30	5,812	-10.5	-24.7	28	13.9
450	30	6,616	-15.3	-29.6	28	14.5
400	30	7,495	-21.9	-35.0	28	15.4
350	30	8,466	-29.1	-40.8	28	17.0
300	30	9,547	-37.6	-46.8	28	18.2
250	30	10,779	-47.4		28	20.5
200	29	12,232	-56.4		29	22.9
175	29	13,074	-59.7		29	24.2
150	29	14,030	-62.9		29	21.5
125	29	15,145	-65.5		29	16.8
100	29	16,500	-65.3		28	12.1
80	29	17,863	-63.6		29	7.2
70	29	18,686	-61.9		29	4.6
60	28	19,643	-60.2		29	2.6
50	27	20,791	-57.1		30	3.0
40	27	22,212	-54.7		28	.9
30	25	24,069	-51.6		04	.7
25	25	25,258	-49.9		07	1.1
20	25	26,724	-47.9		05	1.6
15	24	28,622	-46.0		08	2.8
10	21	31,336	-42.4		10	1.6
7	13	33,779	-38.5		10	3.0

Standard pressure surface (mb)	PONAPE, CAROLINE IS. • 1006 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	39	28.4	24.2	08	2.1
1000	30	90	26.8	22.9	08	2.6
950	30	543	23.6	20.5	10	6.0
900	30	1,014	20.4	16.9	10	7.5
850	30	1,507	17.5	12.7	10	8.4
800	30	2,024	15.1	9.4	09	8.4
750	30	2,570	12.6	5.5	09	7.8
700	30	3,146	9.3	2.8	10	7.8
650	30	3,759	6.0	-.3	10	8.3
600	30	4,411	2.4	-2.8	10	7.6
550	30	5,110	-1.3	-8.2	09	6.6
500	30	5,865	-5.4	-13.2	09	5.8
450	30	6,685	-10.1	-17.8	08	5.2
400	30	7,584	-15.7	-24.6	09	3.8
350	30	8,582	-22.2	-32.2	10	3.1
300	30	9,693	-30.8	-41.3	09	2.0
250	30	10,960	-41.0		27	.4
200	30	12,437	-53.5		28	4.3
175	30	13,282	-60.5		27	7.1
150	30	14,225	-68.1		27	8.0
125	30	15,301	-75.1		26	4.9
100	30	16,583	-77.2		09	3.6
80	28	17,880	-71.7		07	5.1
70	28	18,675	-68.5		08	3.6
60	26	19,605	-65.9		11	2.8
50	27	20,723	-63.2		10	3.5
40	27	22,103	-60.3		08	5.5
30	26	23,915	-56.0		09	7.6
25	25	25,079	-54.1		10	8.8
20	23	26,521	-51.5		10	12.9
15	20	28,397	-47.8		09	20.6
10	13	31,111	-42.1		09	31.8
7						

Standard pressure surface (mb)	PORTLAND, MAINE 1016 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	20	10.8	9.5	28	.9
1000	29	154	13.1	8.9	30	1.9
950	30	581	12.3	5.6	30	3.7
900	30	1,033	9.8	2.0	30	4.4
850	30	1,506	7.8	-.5	30	6.6
800	30	2,005	6.0	-5.1	29	8.2
750	30	2,532	3.8	-8.5	28	9.8
700	30	3,090	1.4	-12.4	28	11.5
650	30	3,684	-1.5	-15.9	28	13.1
600	30	4,317	-4.8	-20.4	28	15.3
550	30	4,997	-8.7	-23.5	28	17.6
500	30	5,730	-12.9	-27.4	28	20.1
450	30	6,525	-18.3	-32.0	28	[illegible]
400	30	7,393	-24.5	-37.6	28	24.5
350	30	8,355	-31.5	-44.1	28	25.7
300	30	9,425	-39.9	-50.0	28	27.2
250	30	10,647	-48.8		28	29.2
200	30	12,091	-54.8		28	29.2
175	30	12,941	-57.1		28	26.5
150	30	13,911	-59.5		28	24.9
125	30	15,047	-60.7		28	20.1
100	30	16,436	-60.8		28	14.7
80	29	17,828	-59.6		28	9.9
70	29	18,666	-58.4		28	7.7
60	27	19,638	-57.4		28	5.7
50	25	20,802	-55.8		29	3.1
40	23	22,230	-53.7		27	2.1
30	20	24,092	-51.0		30	.6
25	20	25,283	-49.4		24	.2
20	20	26,752	-47.5		11	1.2
15	18	28,674	-45.2		09	1.9
10	8	31,421	-42.2			
7						

Standard pressure surface (mb)	• QUILLAYUTE, WASH. 1010 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	58	10.2	9.4	08	.4
1000	28	149	12.2	10.6	10	.7
950	30	570	12.3	8.0	14	1.3
900	30	1,022	10.6	3.6	22	1.2
850	30	1,497	8.7	-.6	23	2.3
800	30	1,997	6.5	-4.6	24	3.2
750	30	2,525	4.2	-7.7	25	4.3
700	30	3,083	1.3	-11.6	25	5.3
650	30	3,676	-1.6	-17.0	25	5.7
600	30	4,309	-5.3	-18.6	25	6.5
550	30	4,987	-9.5	-20.7	26	7.0
500	30	5,717	-14.3	-25.6	26	8.5
450	30	6,508	-19.3	-31.3	26	10.2
400	30	7,373	-25.6	-37.9	26	11.5
350	30	8,331	-32.8	-44.1	27	14.0
300	30	9,394	-41.2	-49.5	27	14.9
250	30	10,608	-49.9		27	16.3
200	30	12,049	-55.0		27	15.8
175	30	12,900	-56.5		27	15.3
150	30	13,877	-57.4		27	14.9
125	30	15,026	-58.5		27	12.4
100	29	16,426	-58.7		27	9.4
80	29	17,828	-58.7		27	6.4
70	28	18,670	-57.9		27	4.7
60	28	19,642	-57.8		27	3.4
50	27	20,796	-57.4		29	2.3
40	25	22,213	-55.9		32	1.3
30	25	24,050	-54.7		33	1.1
25	24	25,228	-53.1		35	1.1
20	23	26,678	-51.5		32	2.0
15	19	28,564	-48.4		30	3.5
10	15	31,269	-43.9		28	4.9
7	9	33,733	-39.5			

Standard pressure surface (mb)	RAPID CITY, S. DAK. 906 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	966	9.7	5.5	34	2.3
1000						
950						
900	27	1,038	11.2	5.0	34	1.9
850	30	1,504	11.2	1.9	31	2.0
800	30	2,009	9.4	.4	30	1.5
750	30	2,543	6.9	-3.0	29	1.9
700	30	3,107	3.7	-6.8	28	2.8
650	30	3,705	.4	-10.0	29	4.4
600	30	4,343	-3.4	-14.1	28	5.0
550	30	5,026	-7.9	-18.5	27	6.5
500	30	5,759	-12.8	-24.5	27	7.2
450	30	6,555	-18.1	-28.7	27	8.4
400	30	7,424	-24.5	-35.6	26	8.9
350	30	8,385	-31.9	-42.2	26	10.5
300	30	9,453	-40.1	-48.8	25	13.3
250	30	10,673	-49.3		26	15.6
200	30	12,114	-55.1		26	17.5
175	30	12,964	-56.6		26	16.8
150	30	13,936	-59.0		26	14.9
125	30	15,076	-60.8		26	12.4
100	30	16,459	-61.5		27	8.3
80	30	17,841	-61.5		28	5.1
70	30	18,670	-60.9		30	3.9
60	28	19,629	-60.0		31	2.4
50	27	20,777	-58.6		33	2.0
40	27	22,184	-56.9		34	1.7
30	27	24,021	-53.3		32	1.3
25	26	25,195	-51.1		29	2.6
20	26	26,654	-49.2		28	2.6
15	24	28,554	-46.9		27	3.3
10	14	31,315	-42.7		30	1.5
7	5	33,773	-38.2			

Standard pressure surface (mb)	ST CLOUD, MINN. 981 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	316	10.3	8.7	13	.1
1000						
950	29	581	12.2	7.1	15	.3
900	29	1,033	10.5	4.4	26	1.6
850	29	1,508	8.6	.7	27	3.0
800	29	2,008	6.5	-3.1	26	4.3
750	29	2,536	4.7	-7.3	27	5.7
700	29	3,096	2.0	-10.6	27	6.9
650	29	3,691	-.6	-13.3	27	7.9
600	29	4,328	-3.9	-17.2	27	9.1
550	29	5,010	-7.6	-21.5	27	10.0
500	29	5,745	-12.3	-27.3	27	10.5
450	29	6,542	-17.8	-31.3	27	12.2
400	29	7,411	-24.4	-35.8	26	13.0
350	29	8,373	-31.5	-41.8	26	16.1
300	29	9,442	-40.0	-46.2	26	18.4
250	29	10,663	-48.7		26	21.5
200	29	12,101	-56.5		26	23.0
175	29	12,945	-58.5		27	20.7
150	29	13,911	-59.7		27	18.8
125	29	15,046	-61.6		27	14.9
100	29	16,427	-61.8		28	10.3
80	29	17,811	-60.9		28	7.6
70	28	18,643	-59.9		29	5.7
60	27	19,614	-59.0		29	3.9
50	27	20,761	-57.6		30	3.8
40	27	22,175	-55.9		31	2.1
30	27	24,019	-52.7		29	1.9
25	27	25,203	-50.4		28	2.7
20	26	26,671	-48.2		27	3.8
15	26	28,574	-46.4		26	3.1
10	14	31,327	-43.0			
7						

Standard pressure surface (mb)	• ST PAUL IS., ALASKA 1005 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	6.4	5.0	25	1.5
1000	21	97	6.5	4.9	27	3.2
950	30	470	4.2	3.1	25	2.6
900	30	908	1.7	-.9	25	2.5
850	30	1,367	-.9	-5.5	25	2.3
800	30	1,850	-2.8	-9.0	26	2.8
750	30	2,359	-5.3	-13.3	25	2.5
700	30	2,899	-7.5	-19.3	26	2.5
650	30	3,473	-10.4	-23.9	27	3.0
600	30	4,085	-14.2	-26.9	27	3.3
550	30	4,739	-18.5	-31.4	27	4.4
500	30	5,444	-23.1	-35.7	27	5.0
450	30	6,207	-28.6	-40.4	28	5.7
400	30	7,040	-34.9	-45.9	26	5.3
350	30	7,961	-41.7	-48.3	26	6.8
300	29	8,984	-48.7		28	6.6
250	29	10,166	-53.2		28	5.8
200	29	11,610	-50.9		27	8.5
175	29	12,481	-50.3		27	8.3
150	29	13,487	-50.2		27	8.4
125	29	14,677	-50.5		26	8.0
100	29	16,133	-50.3		25	7.1
80	29	17,587	-50.6		24	6.4
70	29	18,459	-50.4		24	5.8
60	29	19,464	-50.5		25	5.2
50	29	20,654	-50.3		23	4.7
40	28	22,110	-50.0		24	4.8
30	26	23,991	-49.6		24	3.9
25	23	25,174	-49.9		25	3.4
20	23	26,633	-49.9		27	2.3
15	22	28,518	-48.7		28	3.4
10	11	31,187	-46.2		30	4.7
7	7	33,571	-42.5			

Standard pressure surface (mb)	SALEM, ILL. 996 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	174	17.4	16.1	09	.9
1000						
950	30	585	19.0	13.0	18	2.9
900	30	1,049	16.3	11.3	21	4.1
850	30	1,534	13.9	8.5	22	5.0
800	30	2,044	11.8	3.5	23	5.2
750	30	2,583	9.3	.1	24	5.4
700	30	3,152	6.2	-4.4	24	6.0
650	30	3,756	2.5	-7.7	24	7.0
600	30	4,400	-1.1	-12.1	24	7.5
550	30	5,089	-4.9	-19.2	25	8.0
500	30	5,832	-9.5	-22.3	25	8.8
450	29	6,638	-14.3	-29.4	26	9.5
400	29	7,521	-20.5	-35.1	26	10.9
350	29	8,498	-27.7	-40.8	26	12.8
300	28	9,586	-36.0	-47.9	27	15.6
250	28	10,827	-45.6		27	18.1
200	28	12,281	-55.5		27	21.6
175	28	13,124	-59.7		27	22.8
150	28	14,078	-63.9		27	20.3
125	28	15,185	-67.3		27	16.1
100	28	16,527	-67.8		27	11.1
80	28	17,878	-65.5		28	5.6
70	28	18,695	-63.3		30	3.2
60	28	19,648	-61.0		30	1.7
50	28	20,789	-58.2		02	.8
40	28	22,202	-55.6		31	.3
30	26	24,048	-51.9		07	1.6
25	22	25,247	-50.6		08	2.7
20	21	26,705	-48.4		07	3.7
15	17	28,619	-46.1		09	5.7
10	12	31,354	-42.4		09	3.3
7	5	33,822	-40.9			

Standard pressure surface (mb)	SALEM, OREG. 1009 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	61	11.4	8.4	20	.8
1000	27	147	13.6	9.5	01	.7
950	30	569	13.4	7.1	01	.8
900	30	1,024	12.8	4.4	25	.7
850	30	1,503	10.9	.5	24	1.9
800	30	2,007	8.6	-2.3	25	2.7
750	30	2,538	6.0	-6.5	26	3.1
700	30	3,100	3.0	-11.6	27	4.7
650	30	3,697	-.2	-14.6	27	5.7
600	30	4,333	-3.9	-18.5	27	6.6
550	30	5,015	-7.9	-21.7	27	7.9
500	30	5,749	-12.6	-25.9	27	9.1
450	30	6,545	-17.9	-30.9	27	10.7
400	30	7,415	-24.4	-37.8	28	12.7
350	30	8,377	-31.7	-43.3	28	14.1
300	30	9,444	-40.4	-51.2	28	16.4
250	30	10,663	-49.3		27	17.2
200	30	12,105	-55.2		27	17.1
175	30	12,954	-57.1		27	16.8
150	30	13,925	-59.0		27	16.1
125	30	15,065	-60.5		27	12.9
100	29	16,454	-61.0		27	9.4
80	29	17,842	-60.4		27	4.9
70	29	18,675	-59.5		27	4.6
60	28	19,648	-58.7		28	2.3
50	28	20,796	-57.9		30	1.1
40	28	22,206	-56.8		01	1.0
30	27	24,044	-54.3		04	1.6
25	27	25,218	-52.6		02	1.1
20	26	26,674	-50.6		30	1.6
15	23	28,577	-47.6		31	3.1
10	18	31,252	-44.1		31	3.5
7						

Standard pressure surface (mb)	SALT LAKE CITY, UTAH 873 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,288	11.9	5.4	16	2.7
1000						
950						
900						
850	30	1,508	14.3	2.9	18	2.4
800	30	2,018	12.1	-.9	22	2.3
750	30	2,556	8.8	-3.4	26	2.4
700	30	3,123	4.9	-6.8	26	4.4
650	30	3,724	.8	-10.2	27	5.8
600	30	4,362	-3.4	-13.5	26	6.7
550	30	5,044	-8.2	-17.9	27	8.1
500	30	5,778	-12.6	-24.1	27	8.7
450	30	6,574	-18.0	-30.5	28	10.1
400	30	7,444	-24.3	-35.9	28	11.8
350	30	8,406	-31.6	-43.0	28	12.9
300	30	9,476	-39.8	-50.2	28	14.5
250	30	10,700	-47.7		27	15.8
200	30	12,151	-54.0		28	18.0
175	30	13,002	-56.6		28	18.4
150	30	13,975	-59.2		28	15.9
125	30	15,109	-62.3		28	12.6
100	30	16,481	-63.5		28	7.9
80	30	17,854	-62.7		28	[illegible]
70	30	18,679	-61.9		31	2.0
60	30	19,636	-60.7		01	1.1
50	29	20,774	-59.3		03	1.5
40	29	22,178	-57.2		02	.9
30	26	24,011	-53.8		34	.9
25	26	25,188	-51.7		32	1.4
20	23	26,638	-49.8		32	.7
15	18	28,526	-47.6		03	.9
10	8	31,214	-45.1			
7						

RAWINSONDE DATA

Average monthly values

SAN DIEGO, CALIF.
999 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	124	16.5	12.5	20	.5
1000	8	130	16.6	11.6		
950	30	549	15.4	10.8	23	.4
900	30	1,009	17.9	1.6	29	.6
850	30	1,499	19.1	-3.9	30	2.3
800	30	2,017	17.2	-5.7	28	2.1
750	30	2,565	14.3	-8.3	26	2.1
700	30	3,143	11.1	-10.8	26	2.4
650	30	3,758	8.1	-14.1	27	3.4
600	30	4,413	4.2	-17.4	28	4.1
550	30	5,115	-.5	-21.3	28	4.9
500	30	5,868	-6.2	-25.9	28	6.8
450	30	6,683	-12.4	-31.2	28	7.2
400	30	7,570	-19.4	-36.7	29	8.1
350	30	8,551	-27.0	-43.0	28	8.6
300	30	9,639	-36.0	-51.0	28	10.3
250	30	10,862	-44.9		27	12.6
200	30	12,342	-54.5		27	17.1
175	30	13,188	-59.3		26	16.5
150	30	14,141	-64.5		26	14.5
125	30	15,244	-68.6		26	11.5
100	30	16,572	-70.2		28	5.9
80	29	17,909	-67.6		34	1.3
70	29	18,719	-64.7		07	2.5
60	29	19,667	-61.9		10	3.3
50	29	20,802	-59.5		09	4.1
40	29	22,208	-56.8		08	6.4
30	29	24,046	-53.3		09	8.8
25	28	25,226	-51.2		09	9.2
20	28	26,685	-48.9		09	8.4
15	25	28,580	-46.7		08	7.8
10	8	31,320	-43.9			
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5						

SAN JUAN, P. R.
1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	6	26.1	22.4	14	1.5
1000	30	133	25.4	22.7	10	3.1
950	30	585	22.6	20.1	10	6.7
900	30	1,055	19.7	16.7	10	6.6
850	30	1,547	16.8	12.0	10	6.4
800	30	2,063	14.7	7.7	10	6.1
750	30	2,607	12.0	3.0	10	5.9
700	30	3,182	8.8	-1.8	10	5.0
650	29	3,791	5.2	-6.9	11	4.0
600	29	4,441	1.3	-10.8	10	3.3
550	29	5,136	-2.8	-15.1	11	2.3
500	29	5,885	-7.4	-19.5	10	1.8
450	29	6,699	-12.0	-23.9	08	1.5
400	28	7,591	-17.8	-29.8	03	1.2
350	28	8,579	-24.8	-37.1	36	1.4
300	28	9,678	-33.5	-45.8	36	2.2
250	28	10,931	-43.8		01	2.5
200	28	12,392	-55.6		35	3.5
175	28	13,232	-61.4		33	4.1
150	28	14,173	-67.8		32	4.1
125	28	15,259	-71.4		32	1.7
100	27	16,574	-72.6		08	2.9
80	27	17,892	-69.7		08	7.4
70	26	18,690	-67.4		08	9.5
60	26	19,626	-64.6		08	11.8
50	26	20,748	-61.5		09	13.0
40	26	22,140	-58.8		09	14.4
30	24	23,966	-54.3		09	18.2
25	22	25,143	-52.6		09	20.1
20	21	26,597	-49.3		09	21.8
15	20	28,498	-45.0		09	24.9
10	8	31,240	-39.6			
7						
5						

* SAULT STE MARIE, MICH.
991 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	221	9.1	6.5	25	.1
1000						
950	30	572	11.1	6.0	27	2.9
900	30	1,022	8.5	4.2	27	5.0
850	30	1,493	5.9	1.5	27	7.4
800	30	1,988	3.9	-5.1	27	8.9
750	30	2,512	2.2	-8.4	27	10.0
700	30	3,067	.1	-12.2	28	11.0
650	30	3,658	-2.7	-14.6	28	12.7
600	30	4,289	-5.7	-18.7	27	14.7
550	30	4,967	-9.2	-23.5	28	16.7
500	30	5,698	-13.7	-28.4	28	18.1
450	30	6,491	-18.8	-33.6	28	19.0
400	30	7,358	-25.1	-38.6	28	21.1
350	30	8,317	-32.2	-44.3	28	23.0
300	30	9,363	-40.5	-48.7	28	26.5
250	30	10,601	-49.4		28	29.7
200	30	12,042	-55.5		28	29.6
175	30	12,890	-57.3		28	27.3
150	30	13,861	-58.5		28	23.3
125	30	15,004	-60.1		28	19.2
100	30	16,397	-59.8		28	13.2
80	30	17,794	-59.1		28	9.4
70	29	18,637	-58.1		29	7.0
60	29	19,609	-57.4		29	4.9
50	29	20,765	-56.2		29	3.1
40	28	22,190	-54.3		29	2.4
30	28	24,048	-51.0		27	2.4
25	28	25,239	-49.3		27	2.2
20	28	26,711	-46.7		27	1.9
15	25	28,637	-44.2		24	1.3
10	22	31,364	-40.8		23	1.4
7	14	33,813	-37.8		27	2.6
5						

* SHREVEPORT, LA.
1005 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	20.1	19.1	10	1.0
1000	28	128	21.3	19.8	13	1.1
950	30	569	21.1	17.6	15	4.3
900	30	1,037	19.0	14.7	17	4.9
850	30	1,528	16.4	10.2	17	4.2
800	30	2,043	14.3	5.2	18	3.3
750	30	2,586	11.6	1.7	19	3.4
700	30	3,160	8.3	-3.2	19	3.7
650	30	3,769	4.8	-6.6	20	3.4
600	30	4,418	1.3	-12.7	21	4.2
550	30	5,114	-2.1	-17.2	22	5.0
500	30	5,865	-6.6	-21.2	22	6.1
450	30	6,681	-11.6	-24.6	23	6.1
400	30	7,573	-17.4	-31.4	24	7.3
350	30	8,563	-24.4	-38.6	24	8.4
300	30	9,665	-32.7	-45.3	25	10.8
250	30	10,923	-42.6		26	13.3
200	30	12,393	-53.8		26	16.8
175	30	13,240	-59.9		26	15.8
150	30	14,188	-66.5		26	15.2
125	30	15,277	-71.8		27	11.5
100	28	16,562	-73.2		26	5.7
80	28	17,902	-69.1		32	1.4
70	28	18,707	-65.3		08	1.5
60	28	19,654	-62.2		08	2.3
50	28	20,789	-59.3		09	4.5
40	27	22,194	-57.0		08	6.0
30	25	24,030	-53.5		09	8.6
25	23	25,207	-51.5		09	9.2
20	23	26,667	-47.8		09	9.4
15	22	28,572	-46.0		09	8.5
10	21	31,288	-43.2		09	7.9
7	18	33,716	-39.1		10	6.8
5	11	36,070	-35.6			

SPOKANE, WASH.
932 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	720	10.7	3.7	16	1.5
1000						
950						
900	30	1,016	13.5	2.3	20	1.1
850	30	1,496	11.4	-.6	24	1.9
800	30	2,000	8.4	-2.8	25	3.0
750	30	2,530	5.1	-5.8	25	4.0
700	30	3,090	1.7	-8.7	26	4.6
650	30	3,685	-1.1	-13.3	26	5.7
600	30	4,319	-4.7	-16.3	26	6.8
550	30	4,998	-9.0	-20.8	26	8.2
500	30	5,729	-13.9	-27.2	27	8.3
450	30	6,522	-19.1	-31.5	27	9.0
400	30	7,387	-25.7	-36.9	27	9.6
350	30	8,344	-33.0	-42.7	27	10.0
300	30	9,406	-41.4	-49.5	28	11.0
250	30	10,622	-49.4		28	13.4
200	30	12,064	-54.6		28	15.2
175	30	12,918	-55.4		28	14.6
150	30	13,897	-56.7		28	12.8
125	30	15,048	-58.5		28	12.5
100	29	16,448	-58.9		28	8.7
80	29	17,848	-58.6		28	6.5
70	29	18,690	-57.7		28	5.0
60	29	19,663	-57.6		28	3.6
50	29	20,815	-57.1		30	2.3
40	27	22,237	-56.0		34	1.7
30	27	24,075	-54.1		36	1.3
25	26	25,242	-53.0		34	1.5
20	26	26,686	-51.4		30	2.1
15	22	28,560	-48.7		29	3.4
10	15	31,255	-45.2		27	6.5
7	9	33,651	-41.1			
5						

* SWAN ISLAND, W. I.
1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	27.0	24.4	11	3.6
1000	30	101	26.8	24.2	11	4.2
950	30	554	23.2	21.5	12	5.6
900	30	1,025	20.6	16.8	12	6.0
850	30	1,519	17.7	13.2	12	6.0
800	30	2,036	15.1	9.0	11	5.7
750	30	2,581	12.3	4.4	11	5.3
700	30	3,157	9.2	-.4	11	4.7
650	30	3,768	5.9	-3.4	11	4.6
600	30	4,419	2.1	-8.0	11	4.5
550	30	5,117	-2.0	-12.7	10	4.1
500	30	5,869	-6.5	-17.6	10	3.9
450	30	6,685	-11.5	-23.2	09	3.3
400	30	7,579	-17.2	-28.9	09	3.1
350	29	8,570	-23.9	-35.9	08	3.2
300	29	9,674	-32.3	-42.9	05	2.0
250	29	10,933	-42.3		03	1.8
200	27	12,403	-54.4		35	3.0
175	26	13,245	-61.2		36	4.7
150	26	14,186	-67.9		02	6.8
125	26	15,264	-74.0		04	7.9
100	25	16,559	-75.0		07	8.0
80	25	17,866	-70.9		09	9.3
70	24	18,665	-67.4		09	10.1
60	22	19,598	-65.0		08	9.9
50	22	20,718	-62.1		08	11.8
40	21	22,105	-59.2		09	14.7
30	20	23,926	-54.6		09	17.2
25	19	25,097	-52.8		09	19.0
20	19	26,548	-49.9		09	21.3
15	18	28,448	-46.0		09	25.0
10	16	31,175	-41.8		09	28.5
7	12	33,603	-39.8			
5						

TAMPA, FLA.
1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	23.6	22.5	09	1.8
1000	30	136	24.4	23.0	11	2.5
950	30	586	22.7	19.7	14	2.9
900	30	1,057	20.1	15.7	15	2.6
850	30	1,548	17.1	12.1	15	2.5
800	30	2,065	14.4	7.8	14	2.4
750	30	2,608	11.4	4.8	15	2.2
700	30	3,182	8.6	-.1	15	1.4
650	30	3,792	5.2	-3.5	15	.7
600	30	4,442	1.6	-8.4	02	.2
550	30	5,139	-2.1	-13.6	36	.5
500	30	5,890	-6.7	-20.0	35	1.0
450	30	6,705	-11.8	-25.5	36	1.7
400	30	7,597	-17.6	-32.4	35	3.0
350	30	8,586	-24.6	-38.8	35	4.2
300	30	9,687	-33.1	-46.6	35	4.6
250	29	10,942	-42.7		35	6.3
200	29	12,409	-54.3		34	8.6
175	29	13,253	-60.6		35	8.8
150	29	14,197	-67.0		35	9.6
125	29	15,285	-71.5		36	6.6
100	29	16,594	-72.9		03	4.6
80	29	17,913	-69.2		06	4.7
70	29	18,716	-66.5		07	5.6
60	29	19,658	-63.1		08	8.6
50	28	20,791	-59.8		09	10.4
40	27	22,198	-56.6		09	12.6
30	27	24,039	-52.9		09	13.8
25	27	25,220	-50.9		09	13.7
20	25	26,681	-47.9		08	14.8
15	24	28,593	-45.3		09	16.6
10	20	31,323	-40.6		09	16.0
7	9	33,793	-37.0			
5						

TOPEKA, KANS.
984 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	268	16.8	15.1	06	.2
1000						
950	30	571	16.7	13.6	16	1.6
900	30	1,031	15.0	11.3	22	2.8
850	30	1,514	13.2	5.9	23	3.3
800	30	2,024	11.6	2.4	23	4.7
750	30	2,562	8.8	-1.4	24	5.5
700	30	3,130	5.8	-6.1	24	5.9
650	30	3,733	2.2	-8.0	23	6.1
600	30	4,375	-1.7	-11.1	24	6.1
550	30	5,063	-5.5	-16.4	24	7.4
500	30	5,804	-10.3	-23.5	24	8.3
450	30	6,609	-15.1	-29.4	24	9.6
400	30	7,488	-21.4	-34.7	25	12.1
350	30	8,462	-28.5	-40.9	25	14.7
300	30	9,545	-36.6	-46.9	25	17.0
250	30	10,785	-45.5		25	19.9
200	30	12,242	-54.8		25	23.8
175	30	13,088	-58.6		26	24.0
150	30	14,048	-62.8		26	22.3
125	29	15,164	-65.7		27	16.9
100	28	16,516	-66.9		27	10.2
80	28	17,872	-64.3		28	4.6
70	26	18,694	-62.8		30	2.4
60	26	19,650	-60.3		32	1.8
50	26	20,793	-58.0		01	1.0
40	26	22,209	-55.0		34	.5
30	26	24,061	-52.3		09	1.6
25	26	25,245	-50.7		07	1.2
20	24	26,710	-48.4		07	2.9
15	20	28,609	-46.1		09	3.6
10	15	31,314	-43.8		09	3.2
7	6	33,675	-41.6			
5						

TRUK, CAROLINE IS.
+ 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	2	28.7	24.6	07	2.6
1000	30	104	27.4	23.2	08	3.1
950	30	557	23.8	21.3	09	5.3
900	30	1,029	20.8	17.6	10	6.6
850	30	1,523	17.9	13.7	10	7.2
800	30	2,041	15.5	10.1	10	7.7
750	30	2,587	12.8	6.8	10	7.9
700	30	3,165	9.8	2.4	10	7.8
650	30	3,777	6.1	-.6	10	8.0
600	30	4,430	2.7	-3.7	10	7.9
550	30	5,130	-.9	-7.8	09	7.1
500	30	5,886	-5.3	-12.8	09	6.8
450	30	6,706	-9.7	-19.0	09	5.2
400	30	7,607	-15.4	-25.3	09	3.8
350	30	8,605	-22.3	-33.5	08	3.6
300	30	9,716	-30.7	-42.4	09	2.8
250	30	10,983	-41.2		01	.8
200	30	12,458	-53.8		29	3.1
175	30	13,303	-60.7		28	4.7
150	28	14,243	-68.2		26	7.0
125	28	15,319	-75.3		26	5.2
100	28	16,596	-77.7		08	4.1
80	27	17,890	-71.7		09	6.3
70	27	18,686	-67.8		09	4.4
60	27	19,617	-65.9		09	4.3
50	25	20,733	-62.8		09	5.0
40	24	22,113	-60.1		09	6.1
30	22	23,918	-56.3		09	9.9
25	22	25,083	-53.8		10	10.7
20	20	26,526	-50.8		10	14.0
15	19	28,409	-47.7		09	22.5
10	11	31,126	-41.3			
7						
5						

* TUCSON, ARIZ.
923 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	789	20.0	4.6	15	2.7
1000						
950						
900	30	1,009	24.2	3.4	16	2.0
850	30	1,506	21.7	1.1	22	1.0
800	30	2,028	18.0	-.9	22	2.1
750	30	2,576	13.9	-2.2	21	4.1
700	30	3,153	9.6	-5.6	22	5.1
650	30	3,764	5.6	-8.5	23	5.1
600	30	4,413	1.5	-14.2	25	4.7
550	30	5,109	-2.4	-21.0	28	5.6
500	30	5,859	-7.2	-26.8	30	7.2
450	30	6,672	-12.7	-31.4	30	9.0
400	30	7,559	-19.4	-37.1	29	10.5
350	30	8,540	-26.9	-43.4	29	11.9
300	30	9,630	-35.1	-49.9	27	15.3
250	30	10,878	-43.8		27	18.6
200	30	12,344	-53.7		26	21.9
175	30	13,192	-59.3		26	21.7
150	30	14,143	-65.0		26	19.5
125	30	15,243	-69.5		27	13.9
100	30	16,564	-71.1		28	6.4
80	30	17,891	-68.4		35	.8
70	30	18,698	-65.4		07	2.1
60	30	19,643	-62.5		09	2.9
50	29	20,772	-59.8		09	5.2
40	29	22,173	-57.5		08	7.0
30	29	24,008	-53.6		09	9.6
25	28	25,185	-51.8		09	9.3
20	27	26,636	-49.3		09	8.8
15	24	28,534	-46.8		08	8.4
10	24	31,241	-43.7		08	7.7
7	20	33,655	-40.0		10	7.5
5	8	35,975	-36.4			

* VANDENBERG AFB, CALIF.
1003 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	100	13.1	11.0	35	.5
1000	27	127	13.3	10.9	35	.9
950	30	557	15.9	8.5	01	3.2
900	30	1,019	19.1	1.5	02	2.8
850	30	1,509	18.1	-2.8	01	3.1
800	30	2,026	15.7	-6.2	35	2.5
750	30	2,570	13.2	-9.1	33	2.9
700	30	3,146	10.1	-11.4	32	3.8
650	30	3,759	7.4	-13.9	31	4.3
600	30	4,414	3.7	-16.7	30	4.9
550	30	5,114	-.9	-20.7	30	5.7
500	30	5,867	-6.3	-25.5	30	6.9
450	30	6,681	-12.4	-30.7	29	7.5
400	30	7,569	-19.6	-37.1	29	8.3
350	30	8,548	-27.4	-43.6	29	9.2
300	30	9,635	-36.1	-50.8	28	9.7
250	30	10,876	-45.4		28	11.4
200	30	12,333	-54.9		27	14.2
175	30	13,177	-59.7		27	13.6
150	30	14,131	-64.1		27	13.3
125	30	15,236	-68.0		27	11.9
100	29	16,569	-69.5		27	6.8
80	27	17,906	-67.1		30	2.0
70	27	18,717	-64.7		34	.9
60	27	19,665	-61.9		06	1.3
50	27	20,801	-59.3		09	2.1
40	27	22,206	-57.0		08	3.5
30	26	24,043	-53.5		08	5.3
25	24	25,213	-51.7		09	5.7
20	23	26,666	-49.3		09	5.7
15	21	28,560	-47.5		08	4.4
10	18	31,263	-45.0		07	5.7
7	12	33,660	-41.4			

VICTORIA, TEXAS
1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	33	22.4	21.2	01	1.5
1000	28	110	23.9	22.4	06	1.1
950	30	551	22.3	19.7	15	1.8
900	30	1,022	20.0	16.0	16	1.7
850	30	1,514	17.7	11.0	17	1.5
800	30	2,031	15.0	8.3	18	1.0
750	30	2,576	12.1	4.1	17	.6
700	30	3,151	8.7	.2	23	.6
650	30	3,762	5.6	-3.6	23	.7
600	30	4,413	2.0	-6.7	24	1.5
550	30	5,110	-1.8	-11.2	25	2.0
500	30	5,864	-5.9	-18.7	24	3.0
450	30	6,682	-10.7	-23.4	24	3.0
400	30	7,578	-16.5	-30.0	26	4.5
350	30	8,571	-23.3	-36.8	26	5.4
300	30	9,678	-31.5	-43.8	26	7.3
250	30	10,942	-41.5	-51.0	26	8.4
200	30	12,417	-53.6		26	9.5
175	30	13,263	-60.0		27	9.5
150	30	14,209	-67.0		27	7.5
125	30	15,291	-73.7		27	6.0
100	29	16,582	-75.4		26	1.4
80	28	17,890	-70.0		05	2.9
70	28	18,692	-66.4		09	5.4
60	27	19,632	-63.5		10	6.0
50	27	20,760	-60.8		09	7.6
40	27	22,158	-57.7		08	10.2
30	26	23,989	-53.9		09	13.0
25	26	25,167	-51.6		09	13.6
20	24	26,624	-48.7		09	13.7
15	21	28,531	-45.8		09	13.9
10	12	31,282	-40.5		09	13.7
7						

* WAKE IS., PACIFIC AREA
1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	27.3	24.6	08	5.9
1000	30	139	26.3	23.3	08	6.8
950	30	591	22.8	21.0	09	7.8
900	30	1,061	19.7	16.3	09	8.0
850	30	1,552	16.6	13.3	09	8.1
800	30	2,068	14.3	9.4	09	7.3
750	30	2,611	11.7	4.5	09	7.2
700	30	3,186	8.8	-1.2	09	7.1
650	29	3,797	5.3	-5.6	09	7.0
600	29	4,446	1.6	-11.6	09	6.5
550	29	5,142	-2.5	-16.3	08	5.9
500	29	5,892	-7.3	-21.5	09	5.2
450	28	6,704	-12.5	-27.6	09	5.8
400	28	7,592	-18.8	-34.9	09	4.8
350	28	8,575	-26.4	-40.3	10	3.8
300	28	9,667	-35.0	-46.8	09	2.3
250	28	10,913	-44.9		01	1.1
200	28	12,369	-55.8		28	2.5
175	28	13,208	-61.3		28	3.2
150	28	14,152	-66.6		28	1.7
125	28	15,244	-70.6		11	1.1
100	27	16,558	-73.1		08	4.8
80	27	17,869	-71.7		09	8.7
70	27	18,663	-68.5		09	10.6
60	26	19,593	-65.8		09	11.6
50	26	20,709	-62.7		09	14.0
40	26	22,094	-59.8		09	14.9
30	22	23,912	-55.4		09	17.8
25	22	25,083	-52.4		09	20.3
20	21	26,538	-49.3		09	21.6
15	20	28,434	-46.7		09	25.2
10	12	31,169	-41.6		09	28.0
7						

* WALLOPS IS., VA. NASA
1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	20.0	18.3	02	1.1
1000	30	157	20.8	17.4	01	1.3
950	30	600	18.6	13.3	35	1.7
900	30	1,063	16.1	10.5	30	2.1
850	30	1,547	13.5	6.1	30	3.8
800	30	2,056	10.8	2.9	29	4.9
750	30	2,592	8.5	-3.1	29	5.4
700	30	3,160	5.7	-7.0	29	6.5
650	30	3,763	2.6	-10.3	28	7.3
600	30	4,407	-.9	-14.7	28	7.8
550	30	5,096	-4.8	-19.9	28	8.6
500	30	5,840	-9.3	-24.1	28	9.4
450	30	6,647	-14.6	-30.0	28	10.3
400	30	7,527	-21.0	-35.7	28	10.9
350	30	8,503	-28.2	-41.0	28	11.5
300	30	9,587	-36.7	-48.0	27	11.1
250	30	10,823	-46.5		28	12.6
200	30	12,273	-55.9		28	16.6
175	30	13,113	-60.4		29	18.3
150	30	14,065	-64.0		29	16.2
125	30	15,173	-67.0		29	13.8
100	30	16,517	-67.3		28	10.8
80	29	17,873	-64.6		29	5.7
70	29	18,692	-62.9		29	3.9
60	29	19,648	-60.3		30	2.1
50	28	20,792	-57.2		33	.9
40	27	22,211	-54.8		05	.9
30	27	24,065	-51.6		09	2.5
25	27	25,255	-49.5		09	2.7
20	25	26,717	-47.5		08	2.7
15	23	28,636	-45.6		08	2.5
10	18	31,365	-41.9		08	1.8
7	7	33,771	-39.6			

WASHINGTON DULLES INT. AP
1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	85	14.3	13.1	15	.1
1000	28	167	17.8	15.2	33	.3
950	30	602	17.8	11.1	31	1.6
900	30	1,063	15.7	7.7	29	3.3
850	30	1,547	12.9	5.1	28	4.8
800	30	2,055	11.0	.6	28	6.3
750	30	2,591	9.0	-4.6	28	6.9
700	30	3,160	5.8	-8.0	28	7.8
650	30	3,763	2.5	-10.5	28	8.7
600	30	4,406	-.9	-13.7	28	9.6
550	30	5,095	-5.2	-17.6	28	9.9
500	30	5,838	-9.2	-24.6	28	10.4
450	30	6,645	-14.4	-30.1	28	11.3
400	30	7,527	-20.7	-36.0	27	12.8
350	30	8,503	-27.9	-41.4	28	13.8
300	30	9,588	-36.6	-48.3	28	14.6
250	30	10,824	-46.9		28	16.4
200	30	12,271	-55.9		29	19.8
175	30	13,113	-59.7		29	20.2
150	30	14,070	-62.8		29	18.0
125	30	15,183	-66.3		29	14.5
100	29	16,537	-66.3		28	10.5
80	29	17,895	-64.1		29	6.5
70	28	18,714	-62.3		29	4.2
60	28	19,671	-60.0		31	2.2
50	28	20,817	-57.5		30	2.0
40	27	22,230	-55.0		01	.7
30	24	24,079	-51.6		08	.8
25	24	25,267	-49.9		07	1.5
20	23	26,731	-48.2		07	2.7
15	20	28,640	-45.9		10	2.2
10	8	31,390	-42.3			
7						

RAWINSONDE DATA

Average monthly values

WAYCROSS, GA.
1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point °	Resultant Wind Direction	Resultant Wind Speed M.P.H.
SURFACE	30	44	21.5	21.1	04	.7
1000	30	138	22.9	21.7	07	1.1
950	30	586	22.1	18.6	11	1.9
900	30	1,056	19.6	14.5	11	1.8
850	30	1,547	16.5	11.7	10	1.8
800	30	2,061	13.7	7.8	12	1.8
750	30	2,603	10.7	4.3	13	1.4
700	30	3,176	7.7	-1.7	13	.3
650	30	3,784	4.7	-6.4	28	.7
600	30	4,433	1.7	-10.9	29	1.3
550	30	5,130	-2.1	-17.0	29	1.8
500	30	5,881	-6.6	-22.3	30	3.2
450	30	6,696	-11.6	-26.9	31	3.7
400	30	7,588	-17.9	-33.2	31	4.0
350	30	8,576	-24.7	-39.1	32	4.9
300	30	9,676	-33.3	-47.6	32	6.0
250	30	10,930	-43.4		32	9.5
200	30	12,396	-54.3		32	12.0
175	30	13,241	-60.1		32	12.2
150	30	14,189	-65.7		32	10.1
125	30	15,263	-70.7		32	8.2
100	30	16,599	-71.6		35	3.8
80	30	17,927	-68.0		03	2.2
70	30	18,735	-65.3		05	2.9
60	30	19,681	-62.0		06	5.0
50	30	20,819	-58.6		08	7.1
40	30	22,230	-55.9		09	8.4
30	29	24,074	-52.2		09	9.7
25	27	25,258	-50.4		09	10.0
20	25	26,725	-48.2		09	10.8
15	19	28,626	-46.2		09	12.2
10	8	31,365	-41.2			

WINNEMUCCA, NEV.
872 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point °	Resultant Wind Direction	Resultant Wind Speed M.P.H.
SURFACE	30	1,312	7.2	-2.1	13	.7
1000						
950						
900						
850	30	1,523	14.2	-.5	05	.4
800	30	2,033	12.1	-2.8	28	1.5
750	30	2,570	8.4	-5.9	27	2.9
700	30	3,136	4.6	-9.5	27	4.1
650	30	3,736	1.0	-12.1	26	5.4
600	30	4,375	-2.8	-17.5	27	6.5
550	30	5,059	-7.0	-21.0	28	7.9
500	30	5,796	-11.7	-26.6	29	9.8
450	30	6,595	-17.0	-32.4	29	11.9
400	30	7,468	-23.5	-38.0	29	13.6
350	30	8,433	-30.7	-43.6	30	14.0
300	30	9,506	-39.4	-49.5	30	15.6
250	30	10,730	-48.4		30	15.7
200	30	12,174	-55.6		29	17.2
175	30	13,020	-57.9		29	16.6
150	30	13,986	-60.5		28	15.5
125	29	15,118	-62.8		28	10.8
100	29	16,487	-64.2		28	6.2
80	29	17,858	-62.8		28	3.0
70	29	18,683	-61.5		33	1.0
60	29	19,640	-60.8		03	.8
50	27	20,781	-59.0		05	1.9
40	27	22,189	-56.8		07	1.8
30	27	24,025	-53.4		05	1.2
25	24	25,212	-51.5		36	1.0
20	23	26,671	-48.9		34	.5
15	21	28,564	-46.8		36	.7
10	8	31,279	-44.7			

WINSLOW, ARIZ.
852 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point °	Resultant Wind Direction	Resultant Wind Speed M.P.H.
SURFACE	30	1,487	10.0	-1.5	20	.4
1000						
950						
900						
850	25	1,522	13.4	-.6	22	.4
800	30	2,028	16.4	-.9	23	2.8
750	30	2,574	12.9	-3.1	24	5.2
700	30	3,148	8.2	-5.4	24	5.1
650	30	3,755	3.9	-9.9	24	5.7
600	30	4,401	-.2	-15.2	26	6.0
550	30	5,092	-4.3	-20.9	27	7.2
500	30	5,837	-8.6	-26.7	28	8.4
450	30	6,646	-14.1	-31.7	29	10.6
400	30	7,528	-20.8	-37.5	29	13.0
350	30	8,503	-28.3	-43.2	29	13.8
300	30	9,586	-37.0	-50.1	28	16.6
250	30	10,824	-45.6		28	20.1
200	30	12,283	-53.8		27	21.4
175	30	13,132	-58.5		27	21.2
150	28	14,089	-63.0		27	19.0
125	27	15,201	-67.1		27	14.8
100	27	16,541	-68.8		28	7.1
80	27	17,883	-66.7		27	2.5
70	26	18,698	-64.1		06	.6
60	26	19,648	-61.4		10	1.5
50	26	20,787	-58.6		08	2.3
40	24	22,198	-56.7		08	3.7
30	24	24,040	-52.9		09	5.8
25	22	25,217	-51.0		09	5.4
20	20	26,678	-48.2		10	5.7
15	19	28,582	-47.1		08	4.4
10	11	31,250	-44.7			

YAKUTAT, ALASKA
1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point °	Resultant Wind Direction	Resultant Wind Speed M.P.H.
SURFACE	30	12	4.7	4.0	09	1.4
1000	26	105	9.1	4.7	11	1.8
950	30	522	7.8	2.2	14	4.0
900	30	966	5.1	-.5	15	4.3
850	30	1,430	2.2	-3.9	16	4.1
800	30	1,917	-.6	-6.7	16	4.4
750	30	2,431	-3.1	-11.1	17	4.6
700	30	2,974	-6.3	-16.6	18	4.6
650	30	3,550	-9.6	-20.1	18	4.5
600	30	4,164	-13.4	-24.2	18	4.4
550	30	4,820	-17.8	-28.2	20	5.3
500	30	5,526	-23.2	-32.2	20	7.1
450	30	6,289	-28.6	-37.8	21	7.7
400	30	7,122	-34.6	-43.5	21	8.7
350	24	8,060	-40.9	-42.0	22	9.3
300	24	9,069	-48.1		24	10.0
250	20	10,299	-53.0		25	9.7
200	20	11,731	-54.5		24	10.3
175	20	12,588	-53.6		24	9.4
150	20	13,581	-52.8		24	8.6
125	20	14,758	-52.8		24	8.4
100	19	16,196	-52.2		25	7.3
80	19	17,641	-52.3		25	7.1
70	19	18,505	-52.1		25	6.4
60	19	19,503	-52.4		25	6.1
50	19	20,681	-52.8		26	4.6
40	19	22,119	-53.3		26	3.8
30	18	23,976	-53.5		28	1.8
25	18	25,148	-53.7		30	.9
20	18	26,582	-53.9		32	1.5
15	18	28,436	-52.5		36	1.2
10	7	31,122	-49.2			

YAP, CAROLINE IS.
1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point °	Resultant Wind Direction	Resultant Wind Speed M.P.H.
SURFACE	30	14	28.0	24.4	09	2.4
1000	30	95	26.7	23.8	09	2.4
950	30	549	23.6	21.6	09	[illegible]
900	30	1,021	20.6	18.4	[illegible]	4.7
850	30	1,514	17.6	14.9	[illegible]	[illegible]
800	30	2,032	15.1	[illegible]	[illegible]	[illegible]
750	30	2,578	12.4	8.3	[illegible]	[illegible]
700	30	3,154	9.2	5.2	[illegible]	[illegible]
650	30	3,767	6.1	[illegible]	[illegible]	7.4
600	30	4,419	2.4	-2.1	[illegible]	7.7
550	30	5,118	-1.5	-5.4	[illegible]	7.1
500	30	5,873	-5.6	-10.6	[illegible]	[illegible]
450	30	6,693	-10.1	-16.4	09	5.7
400	30	7,592	-15.7	-22.9	08	5.4
350	30	8,590	-22.2	-31.3	07	4.7
300	30	9,701	-30.7	-39.3	07	3.6
250	30	10,969	-41.1		05	2.9
200	30	12,444	-53.8		02	3.5
175	30	13,288	-61.9		35	4.7
150	30	14,229	-68.7		33	3.3
125	30	15,301	-75.9		35	2.2
100	30	16,581	-76.9		08	[illegible]
80	30	17,877	-72.1		09	8.7
70	30	18,671	-68.6		08	8.8
60	30	19,601	-66.2		08	9.4
50	29	20,716	-62.7		09	9.4
40	28	22,100	-60.3		09	9.5
30	27	23,911	-56.0		09	12.5
25	27	25,076	-54.1		09	[illegible]
20	26	26,517	-51.0		09	[illegible]
15	24	28,409	-46.6		09	[illegible]
10	18	31,128	-42.5		09	[illegible]

YUCCA FLAT, NEV.
881 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point °	Resultant Wind Direction	Resultant Wind Speed M.P.H.
SURFACE	30	1,198	9.4	-9.6	32	1.0
1000						
950						
900						
850	30	1,503	18.5	-2.3	33	1.6
800	30	2,020	15.7	-4.5	29	.9
750	30	2,564	12.0	-7.1	25	1.1
700	30	3,136	7.8	-9.8	24	1.1
650	30	3,743	4.2	-12.5	27	2.0
600	30	4,390	.7	-17.1	28	4.4
550	30	5,083	-3.5	-21.9	29	7.7
500	30	5,829	-8.3	-26.5	29	9.2
450	30	6,638	-14.4	-31.9	29	11.3
400	30	7,519	-21.0	-37.8	29	13.5
350	29	8,491	-28.9	-44.3	29	15.3
300	29	9,571	-37.8	-51.3	29	17.0
250	29	10,805	-46.3		28	19.2
200	29	12,261	-54.2		28	19.6
175	28	13,108	-58.3		27	19.1
150	28	14,069	-62.2		27	17.6
125	28	15,187	-65.4		27	13.6
100	28	16,537	-67.0		28	8.9
80	26	17,882	-65.2		29	3.8
70	25	18,702	-63.5		32	1.3
60	25	19,653	-61.4		03	1.1
50	25	20,792	-58.7		06	1.6
40	24	22,197	-56.4		06	1.6
30	23	24,035	-53.5		09	2.3
25	21	25,212	-51.6		09	2.6
20	20	26,673	-49.4		09	2.9
15	19	28,573	-47.7		08	4.0
10	13	31,267	-45.8		07	3.9

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun.

SEPTEMBER 1973

ALBUQUERQUE, N. MEX.

Date	A M 78.7°	A M 75.7°	A M 70.7°	A M 60.0°	*	P M 60.0°	P M 70.7°	P M 75.7°	P M 78.7°
Air mass	4.19	3.36	2.51	1.67	*	1.67	2.51	3.36	4.19
Sep.									
1-----	0.79	0.87	1.01	1.14	----	----	----	0.84	0.77
2-----	.85	.94	1.04	1.19	1.37	1.18	1.05	.94	.84
3-----	.91	1.01	1.11	1.25	1.41	1.22	1.06	.96	.87
4-----	.94	1.04	1.14	1.27	1.41	1.27	1.14	1.03	.95
5-----	.87	.97	1.08	1.22	1.38	1.19	1.04	.94	.84
6-----	.81	.91	1.02	1.17	1.35	1.20	1.08	.98	.89
7-----	.84	.93	1.03	1.13	1.26	1.12	1.00	.90	.80
8-----	.73	.84	.93	1.08	1.34	1.11	.87	----	----
9-----	.66	.77	----	1.08	1.17	----	----	----	----
Averages	0.81	0.92	1.05	1.18	1.34	1.18	1.05	0.94	0.84

TUCSON, ARIZ.

Date	A M 78.7°	A M 75.7°	A M 70.7°	A M 60.0°	*	P M 60.0°	P M 70.7°	P M 75.7°	P M 78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Sep.									
1----	0.77	0.87	1.06	1.19	1.35	1.18	1.02	----	0.88
2-----	.87	.98	1.09	1.25	1.43	1.23	1.10	1.01	.92
3-----	.90	1.01	1.12	1.25	1.41	1.17	1.01	.88	.87
4-----	.73	.82	.92	1.11	1.32	----	----	----	----
5-----	----	----	----	----	1.27	.92	----	----	----
6-----	.66	.73	.87	1.07	1.29	1.04	.89	.76	.69
7-----	.61	.76	.90	1.07	1.27	.95	.77	.61	.53
8-----	.78	.87	1.03	1.19	1.35	1.08	.93	.80	.76
9-----	.69	.78	.94	1.11	1.36	1.08	----	----	----
10----	.69	.80	.90	1.10	1.35	1.18	1.01	.92	.82
11----	.85	.96	1.09	1.26	1.44	1.25	1.07	.96	.84
12----	.86	.95	1.07	1.24	1.40	1.23	1.06	.92	.80
13----	.74	.84	.97	1.14	1.33	1.13	.95	.81	.76
14----	.75	.83	.96	1.12	1.38	1.24	1.01	.85	.72
15----	.80	.87	----	1.11	----	1.09	----	.80	----
16----	.69	.80	.93	1.09	1.34	1.13	.96	----	----
17----	.79	.91	1.02	1.16	1.39	1.22	1.03	.92	.85
18----	.74	.85	.95	1.10	1.28	1.14	----	----	.76
19----	.69	.79	.90	1.11	1.33	1.17	1.04	.91	----
20----	.73	.82	.98	1.12	1.31	1.20	----	----	----
21----	.80	.90	1.01	1.20	1.39	1.26	1.14	1.02	.93
22----	.87	.98	1.10	1.24	1.44	1.29	1.12	1.02	.92
23----	.91	1.03	1.14	1.28	1.39	1.27	1.07	.92	.81
24----	.89	.98	1.09	1.24	1.38	1.29	1.09	.96	.86
25----	.94	1.05	1.17	1.36	1.45	1.30	1.11	1.01	.91
26----	.91	1.00	1.13	1.30	1.49	1.32	1.18	1.03	.94
27----	.93	1.03	1.12	1.30	1.40	1.26	1.11	1.00	.90
28----	.95	1.05	1.12	1.28	1.45	1.30	1.09	.97	.90
29----	.90	1.00	1.12	1.28	1.45	1.28	1.14	.99	.90
30----	.95	1.06	1.16	1.33	1.45	1.31	1.15	1.03	.92
Averages	0.81	0.91	1.05	1.19	1.38	1.19	1.05	0.92	0.85

OMAHA, NEBR.

Date	A M 78.7°	A M 75.7°	A M 70.7°	A M 60.0°	*	P M 60.0°	P M 70.7°	P M 75.7°	P M 78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78

NO DATA RECEIVED

MADISON, WIS.

Date	A M 78.7°	A M 75.7°	A M 70.7°	A M 60.0°	*	P M 60.0°	P M 70.7°	P M 75.7°	P M 78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Sep.									
5-----	S 0.81	S 0.88	S 1.03	S 1.17	S 1.32	----	----	----	----
6-----	----	S .97	S 1.08	S 1.22	----	----	----	----	----
10----	----	----	----	1.02	----	----	----	----	S 0.44
11----	----	----	----	1.22	1.35	----	----	----	----
14----	.83	S .72	S .89	S 1.05	----	----	----	----	----
18----	.82	.92	1.07	1.23	1.36	----	.92	----	----
20----	.97	1.05	1.15	1.29	----	----	----	----	----
22----	----	----	----	----	S 1.34	S 1.15	S 1.00	----	----
23----	S .88	S .97	S 1.09	----	----	----	----	----	----
Averages	0.86	0.92	1.05	1.54	1.34	1.15	0.96	----	0.44

Net radiation in langleys per day (midnight to midnight) at Palmer, Alaska. SEPTEMBER 19[illegible]

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	87	146	120	57	21	93	-10	101	58	111	11	52	16	45	31	-12	5	117	20	40	56	65	27	34	38	25	66	71	81	8		[illegible]

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average ([illegible] A) at Ames, Iowa

Date. . . .	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	[illegible]	15.06	13.4[illegible]	1.96	15.84	13.96	12.79	2.92	3.77	9.7[illegible]	14.14	9.87	2.19	11.38	5.41	7.92	7.13	11.11	11.9[illegible]	12.7[illegible]	[illegible].53	13.[illegible]	9.38	[illegible].58	11.[illegible]8	1.38	1.11	2.[illegible]8	.92	[illegible]		[illegible]

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code [illegible] defined in the August 1962 WMO circular entitled PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA.

Units: Milli-atm-cms

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Means

Data not received in time for publication.

REFERENCE NOTES

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES: Dates in the table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

+	And also on an earlier date or dates.
D	Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch of water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA - METRIC UNITS: Data from airport unless otherwise specified.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile data can be evaluated.

B	Number of days maximum 21.1°C. or above for Alaskan Stations.
Y	Peak Gust.
+	And also on an earlier date or dates.
U	Indicates Urban site.
R	Indicates Rural site.
Ø	Station pressures apply to elevations shown in the "Elevations" table of the annual issue of this publication.

Conversion formulae to English Units are as follows:

1 foot = 0.3048 meters
°F. = $\frac{9}{5}$ x °C + 32
1 inch = 25.4 millimeters
1 mile per hour = 0.447 meters per second

HEATING DEGREE DAYS: Data from airport unless otherwise specified.

U	Indicates Urban site.
R	Indicates Rural site.

COOLING DEGREE DAYS: Data from airport unless otherwise specified.

U	Indicates Urban site.
R	Indicates Rural site.

STORM SUMMARY:

°	Includes crop damage.
C	Crop damage.
*	No occurrence of storms or unusual weather phenomena reported.
@	Includes heavy sleet storm.
#	Freezing drizzle and freezing rain, commonly known as glaze.
Ø	For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
$	No Storm Data Report received for this State.
<>	Report Incomplete.
†	Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5 Million
7	$5 Million to $50 Million
8	$50 Million to $500 Million
9	$500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS:

1/	Flooding continued at the end of the month.
NA	Not available.

FLOOD STAGE DATA:

#	Highest Stage Observed
1/	Continued at end of month
___	Highest Stage of Record
E	Estimated
P	Provisional (Flood Stage)
U	Unknown

RAWINSONDE DATA (Average Monthly Values):

All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon. The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors. These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

*	Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.
+	Observations for these stations are scheduled at 0000 G.C.T.
†	Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION INTENSITIES: Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

()	Clouds Present
*	Values corresponding to true solar noon
BD	Blowing Dust
BN	Blowing Sand
D	Dust
DI	Intense Dust
DM	Moderate Dust
DS	Slight Dust
F	Fog
GF	Ground Fog
H	Haze
HI	Intense Haze
HM	Moderate Haze
HS	Slight Haze
I	Intense Haze-indeterminable
K	Smoke
KI	Intense Smoke
KM	Moderate Smoke
KS	Slight Smoke
M	Moderate Haze-indeterminable
N	Sand
S	Slight Haze-indeterminable

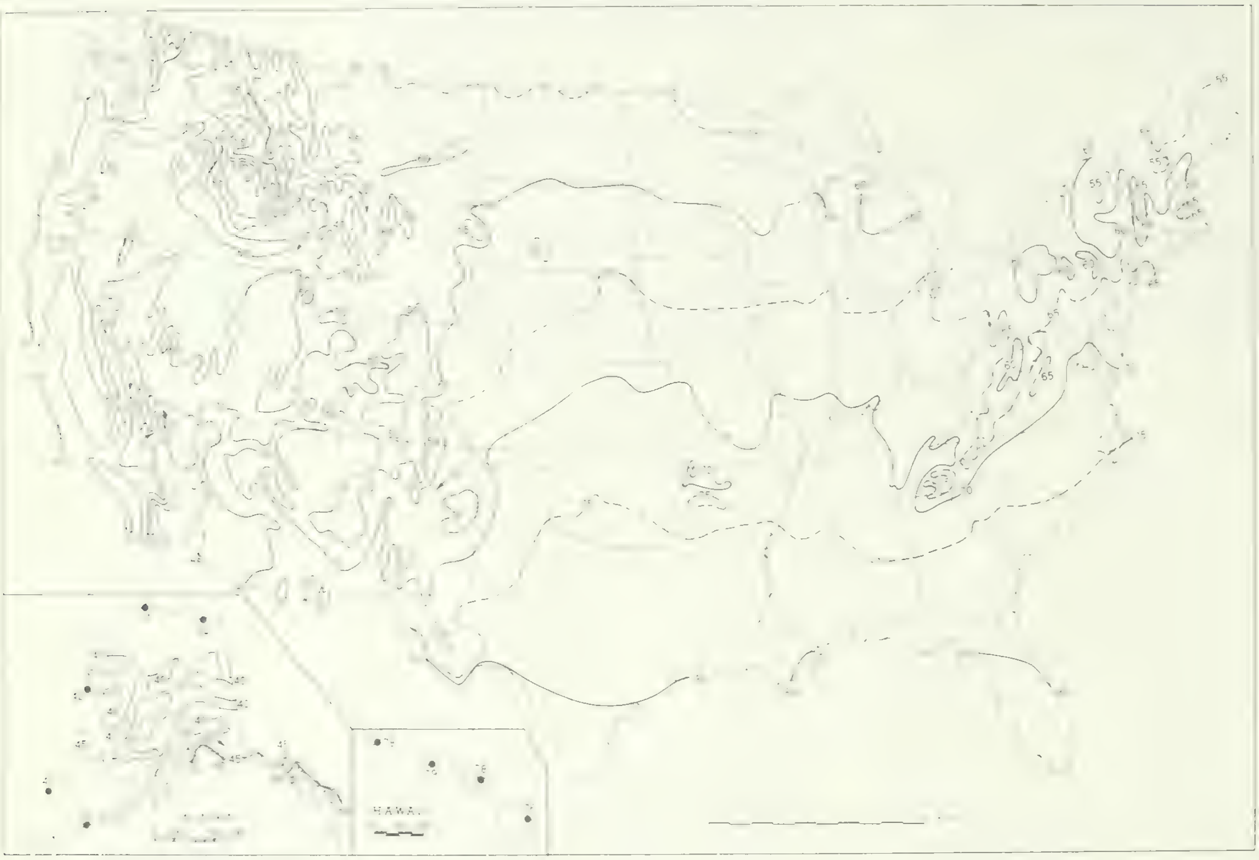
NET RADIATION: The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

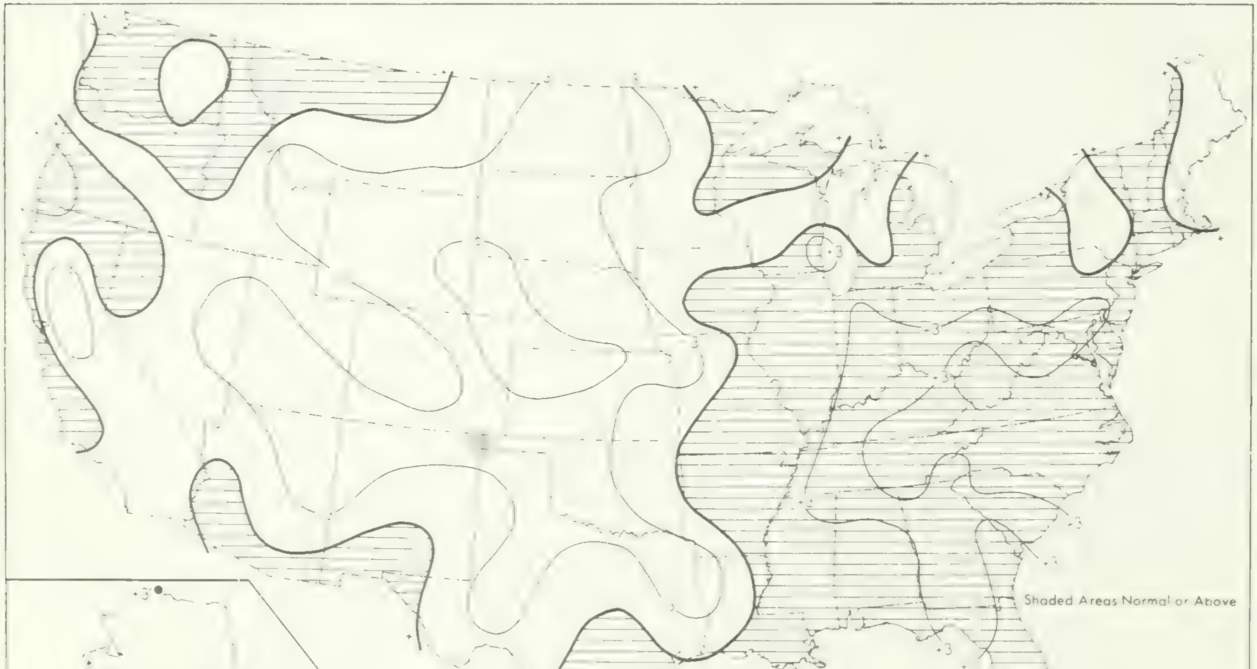
SOLAR ULTRA-VIOLET RADIATION DATA: These data are from an U-V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder. This instrument has not been checked by the NOAA, National Weather Service.

TOTAL OZONE DATA: The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded $\Omega\ \Omega\ \Omega$) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λs designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), September.


55
55
55
65
65
55
70
75
45
45
45
HAWAII

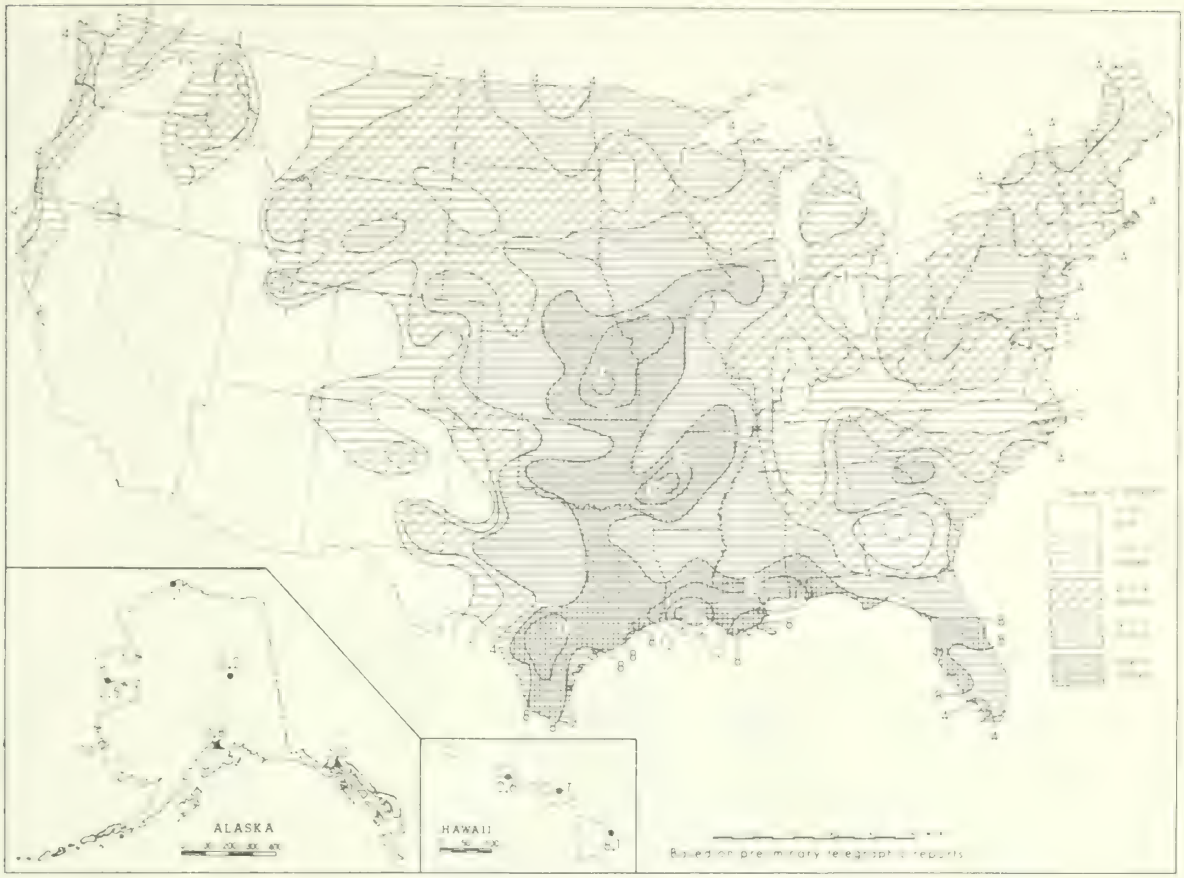
B. Temperature Departure from 30 - Year Mean (°F 1931-60), September 1973


+3
-3
-3
-3
+3
+3
-3
+3
+3
ALASKA
0 100 300 400
HAWAII
0 50 100

Shaded Areas Normal or Above

Based on preliminary telegraphic reports

Chart II. A. Total Precipitation (Inches), September 1972


ALASKA
HAWAII
Based on preliminary telegraphic reports

B. Percentage of Normal Precipitation, September 1973

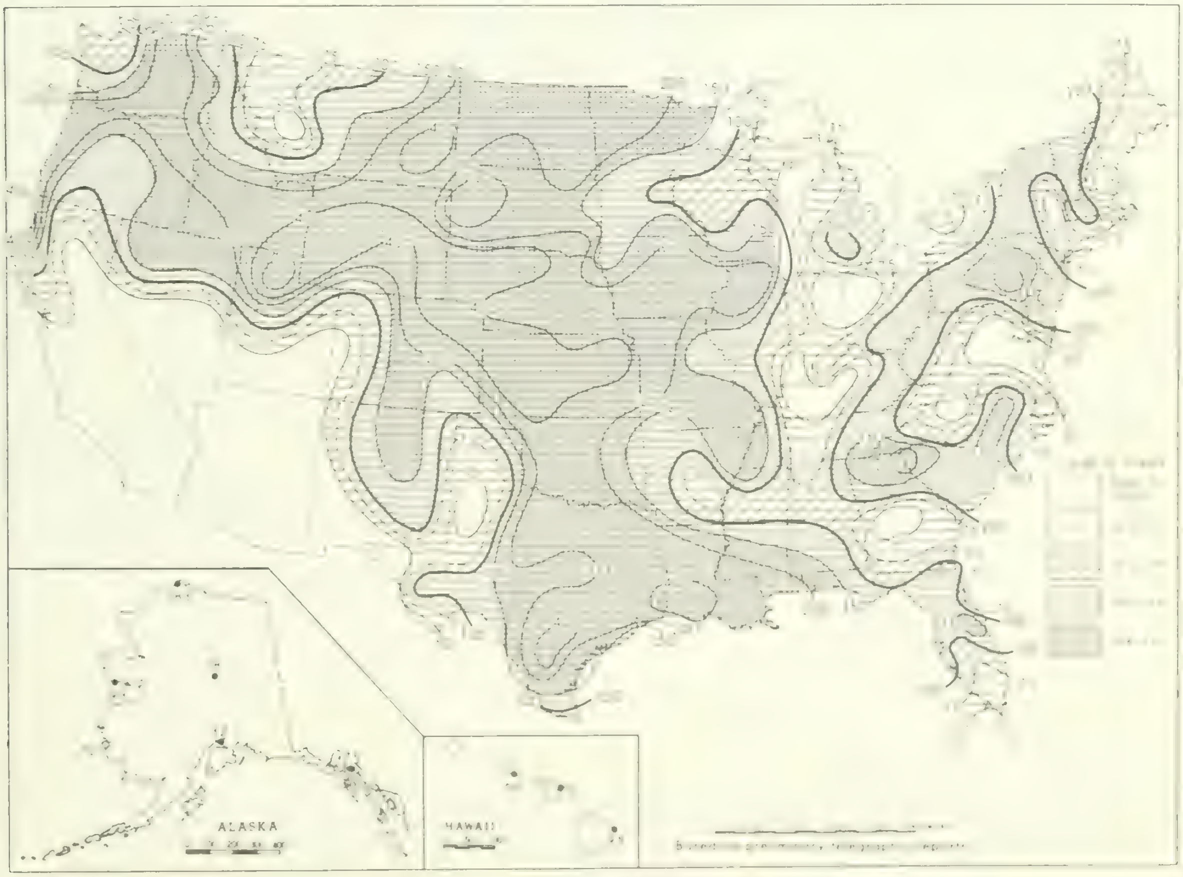
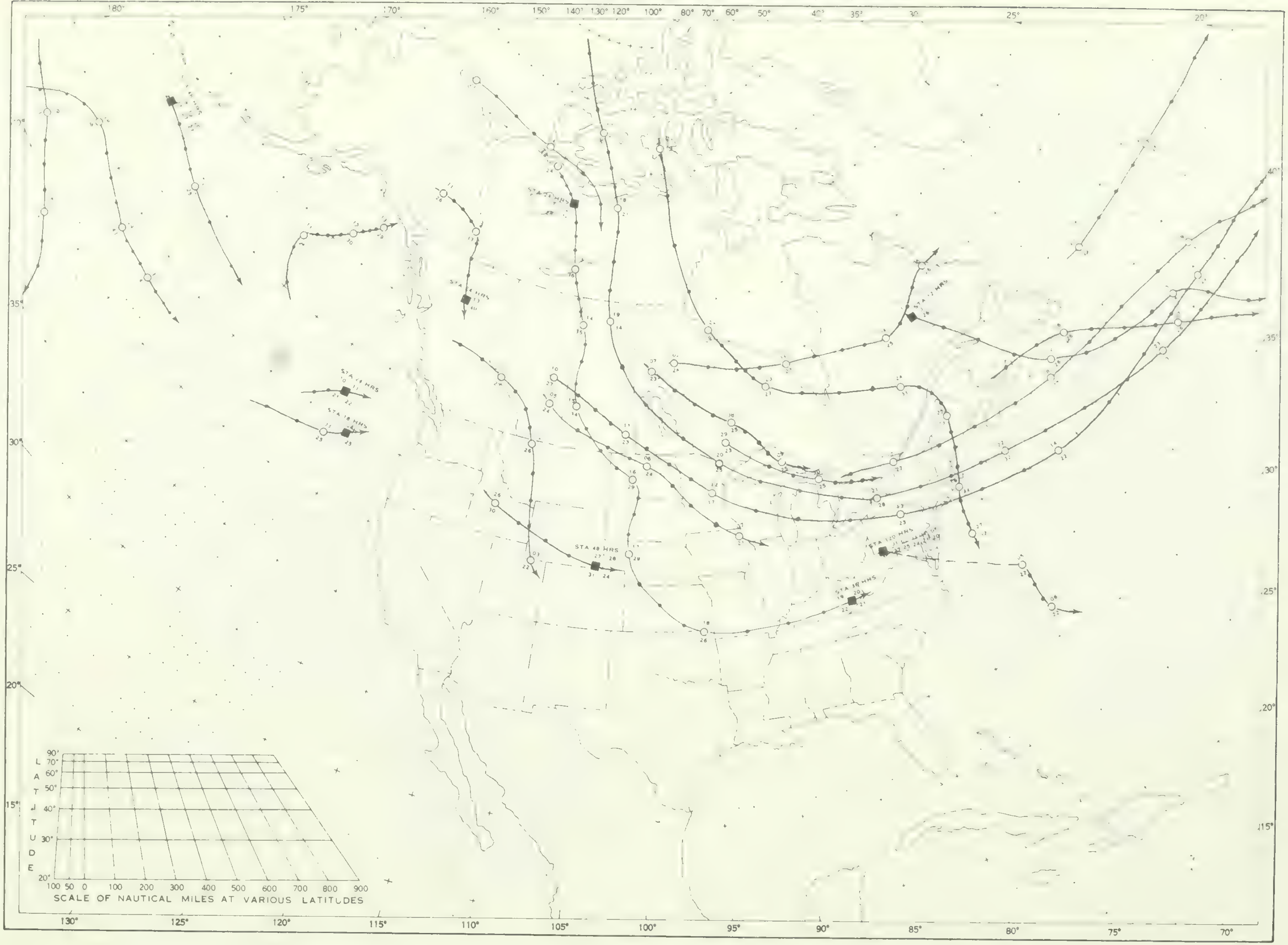
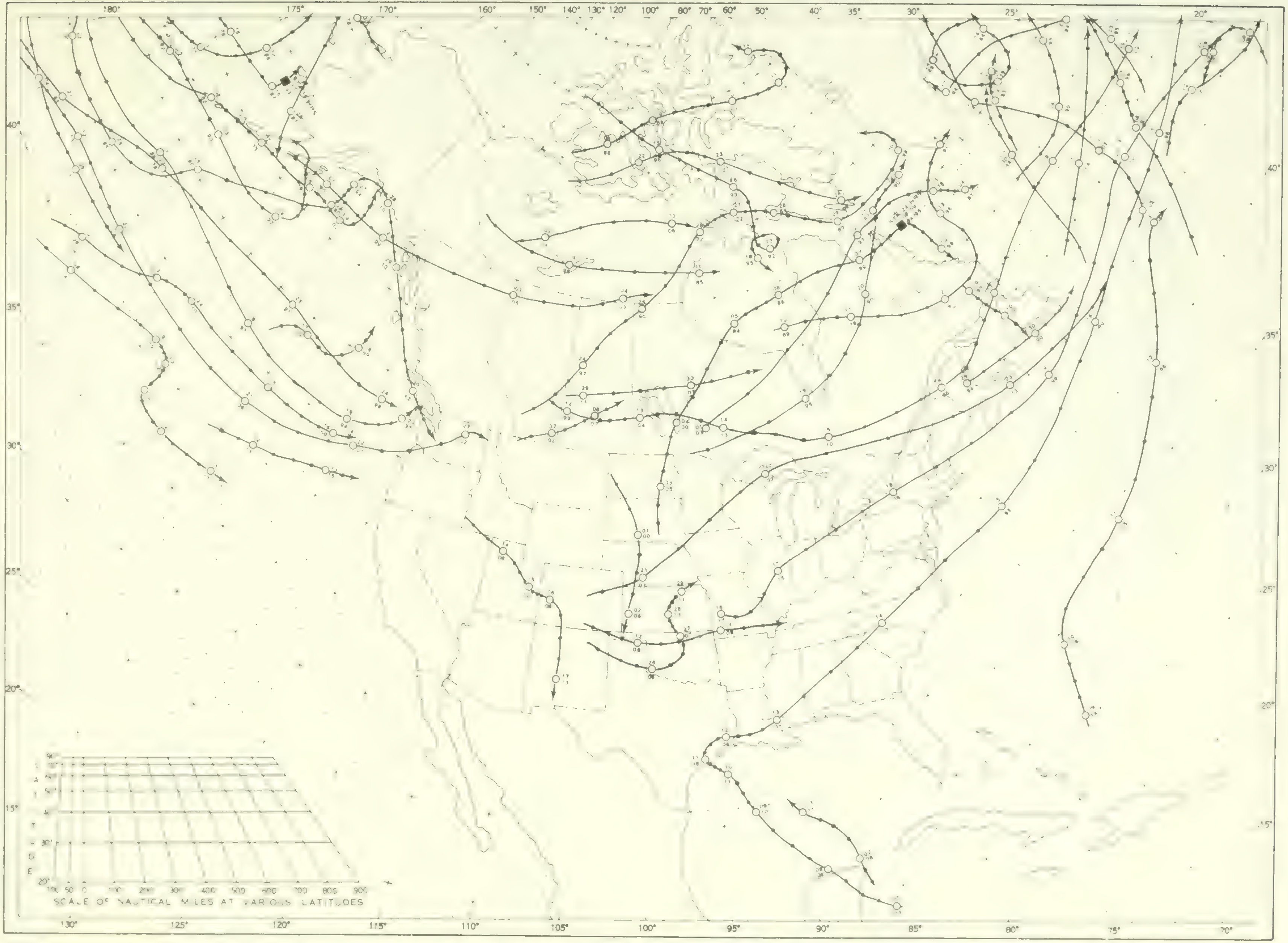

ALASKA
HAWAII

Chart III. Tracks of Centers of Anticyclones at Sea Level, September 1973


STA 24 HRS
STA 48 HRS
STA 120 HRS
STA 36 HRS
STA 18 HRS
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
35°
30°
25°
20°
15°

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, September 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
LAT. TUDE
90°
80°
70°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

OBER
1973

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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

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I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina 28801.

William H. Haggard

Director, National Climatic Center

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

OCTOBER 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

Dr. Richard E. Felch, Climatologist

HIGHLIGHTS: Mild temperatures and sunny, dry weather following an early wet spell favored harvesting progress in the Corn Belt. Much of the Northwest drought area, especially in Washington and Oregon, received above normal precipitation.

PRECIPITATION: Precipitation was mostly above normal over the central United States and in much of the Northwest. Large areas in the western Corn Belt and in east Texas and Arkansas received twice the normal rainfall. Areas getting less than normal precipitation included the Atlantic States, the extreme northern Plains, and most of the Southwest.

Most of October's precipitation fell during the first 2 weeks. Torrential rains on the 8th-14th of from 2 to 6 inches drenched a strip stretching from Texas and Louisiana through Minnesota. These wet conditions through midmonth delayed winter wheat seeding in the southern Great Plains for the fifth straight week, and also halted the Texas cotton harvest for the third straight week. Meanwhile, eastern Corn Belt farmers made good progress harvesting corn and soybeans.

The third week of October turned sunny and rainless almost everywhere except for heavy rains again in east Texas, Arkansas, and Mississippi. The sunny, dry weather continued over the nation's midsection until the end of the month when numerous thunderstorms and showers broke out from east Texas to Michigan. The almost 2 weeks of clear autumn weather permitted rapid harvest progress. Rain caused some interruptions in the Northwest, but greatly benefited small grains and pastures.

The last week in the month brought joy to skiers and other snow lovers as snow accumulated in the Northern Rockies, the northern Plains, and eastward into New York.

TEMPERATURE: October temperatures averaged near or slightly above normal over practically the entire Nation. Most of the Corn Belt and Lower Mississippi River Valley averaged 3° above normal. Mild autumn temperatures generally prevailed throughout the month. As the month ended, cold arctic air drove deep into the nation bringing the season's first frost to many areas of the Corn Belt and readings in the thirties and forties in the Southeast.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

OCTOBER 1973

STATE	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In
Alabama	2 Stations	95	7+	2 Stations	28	30+	Redstone Arsenal	4.77	2 Stations	.00
Alaska	2 Stations	61	4+	Chandalar Lake	-33	26	Little Port Walter	35.42	Tonsina Lodge	16
Arizona	Gila Bend	105	18+	Fort Valley	10	27	Apache 6 WNW	40	168 Stations	00
Arkansas	7 Stations	92	5+	Mammoth Spring	29	30	Langley	10.35	Saint Francis	1 39
California	El Centro 2 SSW	109	1	Bridgeport	6	10+	Vollmers	13.85	53 Stations	00
Colorado	La Junta FAA AP	91	23	Grand Lake 1 NW	- 6	27	Castle Rock	1.50	2 Stations	00
Connecticut	Bridgeport WSO AP	82	5	2 Stations	23	28+	Bakersville	5.02	New Haven Airport	1.98
Delaware	3 Stations	84	5+	Georgetown 5 SW	30	18	Milford 2 WSW	5.08	Lewes 1 SW	1.67
Florida	Arcadia	98	5	Fountain 3 SSE	27	30	West Palm Beach WSO AP	6.97	Perry	03
Georgia	Hawkinsville	97	6	Blairsville Exp Sta	28	19+	Thomaston 2 S	3.97	Eastman 1 W	T
Hawaii	Kahului WSO 398 AP, Maui	96	5	Haleakala Summ 338 4,Maui	32	29	Pauoa Flats 784, Oaho	17.70	4 Stations	00
Idaho	Twin Falls 2 NNE	89	15	2 Stations	10	26	Powell	2.97	Mackay Ranger Station	00
Illinois	Du Quoin 1 NNW	88	3	4 Stations	30	30+	Beardstown	10.27	Stockton	1.36
Indiana	Charlestown Ord Plant	88	11	3 Stations	27	17+	Ogden Dunes	5.17	Prairie Heights	.72
Iowa	Red Oak	87	14	2 Stations	21	29	Bedford	7.74	Delaware 3 WSW	.69
Kansas	Hugoton	94	2	2 Stations	22	29+	Atlanta	12.49	Hugoton	.12
Kentucky	Hopkinsville	90	5	Gray Hawk	25	18+	Williamstown 3 NW	5.85	Rochester Lock 3	1.13
Louisiana	Mamou 4 S	94	6	Franklinton 3 SW	32	30	Oberlin Fire Tower	9.66	Oaknolia	1.05
Maine	2 Stations	78	14	Squa Pan Dam	11	29	Farmington	5.90	Houlton	1.29
Maryland	2 Stations	87	5+	Oakland 1 SE	24	19	Hancock Fruit Lab	7.49	Crisfield Somers Cove	1.14
Massachusetts	Dunstable	82	13	Nantucket FAA AP	20	22	Chatham WSMO	6.77	Holyoke	2.03
Michigan	3 Stations	84	11	Herman	22	30	Manistee	5.35	Copper Hrbr Ft Wilkns	1.46
Minnesota	4 Stations	81	24+	Grand Portage 5 NE	16	31	Remer No 2	8.00	Stewart 6 SSW	.75
Mississippi	2 Stations	94	7+	2 Stations	30	30	Baldwyn	10.14	Ofahoma	1.06
Missouri	5 Stations	89	4+	Plattsburg Waterworks	25	31+	Clifton City	9.76	Malden Municipal AP	1.31
Montana	2 Stations	88	1	Sula 1 NE	6	10	Hungry Horse Dam	4.10	Dupuyer 7 WNW	T
Nebraska	Benkelman	91	24	Merriman	14	28	Roca	8.11	2 Stations	.10
Nevada	3 Stations	97	14+	Rand Ranch Palisade	8	4	Mount Rose Bowl	* 2.17	5 Stations	.00
New Hampshire	2 Stations	79	13	Pinkham Notch	12	28	Mount Washington	7.71	Lebanon FAA	2.14
New Jersey	Hammonton 2 NNE	85	5	Newton	28	22	West Wharton	6.62	Cape May 1 NW	1.63
New Mexico	Jal	99	2	Wolf Canyon	10	30	Alcalde	2.04	17 Stations	.00
New York	2 Stations	83	4	Constable 1 S	20	28	Sodus Center	5.29	Schenectady	1.18
North Carolina	2 Stations	93	5+	Hayesville 4 NE	23	19+	Marion	5.51	Pinehurst Srn-Pines	.07
North Dakota	2 Stations	85	1	Breien	11	28	Carrington 4 N	3.84	2 Stations	T
Ohio	Portsmouth	87	5	Coshocton Sewage Pl	24	19	Fredericktown 4 S	5.95	Stryker	1.43
Oklahoma	2 Stations	95	7+	2 Stations	26	29	Enid	15.84	Eva 4 ESE	.00
Oregon	John Day	86	18	Fremont	5	3	Tillamook 13 ENE	11.14	Burns Junction	.18
Pennsylvania	Phila. 10th Chestnut	85	4	Clermont 4 NW	19	25	George School	5.84	Scranton	1.18
Puerto Rico & VI	Rincon Power Plant, P.R.	96	20	Adjuntas Substation, P.R.	57	31+	Pico Del Este, P.R.	17.89	Rio Grande El Verde, P.R.	.78
Rhode Island	Kingston	78	3	Kingston	27	18	North Scituate 4 W	4.16	Newport	3.00
South Carolina	3 Stations	93	1	Kingstree 1 SE	28	19+	Great Falls	4.57	Brookgreen Gardens	.22
South Dakota	Midland	90	7	Marcus 8 NNW	13	28	Sioux Falls WSO AP	5.73	Pine Ridge	.34
Tennessee	9 Stations	90	5+	Mountain City No 2	20	18	Woodbury 1 WNW	7.18	Copperhill	1.43
Texas	Pecos	104	4+	Walcott	25	31	Pierce 1 E	16.61	4 Stations	.00
Utah	Saint George	93	1	Woodruff	9	26	Alta	2.39	7 Stations	.00
Vermont	Montpelier FAA AP	79	13	Mount Mansfield	10	27	Whitingham 2 W	4.18	Cornwall	1.47
Virginia	Boykins	91	5	Partlow 3 WNW	19	18	Rockfish	7.90	Boykins	.81
Washington	Whitman Mission	79	19	Lacrosse 3 ESE	19	9	Upper Baker Dam	13.88	Lower Granite Dam Near	.36
West Virginia	4 Stations	88	5+	Canaan Valley	22	19	Ripley	7.61	Vandalia	2.52
Wisconsin	2 Stations	83	10	Coddington 1 E	17	17	Couderay 8 W	6.42	Owen	.73
Wyoming	Weston 1 E	88	1	2 Stations	6	26+	Gillette 2 E	3.06	3 Stations	.00

* Incomplete

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear 0-3	Partly cloudy 4-7	Cloudy 8-10		
ALABAMA	M	Mb	Mb	C	C	C	C	C		C.				C	%	Mm	Mm.	Mm.			Mm.	Mm.	M.p.s		M.p.s							%
BIRMINGHAM	189	996.3	1018.7	25.8	12.6	19.2	0.5	30.0	5+	4.4	30+	0	0	13.3	76	24	- 51	11	6	2	0	0	0.5	6	14.3	SE	31	13	9	9	4.3	77
HUNTSVILLE	190	995.9	1018.9	25.7	13.2	19.4	2.1	30.6	4	5.6	18	0	0	12.8	71	87	18	42	6	5	0	0	0.3	11	10.3	29	31+	14	9	8	4.4	
MOBILE	64	1009.5	1017.5	29.2	17.1	23.1	2.6	33.3	6+	5.6	30	6	0	14.4	64	55	- 22	25	6	3	0	0	1.4	6	9.4	31	31	15	9	7	4.2	
MONTGOMERY	56	1011.2	1018.3	27.6	12.8	20.2	0.9	32.2	5	2.2	30	1	0	13.3	70	12	- 46	34	4	0	0	0	0.7	5	8.0	W	31+	20	6	5	3.4	76
ALASKA																																
ANCHORAGE	35	997.6	1002.6	3.3	- 3.1	0.1	- 2.0	10.0	1	-11.7	24	0	25	- 2.8	79	44	- 3	13	14	0	168	76	0.7	3	10.3	15	1	2	10	19	7.0	57
ANNETTE	34	1005.4	1009.5	8.9	4.3	6.7	- 1.5	11.1	8+	- 0.6	31	0	1	3.3	81	401	- 28	101	29	1	T	0	3.4	14	17.0	14	26	1	1	29	9.3	
BARROW	9	1008.8	1009.2	- 4.6	- 9.5	- 7.0	1.6	2.8	1	-22.8	31	0	31	- 8.9	86	14	2	4	18	0	213	203	2.3	12	12.5	17	16+	0	4	27	9.0	
BARTER ISLAND	12	1007.1	1009.0	- 6.2	-11.9	- 9.0	- 0.8	3.3	1	-22.8	31	0	31	-10.0	90	12	- 9	4	13	0	173	203	0.6	23	16.5	6	5	1	6	24	8.7	
BETHEL	38	999.7	1005.5	1.7	- 3.7	- 1.0	- 0.7	8.3	1	-13.3	31	0	24	- 2.8	86	53	13	20	15	0	112	25	1.5	33	16.1	31	17	4	4	23	8.2	
BETTLES	196			- 4.6	-11.7	- 8.1		5.6	1	-20.0	16+	0	31			33		12	8	0	386	279			7.6	4	17	5	6	20	7.4	
BIG DELTA	386			- 0.9	- 8.5	- 4.7		10.0	1	-20.6	24	0	30			13			10	0	175											
COLD BAY	29	1004.4	1008.2	6.0	1.2	3.6	- 0.9	11.7	7	- 6.1	28	0	12	1.7	86	122	5	32	27	0	99	51	4.4	29	19.2	26	10	0	2	29	9.2	
FAIRBANKS	133	988.5	1005.9	- 0.4	- 7.3	- 3.8	- 0.6	7.2	2+	-16.7	24	0	29	- 7.8	74	23	2	8	9	0	208	76	0.3	32	8.0	23	1	6	1	24	7.9	
HOMER	20			5.8	- 1.4	2.2		10.0	2	- 8.3	21	0	21			40	- 49	16	11	0	T	T			9.4	24	1	5	11	15	7.4	
JUNEAU	4	1005.4	1006.3	7.3	2.9	5.1	- 0.2	10.0	2	- 2.2	23	0	7	3.3	90	154	- 57	19	24	0	T	T	4.2	12	13.0	12	29+	1	3	27	9.3	21
KING SALMON	15	1001.7	1003.6	4.4	- 2.1	1.2	- 0.9	11.1	5	-10.0	30	0	22	- 2.2	76	39	- 16	15	13	0	51	25	0.7	35	13.9	28	17	0	8	23	8.5	
KODIAK	4	997.3	1001.6	6.2	0.3	3.3	- 1.6	11.7	10+	- 6.1	22	0	17			162	2	82	15	0	269	51	3.0	29	13.9	29	18+	8	8	15	7.0	
KOTZEBUE	3	1005.4	1005.9	- 3.2	- 8.6	- 5.8	- 1.8	5.0	1	-21.1	31	0	30	- 8.3	80	29	14	13	10	0	368	279	3.9	7	17.0	11	16	7	5	19	7.0	
MC GRATH	105	992.6	1005.4	- 0.8	- 7.5	- 4.1	- 1.2	7.8	1	-17.8	25	0	28	- 6.7	84	42	9	16	12	0	378	279	0.8	33	7.6	34	19+	2	2	27	8.7	
NOME	4	1004.1	1005.0	- 0.3	- 6.2	- 3.2	- 1.9	5.6	4	-18.9	31	0	30	- 5.6	82	60	17	14	13	0	340	127	1.3	3	12.5	17	16+	5	5	21	7.7	23
ST. PAUL ISLAND	7	1007.1	1008.2	5.3	0.8	3.1	0.2	8.9	6	- 6.1	27	0	13	0.6	82	70	- 10	13	23	0	97	25	3.5	29	21.5	14	21	0	10	21	8.3	
SUMMIT	732	916.7	1006.1	- 3.8	-10.1	- 6.9		1.7	2	-20.0	24	0	31	- 8.9	86	52		27	11	0	615	356	3.5	6	11.2	8	14+	6	3	22	7.6	
TALKEETNA	105			2.8	- 8.6	- 2.9	- 3.5	7.2	18+	-21.7	22	0	30			66	- 7		11	0	592				7.6	2	26					
UNALAKLEET	5			- 0.3	- 6.4	- 3.4		9.4	1	-17.2	31	0	28			35			16	0	224				17.9	8	22					
YAKUTAT	9	1001.7	1002.8	7.8	1.4	4.6	- 0.9	10.6	21+	- 5.6	24+	0	8	2.2	85	385	-112	49	24	1	5	T	2.6	9	13.0	12	10	3	4	24	8.4	
ARIZONA																																
FLAGSTAFF	2135	789.4	1016.9	20.5	- 0.6	10.0	1.7	25.6	17	- 6.7	11+	0	19	- 3.9	43	1	- 38	1	1	0	T	0	0.6	18	10.3	SW	6	22	9	0	2.0	92
PHOENIX	340	973.6	1011.9	33.1	14.1	23.6	2.1	37.8	16+	7.2	31	19	0	1.1	25	0	- 12	0	0	0	0	0	0.7	13	14.3Y	S	6	29	1	1	1.0	99
TUCSON	788	925.2	1012.0	30.1	12.9	21.5	0.4	35.0	1	6.1	11	13	0	- 1.1	24	0	- 16	0	0	0	0	0	1.7	16	11.6	SW	7	25	6	0	0.9	97
WINSLOW	1492	853.0	1017.1	24.2	1.3	12.8	- 1.3	30.6	1	- 4.4	28	0	13	- 6.1	30	T	- 17	T	0	0	0	0	1.2	22	12.5	32	29	24	6	1	1.7	
YUMA	59	1004.7	1011.8	32.8	15.2	24.0	0.4	37.8	18+	9.4	11	19	0	4.4	32	0	- 10	0	0	0	0	0	1.0	33	11.6	W	8	30	0	1	0.6	97
ARKANSAS																																
FORT SMITH	136	1001.0	1017.5	24.8	11.0	17.9	0.3	31.1	3+	1.1	29	0	0	12.9	76	112	24	34	8	5	0	0	0.4	10	13.3	N	27	14	8	9	4.8	65
LITTLE ROCK	78	1008.1	1017.7	25.9	13.6	19.8	2.5	32.2	4	3.9	30	1	0	14.4	78	151	77	45	12	4	0	0	0.6	21	11.6	N	31					69
CALIFORNIA																																
BAKERSFIELD	145	998.3	1015.8	28.0	12.4	20.2	0.9	35.6	19	8.3	24	9	0	8.3	50	4	- 4	4	1	0	0	0	0.9	35	10.3	33	6	24	6	1	1.9	
BISHOP	1252	874.4		24.7	2.2	13.4	- 0.7	30.0	1	- 2.2	11	0	6			0	- 11	0	0		0	0						22	9	0	2.2	
BLUE CANYON	1609	841.9		15.9	6.6	11.3	- 0.8	22.8	16	- 0.6	23+	0	3			123	36	68	7		338	51	1.5	17	17.0	19	22	13	9	9	4.7	
EUREKA C	13			14.2	8.1	11.2	- 1.3	19.4	22+	5.0	29	0	0			105	24	46	10		0	0			15.6	SE	22	6	10	15	6.7	49
FRESNO	100	1004.1	1015.8	25.5	9.2	17.4	- 0.7	32.8	17	5.6	3	1	0	10.0	69	26	15	17	4	0	0	0	0.2	4	10.3	S	22	23	3	5	2.3	89
LONG BEACH	8	1013.9	1015.1	26.2	12.8	19.6	0.4	35.6	28+	10.0	31+	5	0	10.0	64	5	1	4	3	0	0	0	0.9	26	7.6	27	18+	17	7	7	3.6	
LOS ANGELES	30	1010.8	1014.5	23.7	13.7	18.7	0.4	32.8	27	11.7	29+	1	0	11.7	72	2	- 8	1	2	0	0	0	1.5	24	11.2Y	W	10	15	12	4	3.8	
LOS ANGELES C	82			26.4	14.5	20.4	0.8	35.0	27	12.2	24+	6	0			3	- 7	3	2		0	0			5.8	SW	11+	19	11	1	2.5	79
MT SHASTA R	1080			16.7	2.9	9.8	- 1.2	25.0	17	- 1.1	26+	0	5			129	67	72	9		0	0										
OAKLAND	2	1016.6	1016.7	20.1	11.0	15.6	- 0.6	27.2	30	7.8	24+	0	0	11.1	80	34	14	17	6	0	0	0	1.1	25	13.9	17	22	18	7	6	3.6	
RED BLUFF	104	1003.1	1015.8	23.8	10.1	16.9	- 1.7	30.0	16+	6.7	28+	0	0	7.2	61	60	25	32	8	1	0	0	0.4	34	18.8	S	22	13	7	11	5.0	81
SACRAMENTO	5	1014.9	1015.7	25.1	9.8	17.4	- 0.1	30.6	14	6.1	26+	0	0	8.3	63	42	22	27	5	0	0	0	0.7	22	12.5	W	22	18	6	7	3.4	79
SANDBERG R	1377	963.5		20.4	9.2	14.8	0.0	27.2	16+	2.2	24	0	0			T	- 12	T	1		0	0			16.5	33	29	22	7	2	2.1	
SAN DIEGO	4	1013.5	1014.6	23.7	14.9	19.3	0.4	32.2	28	12.2	30	1	0	10.6	62	T	- 12	T	1	0	0	0	1.9	30	8.0	NW	28+	18	6	7	3.3	73
SAN FRANCISCO	2	1015.6	1016.3	21.1	10.7	15.9	0.1	26.1	30	7.8	10	0	0	9.4	73	41	22	23	4	1	0	0	1.8	27	13.9	17	22	18	7	6	3.5	
SAN FRANCISCO C	16			20.2	11.9	16.1	- 0.2	26.7	30	10.0	15	0	0			41	19	19	7		0	0										71
SANTA MARIA	72			23.7	8.4	16.1	0.3	31.1	27	3.3	11	0	0			10	- 6	6	4		0	0						21	5	5	2.9	
STOCKTON	7	1014.9	1015.8	24.7	10.0	17.3	- 0.4	29.4	16+	6.1	30+	0	0	8.9	63	53	37	34	5	0	0	0	0.8	28	9.8	34	29	19	6	6	3.6	
COLORADO																																
ALAMOSA	2297	773.8		18.1	- 4.4	6.8	- 0.1	23.3	18+	-11.1	27	0	30			16	1	16	3		206	76						23	6	2	2.2	

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No of days		Snow, Ice pellets		Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Fastest mile (1.6 kilometers) Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy 8-10		
	M	Mb	Mb	C.	C.	C.	C	C.		C.				C	%	Mm.	Mm	Mm			Mm.	Mm	M p.s.		M p.s							
COLORADO																																
COLORADO SPRINGS	1873	812.4	1016.1	19.0	3.9	11.4	1.3	26.7	23	- 3.3	27	0	8	- 3.3	41	9	- 9	6	4	0	99	76	1.2	3	15.6	36	29	17	5	9	3.8	
DENVER	1610	836.8	1014.3	21.3	3.7	12.5	1.7	30.6	23	- 1.1	11	0	5	- 1.1	46	12	- 14	7	6	0	58	51	1.2	19	15.2	NE	29	16	9	6	3.8	80
GRAND JUNCTION	1476	853.7	1015.8	21.4	5.6	13.6	0.8	28.9	1	- 0.6	27	0	1	- 3.3	36	5	- 14	4	2	0	0	0	1.0	13	14.3	NW	29	15	13	3	3.5	77
PUEBLO	1428	855.7	1014.4	23.2	3.7	13.4	0.8	31.7	23	- 3.3	27	0	5	1.1	51	19	- 6	19	2	0	T	0	0.3	36	20.6	N	29	17	11	3	3.0	88
CONNECTICUT																																
BRIDGEPORT	2	1018.3	1018.9	20.8	10.2	15.5	2.5	27.8	5	3.3	19	0	0	7.2	60	72	- 14	59	6	1	0	0	1.5	31	22.4	7	29	12	11	8	4.8	
HARTFORD	52	1011.5	1018.2	19.4	5.7	12.6	0.9	25.6	12+	0.0	28+	0	2	5.6	68	88	7	58	8	0	0	0	1.1	33	13.9	NW	14	10	11	10	5.7	65
DELAWARE																																
WILMINGTON	23	1015.6	1018.5	21.4	9.6	15.5	1.8	28.3	4	3.3	18	0	0	8.9	68	56	- 18	35	6	1	0	0	0.8	31	13.0	7	29	13	10	8	4.6	
DIST.OF COLUMBIA																																
WASHINGTON DULLES	88	1006.8	1018.6	21.3	6.4	13.8		29.4	4	- 0.6	19	0	1	9.4	80	68		43	6	2	0	0	0.5	22	9.8	12	29	15	7	9	4.6	
WASHINGTON NATIONAL	3	1016.3	1018.5	23.3	11.5	17.4	2.4	30.6	4	5.6	18	0	0	8.9	62	43	- 35	31	6	2	0	0	0.4	24	11.6	NW	16	15	5	11	4.5	63
FLORIDA																																
APALACHICOLA U	4			27.3	18.3	22.8	1.0	31.7	5	8.3	30	0	0			34	- 28	15	6	0	0	0			12.5	E	9	18	8	5	3.5	93
DAYTONA BEACH	9	1015.2	1016.5	28.1	19.7	23.9	0.9	30.6	6+	6.1	30	0	0	18.3	73	112	- 31	37	15	2	0	0	2.7	5	15.6	9	10	7	16	8	5.4	
FORT MYERS	5	1014.6		30.6	19.8	25.2	0.7	33.9	7	11.1	30	7	0	18.9	74	4	-100	3	2	2	0	0	3.0	6	13.4	3	20	19	11	1	3.6	
JACKSONVILLE	8	1016.3	1017.4	27.4	16.0	21.7	- 0.1	32.8	1	3.9	30	1	0	16.7	78	104	- 27	60	7	2	0	0	2.0	3	11.6	W	29	10	13	8	5.2	61
KEY WEST	1	1012.5	1013.4	29.4	24.3	26.8	0.7	31.1	10+	20.0	31	0	0	22.2	77	62	- 86	31	13	1	0	0	4.0	6	12.1	E	12	8	19	4	4.9	75
LAKELAND U	65			28.1	19.2	23.6	0.0	31.1	6+	10.6	30	0	0			3	- 72	1	4		0	0						17	9	5	4.1	73
MIAMI	2	1013.2	1013.6	28.6	22.0	25.3	- 0.1	30.6	7	15.0	31+	0	0	20.6	76	85	-123	19	16	4	0	0	2.7	5	10.3	5	21+	8	18	5	5.1	
ORLANDO	33	1011.5	1016.0	28.9	19.4	24.2	0.9	31.7	6+	8.3	30	0	0	19.3	74	28	- 73	14	11	1	0	0	2.8	2	10.3	2	20+	13	14	4	4.3	
PENSACOLA	34	1013.2	1017.4	28.6	17.4	23.0	1.7	33.3	5	5.6	30	1	0	16.1	69	101	25	74	5	3	0	0	1.5	6	12.5	19	31	13	11	7	4.1	
TALLAHASSEE	17	1015.2	1017.5	28.6	13.6	21.1	0.2	31.7	6+	- 1.1	30	0	1	15.0	73	60	- 2	31	5	3	0	0	1.6	5	7.6	17	31+	16	8	7	4.1	
TAMPA	6	1015.6	1015.7	29.7	18.9	24.3	0.6	33.3	6	8.9	30	6	0	17.8	69	25	- 46	13	5	2	0	0	3.0	5	8.9	20	31+	13	14	4	4.3	71
WEST PALM BEACH	5	1013.5	1014.1	29.0	21.5	25.3	- 0.4	31.7	7	12.2	31+	0	0	19.4	71	177	- 25	70	13	6	0	0	3.0	5	13.0	4	10	11	14	6	5.1	
GEORGIA																																
ATHENS	244	989.8	1018.8	24.1	11.2	17.7	0.4	30.6	5	2.8	30	0	0	11.7	75	17	- 56	33	3	1	0	0	0.8	1	7.6	26	30	16	8	7	4.1	
ATLANTA	308	981.7	1018.5	23.8	12.4	18.2	1.3	29.4	5+	2.2	30	0	0	11.7	70	19	- 43	31	4	0	0	0	0.8	3	9.8	NW	29	17	5	9	4.2	71
AUGUSTA	41	1012.9	1018.0	26.1	9.9	18.0	- 0.4	31.1	5+	1.1	18	0	0	11.1	74	51	0	42	4	2	0	0	0.8	34	12.5	23	1	17	7	7	3.7	
COLUMBUS	117	1004.4		26.7	12.9	19.8	1.3	31.7	5+	3.3	30	0	0	13.3	74	29	- 15	38	3	1	0	0	1.5	4	7.6	31	29+	18	8	5	3.4	
MACON	108	1005.8	1018.6	27.6	11.6	19.6	0.6	32.8	5	3.3	18	3	0	12.2	69	17	- 34	7	3	1	0	0	1.3	2	9.8	NW	29	17	7	7	4.0	80
ROME	194			24.2	9.9	17.1	0.8	30.0	4	1.7	18	0	0			29	- 45	14	6		0	0										
SAVANNAH	14	1016.6	1018.2	26.6	14.4	20.5	0.9	31.1	5+	4.4	30	0	0	14.4	74	5	- 61	3	5	1	0	0	1.4	2	13.0	W	29	11	13	7	4.8	64
HAWAII																																
HILO	8	1015.2	1016.4	28.3	20.3	24.3	0.4	31.7	4	18.3	18	0	0	21.1	87	247	- 27	38	30	0	0	0	0.7	21	9.4	E	29	1	6	24	8.3	25
HONOLULU	2	1015.6	1015.9	30.2	22.5	26.3	0.7	32.8	5	19.4	31	1	0	18.9	66	45	- 2	22	9	0	0	0	5.0	6	12.5	NE	9	4	18	9	6.1	66
KAHULUI	15	1013.2	1015.5	29.8	20.7	25.3	0.1	35.6	5	17.8	29+	1	0			9	- 13	8	2	0	0	0	5.4	5	13.9	E	28	12	12	7	5.1	75
LIHUE	31	1011.9	1017.1	28.1	22.9	25.5	0.6	29.4	5+	20.0	17+	0	0	20.6	75	129	26	58	19	0	0	0	4.7	6	11.2	NE	7	2	18	11	6.6	35
IDAHO																																
BOISE	865	916.7	1017.3	17.8	4.8	11.3	0.4	27.2	14	- 2.2	10	0	3	0.6	52	29	8	12	7	0	0	0	0.4	16	17.0	SW	23	8	8	15	6.2	67
LEWISTON	431			16.9	4.6	10.7	- 0.4	23.9	17	- 0.6	8	0	5			42	11	28	9		23	25			20.6Y		6	5	6	20	7.5	
POCATELLO	1358	864.5	1017.6	17.1	1.4	9.3	- 0.2	26.1	15	- 4.4	27+	0	10	- 1.1	53	30	8	22	4	0	51	51	3.4	22	18.8	SW	28	14	4	13	5.2	63
ILLINOIS																																
CAIRO U	96			23.1	12.8	17.9	1.3	29.4	3	3.9	29	0	0			71	- 2	18	9		0	0			11.2	NW	27					66
CHICAGO O HARE	201	991.9	1016.2	19.8	8.9	14.4	2.7	27.8	11	1.1	17	0	0	10.0	75	73	3	31	9	2	0	0	1.8	22	13.4	20	12	7	11	13	5.9	
CHICAGO MIDWAY	185	993.9	1016.6	19.8	9.6	14.7	1.9	28.9	11+	2.2	28	0	0	8.9	72	88	18	44	11	4	0	0	1.6	22	11.2	NW	29	10	10	11	5.6	60
MOLINE	177	994.9	1016.4	20.0	8.1	14.1	1.4	27.8	9	1.1	30	0	0	8.3	71	78	15	17	12	4	0	0	1.3	23	11.6	NW	10	9	7	15	5.9	56
PEORIA	199	992.9	1017.0	19.9	8.6	14.3	1.3	27.8	9	0.6	17	0	0	8.9	73	132	67	48	11	4	0	0	1.2	22	11.2	S	11+	8	8	15	5.9	55
ROCKFORD	221	989.2	1016.3	19.1	8.2	13.6	2.2	27.2	11+	0.6	17	0	0	9.4	78	131	62	66	11	4	0	0	1.2	22	11.2	27	13	8	9	14	6.2	
SPRINGFIELD	179	994.9	1017.1	22.0	9.8	15.9	2.2	29.4	10	1.7	28+	0	0	10.6	75	139	65	89	10	3	0	0	1.5	21	16.5	SW	3	13	7	11	5.0	67
INDIANA																																
EVANSVILLE	116	1004.1	1018.3	23.1	10.3	16.7	1.7	30.0	11	1.1	17	0	0	11.1	75	51	- 15	16	8	4	0	0	0.8	23	10.7	NW	1	15	5	11	4.4	65

CLIMATOLOGICAL DATA

METRIC UNITS

OCTOBER 1973

State and Station	Elevation (ground)	Pressure: Station ⊙	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 25 mm or more	Precipitation: No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
INDIANA	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M.p.s.		M.p.s							%
FORT WAYNE	241	987.1	1017.3	20.2	7.4	13.8	2.2	27.8	10	0.0	19+	0	2	8.9	75	78	5	29	8	3	0	0	1.6	24	13.0	SW	19+	13	4	14	5.4	64
INDIANAPOLIS	241	988.5	1017.6	21.2	9.2	15.2	2.2	28.3	10	0.0	29	0	1	10.0	76	79	12	22	7	2	0	0	1.0	21	9.8	NW	16	16	2	13	4.8	55
SOUTH BEND	236	988.5	1016.3	19.8	9.4	14.6	2.7	27.2	10	2.8	19	0	0	9.4	74	89	8	29	10	3	0	0	1.5	23	11.2	23	19	7	11	13	6.1	
IOWA																																
BURLINGTON	211			20.4	9.3	14.8	1.8	28.3	9	1.1	30	0	0	10.0	75	76	7	25	11	6	0	0	1.1	22	10.3	19	24	11	7	13	5.7	
DES MOINES	286	981.4	1016.1	20.6	9.4	15.0	2.7	28.3	9	0.6	30	0	0	8.2	68	83	30	55	7	3	0	0	0.9	21	14.3	SW	24	11	9	11	5.5	65
DUBUQUE	322			18.2	8.0	13.1	2.7	26.1	9	- 0.6	30	0	1			19	- 51	5	9		0	0										
SIOUX CITY	334	975.6	1015.6	20.6	7.3	13.9	1.7	30.0	14	- 3.9	29	0	2	7.2	68	56	20	41	5	2	0	0	0.8	20	15.6	S	11	9	10	12	5.5	61
WATERLOO	265	984.1	1016.0	18.9	6.7	12.8	1.8	26.7	14	- 3.3	30	0	3	7.8	74	24	- 30	18	5	1	0	0	1.1	22	13.0	19	24	9	8	14	5.8	
KANSAS																																
CONCORDIA	448	962.4	1015.3	21.3	8.7	15.0	0.7	28.9	8	- 1.1	29	0	1	9.4	72	109	67	78	5	3	0	0	1.6	19	15.2	S	9	19	5	7	3.5	78
DODGE CITY	787	924.8	1014.8	23.7	8.7	16.2	1.6	32.8	8	1.1	29+	1	0	3.9	51	30	- 6	30	2	2	0	0	1.8	20	15.2	NW	24	19	5	7	2.9	82
GOODLAND	1114	888.3	1015.1	19.6	3.7	11.7	- 0.1	29.4	23	- 3.3	28	0	6	3.9	66	12	- 7	11	3	2	43	25	1.4	24	16.1	30	24	15	10	6	3.5	
TOPEKA	267	984.4	1016.4	22.4	9.1	15.8	1.2	30.6	8	0.0	29	0	1	10.6	76	116	57	103	5	3	0	0	1.3	19	13.0	S	9	14	10	7	4.3	69
WICHITA	403	968.2	1015.9	22.6	9.7	16.2	0.7	29.4	8	- 2.2	29	0	1	10.6	74	87	26	80	5	3	0	0	2.0	18	13.0	NW	10+	17	9	5	3.7	77
KENTUCKY																																
COVINGTON	265	986.5	1018.0	20.7	9.2	15.0	1.6	28.9	4	- 0.6	17	0	1	10.0	78	112	54	63	9	5	0	0	1.1	22	11.2	29	31	15	3	13	4.5	
LEXINGTON	294	983.1	1018.6	22.2	9.9	16.1	1.6	28.9	4	0.6	17	0	0	10.6	74	67	9	19	11	5	0	0	1.3	21	10.3	27	31	17	6	8	4.3	
LOUISVILLE	145	1000.3	1017.8	22.4	11.2	16.8	2.4	30.6	4	2.8	17	0	0	10.6	70	58	1	17	8	4	0	0	0.8	22	8.5	W	31+	16	4	11	4.4	67
LOUISIANA																																
ALEXANDRIA	28	1012.9	1017.4	26.9	14.3	20.7	1.2	31.7	7+	3.3	30	0	0	16.1	80	131	42	51	10	1	0	0	0.5	8	9.8	17	11	17	6	8	3.9	
BATON ROUGE	20	1014.6	1017.3	29.1	16.7	22.9	2.3	32.8	5	5.0	30	5	0	15.6	70	48	- 14	20	6	2	0	0	1.3	8	10.3	14	11	15	10	6	3.9	
LAKE CHARLES	3	1015.9	1016.8	28.1	17.1	22.6	1.2	31.7	5	8.3	29	0	0	17.2	78	105	27	49	12	6	0	0	1.7	8	14.8	27	31	18	6	7	4.1	
NEW ORLEANS	1	1016.3	1017.0	28.1	17.9	23.0	1.7	31.7	12+	4.4	30	0	0	17.8	76	129	57	66	8	6	0	0	1.6	7	16.5	8	1	15	10	6	3.9	84
SHREVEPORT	77	1008.1	1017.2	26.2	14.0	20.1	- 0.1	31.1	9	3.9	29	0	0	15.6	80	137	65	57	9	1	0	0	0.3	13	9.4	30	11	12	9	10	4.8	65
MAINE																																
CARIBOU	190	992.2		11.4	1.8	6.6	0.5	21.1	2	- 8.9	29	0	11			37	- 48	18	9		T	0						5	5	21	7.4	
PORTLAND	13	1015.6	1017.9	15.3	3.8	9.6	0.3	22.8	4	- 1.7	28	0	4	5.0	77	86	5	46	8	0	0	0	0.8	28	15.2	W	14	9	9	13	6.1	62
MARYLAND																																
BALTIMORE	45	1013.2	1019.0	20.8	8.3	14.6	0.7	27.8	5+	2.2	22+	0	0	9.4	74	73	- 8	38	8	2	0	0	0.8	27	10.7	SW	18	16	4	11	4.6	64
MASSACHUSETTS																																
BLUE HILL OBS R	192			16.1	7.1	11.6	0.1	23.9	13+	0.6	28	0	0			74	- 21	54	9		0	0			20.6	E	30					63
BOSTON	5	1016.9	1018.0	17.2	9.0	13.1	0.3	25.0	13+	2.8	28	0	0	5.6	65	69	- 11	45	8	0	0	0	1.1	29	16.1	SE	30+	11	10	10	5.2	63
WORCESTER	301	980.7	1017.9	15.9	5.5	10.7	0.4	23.3	13+	- 2.2	28	0	2	4.4	70	118	29	90	9	1	0	0	1.7	30	13.4	29	16	10	10	11	5.5	
MICHIGAN																																
ALPENA	210	990.9	1016.3	16.3	5.7	11.1	3.1	26.7	11	- 2.8	21	0	7	6.1	76	102	41	30	14	3	T	T	0.4	24	14.3	W	13	6	6	19	6.7	47
DETROIT	189			17.8	9.2	13.5	1.4	24.4	12	0.6	21	0	0	8.9	75	44	- 23	16	9	1	0		1.0	23	15.6	22	2					
DETROIT METRO.	193	992.6	1016.6	19.1	7.8	13.4	2.2	26.7	12	- 1.7	19	0	1	9.4	79	51	- 14	19	8	1	0	0	1.3	25	11.6	NW	13+	7	11	13	6.4	52
FLINT	235	988.2	1016.0	18.1	7.8	12.9	2.2	25.0	10	0.0	19	0	1	8.9	78	69	9	26	11	1	0	0	1.3	22	9.8	3	29+	8	5	18	6.5	
GRAND RAPIDS	239	987.5	1016.5	18.3	7.2	12.8	2.2	26.7	11	0.0	19	0	1	8.3	77	105	38	30	10	1	0	0	1.0	21	16.5	NW	16	6	9	16	7.0	45
HOUGHTON LAKE	350	974.3	1016.5	15.9	5.6	10.7	2.4	25.0	11	- 2.8	19	0	6	7.2	80	79	3	24	11	3	T	T	0.4	24	10.3	7	28	7	6	18	6.8	
LANSING	256	984.8	1016.5	18.6	6.2	12.4	1.7	26.7	11+	- 1.7	19	0	3	8.9	82	53	- 11	20	9	0	0	0	1.3	22	11.6	W	31	7	8	16	6.4	43
MARQUETTE U	206			15.7	8.1	11.9	3.0	25.6	10	2.2	30+	0	0			64	5	17	13		T	T			12.1	NW	13	5	12	14	6.6	42
MUSKEGON	191	993.6	1016.5	17.3	7.7	12.5	1.1	27.2	11	- 0.6	19	0	3	8.9	80	84	19	36	9	1	0	0	0.8	22	11.6	17	25	7	9	15	6.6	
SAULT STE MARIE	220	988.8	1015.5	14.1	5.3	9.7	1.8	22.2	12	- 0.6	18	0	1	6.1	83	71	0	26	12	2	5	T	0.3	7	17.0	NW	15+	5	7	19	7.5	39
MINNESOTA																																
DULUTH	435	963.1	1014.7	13.6	4.4	9.0	2.0	22.8	22	- 3.3	17	0	9	5.0	80	116	61	74	9	3	T	T	0.8	21	19.2	W	13	7	6	18	6.9	41
INTERNATIONAL FALLS	359	969.9	1013.3	14.0	3.4	8.7	2.9	22.8	21+	- 3.9	29	0	9	3.3	71	49	5	25	10	3	T	T	1.7	19	14.3	27	13	4	6	21	7.8	
MINNEAPOLIS	254	984.4	1015.0	17.4	6.8	12.1	2.7	24.4	24	- 1.1	30	0	1	6.7	74	33	- 8	21	7	2	0	0	0.9	20	15.6	SW	11	9	8	14	6.1	54
ROCHESTER	395	968.2	1015.8	17.7	6.6	12.2	2.2	24.4	24+	- 0.6	30	0	2	7.8	77	66	23	40	6	2	T	0	1.9	21	13.4	17	24	11	4	16	6.1	
ST CLOUD	313	977.7		17.1	4.3	10.3	2.2	23.9	9	- 5.6	29	0	8			80	38	51	7		0	0						11	5	15	6.1	

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
MISSISSIPPI	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm	M.p.s.		M.p.s							%
JACKSON	94	1006.1	1018.0	26.6	14.1	20.3	0.9	30.6	7+	2.8	30	0	0	15.0	78	69	17	25	6	2	0	0	0.7	11	11.6	N	28	19	7	5	3.6	63
MERIDIAN	88	1007.1	1018.3	27.9	13.6	20.8	2.1	32.2	5	2.2	30	1	0	13.9	72	51	- 6	32	4	0	0	0	0.4	7	7.6	27	31	18	8	5	3.7	
MISSOURI																																
COLUMBIA REGIONAL	270	985.1	1017.3	21.3	10.2	15.8	1.3	28.9	10+	0.6	30	0	0	10.6	74	130	50	50	11	5	0	0	0.8	20	11.2	SE	11	13	8	10	4.7	68
KANSAS CITY	309	979.3	1015.9	21.2	10.7	15.9	1.6	29.4	8	1.1	29	0	0	10.0	71	147	65	125	5	2	0	0	1.5	18	12.5	S	11	16	7	8	4.1	61
ST JOSEPH	247			21.8	9.1	15.4	1.3	29.4	8	0.0	30+	0	2	8.9	71	126	71		5		0		0.8	18	11.6	35	10	16	4	11	4.4	
ST LOUIS	163	997.3	1017.6	21.8	10.1	15.9	1.3	28.3	3	2.2	28	0	0	12.2	80	59	- 13	18	9	2	0	0	1.4	20	11.2	SE	11	15	6	10	4.5	63
SPRINGFIELD	386	972.2	1017.4	23.7	9.8	16.8	1.4	30.6	3	0.6	30	0	0	11.1	75	108	13	50	9	5	0	0	1.8	18	10.3	S	11	13	9	9	4.4	73
MONTANA																																
BILLINGS	1087	890.6	1014.9	16.4	4.0	10.2	0.5	25.6	18	- 2.2	11	0	6	0.0	54	35	7	14	6	0	216	51	2.2	26	16.5	NW	30	6	10	15	6.4	55
GLASGOW	696	931.6	1013.8	16.8	2.3	9.6	2.2	26.1	19+	- 6.1	27	0	8	0.0	57	6	- 10	5	3	0	0	0	0.5	32	16.1	29	18	2	10	19	7.1	
GREAT FALLS	1116	887.2	1015.0	15.7	3.3	9.6	0.9	24.4	20	- 5.0	10+	0	8	- 1.7	50	25	6	10	6	1	91	76	4.7	23	21.5	SW	13	4	5	22	7.6	51
HAVRE	788	921.1	1013.6	16.5	1.8	9.2	1.5	26.1	19	- 6.1	27	0	9	- 0.6	54	25	5	21	4	0	10	T	2.3	25	18.8	SW	13	6	4	21	7.5	56
HELENA	1167	880.8	1016.7	14.7	0.7	7.7	0.1	21.7	18	- 7.2	10	0	13	- 2.8	52	17	0	13	3	0	183	152	2.3	26	15.2	W	30	4	5	22	7.8	54
KALISPELL	904	911.6	1017.3	13.3	- 0.2	6.6	- 0.1	27.8	18	- 8.3	9	0	14	0.0	67	30	- 1	14	8	1	15	T	1.2	20	10.3	15	13	2	4	25	8.5	
MILES CITY	801	920.8	1013.9	16.8	3.6	10.2	0.7	26.7	18	- 3.9	27	0	3	2.8	65	14	- 8		8	0	T		1.2	29								
MISSOULA	972	905.2	1018.3	14.6	0.2	7.4	0.7	23.9	18	- 6.7	10+	0	16	0.0	65	15	- 10	10	7	0	137	127	1.0	29	12.5	SW	28	4	5	22	7.8	44
NEBRASKA																																
GRAND ISLAND	561	949.5	1015.5	19.8	5.9	12.8	0.9	28.9	8	- 3.9	29	0	4	5.6	66	38	14	24	5	1	0	0	1.4	21	13.0	16	11	13	9	9	4.7	
LINCOLN	360	973.2	1015.6	20.8	6.0	13.4	0.8	30.0	8	- 4.4	29	0	4	8.3	75	125	86	68	7	2	0	0	0.7	19	17.0	SW	11	14	7	10	4.4	68
NORFOLK	471			19.6	5.9	12.7	1.1	28.9	14	- 6.7	29	0	2			20	- 10	12	6		T	T						12	8	11	5.3	
NORTH PLATTE	846	917.7	1015.9	19.4	2.4	10.9	0.4	28.3	7+	- 6.7	28	0	8	3.3	65	32	9	32	2	0	T	T	0.3	31	19.2	NW	24	14	9	8	4.4	71
OMAHA	298	980.4	1015.6	20.9	7.1	14.1	0.9	29.4	8	- 4.4	29	0	3	8.9	74	66	22	46	5	3	0	0	1.0	19	14.8	SW	11	14	7	10	4.8	64
SCOTTSBLUFF	1206	879.4	1015.6	19.2	1.6	10.4	0.2	27.2	2	- 3.3	30+	0	10	1.1	61	19	1	12	3	0	117	76	1.1	34	16.1	29	24	13	4	14	5.4	
VALENTINE	789			19.2	3.8	11.5	1.9	30.6	7	- 5.0	28	0	7			41	18	34	3		T	0			15.2	W	24+	15	9	7	4.4	69
NEVADA																																
ELKO	1539	846.3	1017.6	18.4	- 0.8	8.8	0.6	26.1	17+	- 7.2	27+	0	18	- 6.1	40	16	- 3	14	3	0	0	0	0.9	25	11.2	23	23	15	8	8	4.7	
ELY	1906	810.0	1016.9	17.4	- 2.2	7.6	- 0.1	24.4	16	-10.6	30	0	22	- 4.4	49	22	4	15	4	0	81	25	2.1	20	17.0	S	23	15	8	8	4.2	84
LAS VEGAS	659	938.4	1014.2	28.1	11.6	19.8	0.6	34.4	1	7.2	31+	8	0	- 3.9	22	1	- 5	1	1	0	0	0	1.7	23	20.6	NW	8	22	9	0	1.8	95
RENO	1342	867.6	1017.6	21.1	- 2.1	9.6	0.0	30.6	17	- 8.9	10	0	23	- 3.3	48	14	1	13	3	0	0	0	0.5	23	16.5	SW	22	16	9	6	3.9	96
WINNEMUCCA	1311	871.0	1018.8	20.2	- 2.7	8.7	0.0	30.0	14	-10.0	3	0	22	- 3.9	49	16	- 4	11	5	0	0	0	0.5	23	17.0	NW	23	11	10	10	5.2	70
NEW HAMPSHIRE																																
CONCORD	104	1005.4	1018.3	16.6	1.3	9.0	- 0.3	26.1	13	- 7.2	28	0	16	3.9	73	62	- 5	42	8	0	0	0	0.5	30	13.4	W	14	6	11	14	6.0	62
MT WASHINGTON OBS	1909			3.4	- 2.8	0.3	0.9	10.6	2	-10.0	19	0	21			196	39	71	14	1	267	102			52.8Y	SE	30	6	7	18	7.1	48
NEW JERSEY																																
ATLANTIC CITY	20	1015.9	1018.5	20.8	7.4	14.1	0.1	28.3	5	1.1	19+	0	0	7.2	68	70	- 12	56	5	1	0	0	0.8	28	13.4	13	29	10	14	7	4.7	63
ATLANTIC CITY U	3			19.7	11.8	15.8	0.9	27.8	5+	5.6	31+	0	0			46	- 40	33	6		0	0			17.0	SE	29					
NEWARK	2	1017.3	1018.2	20.9	10.6	15.7	2.1	27.8	5+	4.4	19	0	0	8.3	65	85	6	77	5	1	0	0	1.2	28	12.5	5	29	12	12	7	4.6	
TRENTON U	17			20.2	9.6	14.9	1.1	27.8	4	5.0	31+	0	0			94	22	80	6		0	0			12.1	SE	29+	13	12	6	4.4	70
NEW MEXICO																																
ALBUQUERQUE	1619	839.5	1015.5	22.3	4.8	13.6	- 0.9	27.8	2	- 1.1	30+	0	2	- 2.8	38	9	- 10	5	3	2	8	T	0.3	12	15.2	SE	4	25	3	3	1.8	92
CLAYTON	1515			21.9	5.2	13.6	0.6	30.0	2	0.0	31+	0	2			10	- 15	8	2		T	25						24	3	4	2.0	
ROSWELL	1112	890.6	1014.0	25.9	6.7	16.3	- 0.2	34.4	2	0.0	31	2	1	2.2	44	13	- 18	13	1	0	0	0	0.9	20	17.0	SW	10	23	5	3	2.1	85
NEW YORK																																
ALBANY	84	1007.8	1018.4	17.8	3.2	10.6	0.1	24.4	3	- 2.8	28	0	4	5.0	75	53	- 18	34	10	1	0	0	0.8	26	15.2	W	14	9	12	10	5.5	59
BINGHAMTON	485	959.4	1018.4	16.3	6.6	11.4	1.6	22.2	13	0.0	31	0	1	6.1	73	69	- 9	32	16	2	T	T	1.2	21	14.8	NE	29	5	11	15	6.6	43
BUFFALO	215	991.5	1017.2	16.9	7.8	12.4	1.9	23.9	12	1.1	19	0	0	7.2	75	108	32	30	13	4	0	0	1.0	23	17.0	N	14	4	9	18	7.1	55
NEW YORK U	40	1015.2	1018.5	20.6	10.7	15.7	1.1	27.8	4	5.0	28	0	0	7.2	62	100	20	93	3	2	0	0	0.8	30	13.4	NE	29					71
NEW YORK KENNEDY	4	1017.6	1018.3	19.1	9.5	14.3	0.1	27.2	5	5.0	28+	0	0	7.8	69	57	- 24	52	4	1	0	0	1.3	28	13.9	8	29+	14	10	7	4.4	
NEW YORK LA GUARDIA	3	1017.6	1018.6	19.7	11.5	15.6	0.8	26.7	5+	5.6	28	0	0	7.8	64	69	- 16	62	4	2	0	0	1.1	30	17.9	NE	29	13	10	8	4.7	
ROCHESTER	167	997.6	1017.9	18.1	7.5	12.8	1.8	27.2	25	1.1	22	0	0	7.8	76	68	2	25	13	2	0	0	1.2	26	16.5	NW	14	6	11	14	6.5	60
SYRACUSE	125	1002.7	1017.6	17.4	6.7	12.1	1.1	24.4	13	- 0.6	31	0	1	8.3	82	97	16	25	11	3	T	0	0.4	21	20.1	W	14	5	13	13	6.5	49

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M	Mb.	Mb.	C.	°C.	C.	C.	C.		°C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
ASHEVILLE	652	943.8	1019.8	22.0	7.7	14.9	1.7	27.8	4	- 1.1	18	0	1	10.0	81	61	- 18	23	5	2	0	0	0.9	34	11.2	36	30+	13	8	10	5.1	62
CAPE HATTERAS R	2	1017.3	1017.8	23.6	16.2	19.9	1.3	29.4	5	10.0	28	0	0	15.0	74	34	- 74	24	9	4	0	0	2.9	36	12.5	23	29+	14	5	12	4.8	63
CHARLOTTE	224	991.2	1018.7	23.0	10.4	16.7	- 0.2	30.0	5	2.2	18	0	0	11.1	74	60	- 15	31	4	3	0	0	1.0	34	9.8	SW	30	16	8	7	4.1	74
GREENSBORO	273	987.5	1019.1	22.2	8.7	15.4	0.3	29.4	4	0.0	18	0	1	8.3	69	59	- 10	29	8	2	0	0	0.6	31	11.2	SW	30	16	7	8	4.0	71
RALEIGH	132	1002.7	1018.4	24.1	9.4	16.8	0.9	31.1	4	- 1.1	18	0	1	10.0	71	15	- 54	9	3	2	0	0	0.6	2	8.9	26	29	18	7	6	3.6	69
WILMINGTON	9	1016.6	1017.9	26.1	13.1	19.6	1.1	30.6	5+	5.0	18	0	0	14.4	78	39	- 38	24	6	4	0	0	1.2	2	10.3	N	24	15	5	11	4.6	77
NORTH DAKOTA																																
BISMARCK	502	953.3	1013.6	15.4	1.0	8.2	0.1	24.4	20+	- 7.2	28	0	14	3.3	76	36	14	17	7	0	15	25	1.1	28	15.2	W	31	9	9	14	6.3	54
FARGO	273	980.4	1013.4	15.8	4.4	10.1	2.1	23.3	20	- 3.3	27	0	8	6.1	78	39	11	22	6	2	T	0	1.5	22	23.2	S	11	7	14	10	6.1	57
WILLISTON	579	944.8	1013.7	16.0	0.9	8.4	0.9	26.1	18	- 3.9	25	0	16	1.1	65	7	- 11	4	4	0	T	0	1.6	29	16.1	W	18	7	9	15	6.4	54
OHIO																																
AKRON	368	973.2	1017.7	19.4	8.5	13.9	2.3	26.1	4	1.7	19	0	0	8.3	73	117	54	27	13	4	0	0	1.0	21	10.3	27	15+	10	7	14	5.9	
CINCINNATI ABBE OB.	232			22.1	11.1	16.6	2.2	28.9	4	3.3	29	0	0			96	39	44	10		0	0			11.2	SW	4					48
CLEVELAND	237	987.8	1017.0	19.4	9.2	14.3	2.4	26.7	12+	0.6	19	0	0	10.0	77	100	39	29	11	1	T	0	1.3	24	12.5	NW	16	9	7	15	6.1	50
COLUMBUS	247	987.8	1017.9	20.5	9.0	14.8	2.4	28.3	4	1.7	19	0	0	9.4	74	84	30	29	8	3	0	0	1.0	22	12.5	W	31+	14	5	12	4.8	59
DAYTON	305	981.7	1017.8	20.9	8.7	14.8	1.7	27.8	10	1.1	29+	0	0	8.9	73	83	27	31	10	3	0	0	1.4	21	11.6	W	31	15	4	12	4.8	62
MANSFIELD	395			19.9	9.2	14.6	1.9	26.1	12	1.1	19	0	0	8.9	71	91	34	20	11	2	0	0	1.8	22	10.7	28	16	11	8	12	5.7	
TOLEDO	204	991.9	1017.0	19.7	6.6	13.2	2.0	26.1	12+	- 2.8	19	0	5	7.8	75	70	9	25	9	2	0	0	1.1	26	11.6	W	2	8	10	13	5.9	48
YOUNGSTOWN	359	974.9	1017.7	17.8	7.5	12.7	1.6	24.4	12+	1.7	6	0	0	7.8	77	73	5	31	12	1	0	0	1.3	20	10.3	28	16	8	8	15	6.3	
OKLAHOMA																																
OKLAHOMA CITY	392	969.9	1016.1	24.2	11.7	17.9	0.8	30.6	2	- 0.6	29	0	1	11.7	72	77	14	27	10	5	0	0	1.7	18	13.0	SE	10	18	6	7	3.9	74
TULSA	198	992.6	1016.7	24.7	11.9	18.3	1.2	31.1	3+	1.7	29	0	0	12.8	74	156	72	56	7	5	0	0	2.1	19	18.8	S	11	15	7	9	4.0	75
OREGON																																
ASTORIA	2	1016.9	1017.6	15.2	6.1	10.7	- 0.9	19.4	18	0.6	4	0	0	7.2	82	150	- 47	37	19	0	0	0	1.1	18	11.2	25	31+	1	10	20	7.9	
BURNS U	1265			16.4	- 0.3	8.1	- 1.1	26.7	17	- 5.6	25	0	17			16	- 6	6	7		T	T						9	8	14	6.0	
EUGENE	109	1004.4	1018.1	17.7	5.3	11.5	- 0.3	22.8	18	- 1.7	3	0	1	7.8	83	60	- 37	23	11	0	0	0	0.8	19	13.0	17	6	3	10	18	7.5	
MEACHAM	1234	877.4	1017.3	11.9	2.4	7.2	- 0.8	22.8	17	- 3.3	31	0	12			75	3	27	10		76				10.3	28	30	6	6	19	7.0	
MEDFORD	396	970.5	1018.4	19.6	4.1	11.9	0.2	27.2	18+	0.6	4+	0	0	3.3	64	71	22	45	9	0	0	0	0.3	31	13.4	14	22	7	10	14	6.1	
PENDLETON	452	963.4	1017.1	17.5	5.6	11.6	- 0.5	25.6	19	0.0	8	0	1	1.1	53	43	13	18	9	0	81	76	1.2	24	13.0	27	6	7	4	20	6.9	
PORTLAND	6	1016.6	1017.8	17.1	7.7	12.4	0.1	21.1	17	2.8	9+	0	0	8.3	79	80	- 12	25	14	0	0	0	0.7	19	13.0	SW	31	3	7	21	7.9	38
SALEM	60	1010.5	1017.9	16.8	5.3	11.1	- 1.2	21.1	15	0.0	3	0	1	7.2	81	71	- 28	17	12	0	0	0	1.2	20	10.3	31	31+	4	9	18	7.3	
SEXTON SUMMIT R	1169	885.2	1017.8	12.5	4.1	8.3	- 2.1	21.7	17	- 1.1	31	0	8			163	76	84	10		T	0			17.9	21	6	9	8	14	5.7	
PACIFIC AREA																																
GUAM TAGUAC R	110			29.6	22.3	25.9	- 0.3	31.1	19+	19.4	20	0	0			453	120	125	25		0	0			11.6	NE	11					44
JOHNSTON	2	1012.5	1013.0	28.4	24.6	26.6	- 0.6	29.4	31+	21.1	17	0	0	22.2	76	58	- 25	30	16	0	0	0	5.8	9	16.1	E	10	3	15	13	7.0	64
KOROR R	29			31.2	24.2	27.7	0.4	33.3	17	22.2	11	11	0			486	154	115	24	5	0	0			13.0	W	3	0	7	24	9.0	49
KWAJALEIN	2	1008.8	1009.5	30.1	24.9	27.5	- 0.2	31.1	16+	22.8	26+	0	0	23.9	81	291	14	69	26	0	0	0	4.4	8	17.0	8	26	1	6	24	8.4	
MAJURO	3			29.2	24.7	26.9	0.0	30.6	17	22.8	5	0	0			350	- 35	85	27		0	0			13.0	E	28	2	4	25	8.5	66
PAGO PAGO	4	1011.5	1011.6	28.4	23.6	26.0		30.0	29+	19.4	14	0	0	23.3	84	411		70	27	4	0	0	4.5	11	17.9	E	19	0	9	22	8.4	47
PONAPE R	37			31.0	22.8	26.9	0.4	32.8	21+	21.1	12	12	0			542	136	135	23	2	0	0			7.6	NE	29+	0	8	23	8.4	45
TRUK MOEN ISLAND	2			30.6	23.8	27.2	0.2	31.7	18+	22.2	20	0	0			537	196	114	26	2	0	0			12.1	S	25	1	4	26	9.0	38
WAKE	3	1012.5	1012.9	30.7	23.8	27.3	- 0.3	32.2	13+	21.1	21	6	0	22.2	77	69	- 65	10	21	5	0	0	4.9	8	15.2	E	31	3	18	10	6.4	38
YAP R	13			29.9	23.4	26.7	- 0.9	31.1	31+	22.2	7+	0	0			379	44	70	27	3	0	0			9.4	E	21	0	9	22	8.3	43
PENNSYLVANIA																																
ALLENTOWN	118	1004.4	1018.6	19.3	6.8	13.1	1.0	26.1	4	1.1	22	0	0	7.8	74	53	- 23	43	4	0	0	0	1.0	28	13.9	29	14	11	13	7	4.8	
ERIE	223	990.5	1017.3	16.9	8.4	12.7	1.9	23.9	12	1.7	22	0	0	8.3	80	90	7	28	13	4	T	0	1.7	21	13.0	31	16	5	10	16	6.7	
HARRISBURG	103	1005.8	1018.5	19.8	8.3	14.1	0.9	27.8	4	1.1	31	0	0	7.2	68	63	- 13	42	4	1	0	0	0.4	28	11.6	E	29	13	10	8	4.9	60
PHILADELPHIA	2	1017.3	1018.2	20.8	9.3	15.1	1.9	28.9	5	2.8	19	0	0	10.0	75	55	- 16	38	5	0	0	0	0.5	26	13.4	W	14	13	13	5	4.4	67
PITTSBURGH	347	973.9	1018.1	18.7	8.1	13.4	1.7	26.1	4	0.6	19	0	0	7.8	73	113	49	34	10	2	0	0	0.9	24	12.5	26	18	8	9	14	5.8	45
SCRANTON	283	984.1	1018.4	17.4	6.1	11.8	1.2	25.0	4	0.6	31+	0	0	5.6	70	50	- 39	29	9	3	T	0	0.7	21	17.0	E	29	8	12	11	5.8	60
WILLIAMSPORT	160	999.3	1018.7	17.6	6.2	11.9	0.2	23.3	4	- 0.6	31	0	1	7.8	79	91	- 4	39	10	2	0	0	0.0	30	10.3	9	29	9	9	13	6.3	
RHODE ISLAND																																
BLOCK ISLAND	34			17.1	9.7	13.4	0.5	22.8	4	4.4	12+	0	0			85	8	47	4		0	0						12	10	9	5.2	
PROVIDENCE	16	1015.9	101[illegible].1	18.1	6.6	12.3	0.6	25.0	4	1.7	22	0	0	6.1	69	81	2	47	8	1	0	0	1.2	32	10.3	30	14	11	9	11	5.4	63

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station ☉	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
SOUTH CAROLINA	M.	Mb.	Mb.	C	C.	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
CHARLESTON	12	1016.3	1018.0	27.1	14.7	20.9	1.9	31.7	5+	5.0	18	0	0	14.4	71	16	- 56	12	3	2	0	0	1.6	1	16.5Y	W	29	15	6	10	4.4	73
CHARLESTON U	3			25.5	17.0	21.3	1.2	30.0	5	7.2	30	0	0			16	- 54	11	3		0	0			14.3	SW	29					
COLUMBIA	65	1010.5	1018.7	27.1	11.4	19.3	1.1	32.2	5+	1.7	18	2	0	12.8	73	18	- 42	13	4	3	0	0	0.6	36	8.0	23	28	18	3	10	3.9	67
GRNVLLE-SPRTNBRG	292	984.4	1018.8	23.2	9.9	16.6	- 0.3	30.0	5	0.6	18	0	0	10.0	72	25	- 60	12	5	0	0	0	0.6	1	9.4	W	29	18	7	6	3.6	71
SOUTH DAKOTA																																
ABERDEEN	395	966.8	1013.8	17.1	3.6	10.3	1.3	25.6	23	- 3.9	31	0	12	6.1	78	33	2	15	5	5	T	T	0.7	24	11.6	34	24	9	12	10	5.5	
HURON	390	967.5	1014.0	18.4	4.4	11.4	2.1	26.1	23+	- 1.1	31+	0	5	6.1	74	54	25	32	5	1	T	T	1.3	19	14.3	NW	24	9	10	12	5.7	55
RAPID CITY	964	904.2	1015.0	18.6	2.8	10.7	0.7	28.3	18+	- 5.6	28	0	9	0.0	54	35	15	28	5	2	36	25	2.3	33	24.1	NW	29	14	7	10	5.0	75
SIOUX FALLS	432	963.8	1015.3	18.3	4.9	11.6	1.4	26.7	14	- 4.4	29	0	4	6.1	72	146	114	115	4	2	T	0	1.2	22	12.5	18	11	8	10	13	5.9	
TENNESSEE																																
BRISTOL	459	964.8	1019.0	23.1	8.4	15.7	1.3	28.9	4	0.0	18	0	1	9.4	74	58	4	27	9	2	0	0	0.4	29	10.3	27	31	14	9	8	4.3	
CHATTANOOGA	203	994.2	1018.9	23.9	10.1	17.1	0.3	30.0	4+	2.8	18	0	0	11.7	78	94	17	39	7	2	0	0	0.3	19	9.4	NW	28	12	8	11	5.1	58
KNOXVILLE	299	983.7	1018.6	23.1	10.7	16.9	0.8	27.8	4	3.3	18	0	0	11.7	75	88	22	48	6	1	0	0	0.4	29	9.4	W	31+	13	8	10	4.8	75
MEMPHIS	79	1007.8	1018.0	25.7	13.8	19.8	2.5	31.7	4	3.3	30	0	0	13.9	74	86	17	24	8	5	0	0	0.9	15	14.3	35	4	14	10	7	4.4	68
NASHVILLE	180	996.6	1018.4	25.8	12.1	19.0	2.6	31.7	4	3.9	18+	0	0	11.7	71	84	25	34	7	2	0	0	0.8	21	11.6	NW	7	15	7	9	4.5	65
OAK RIDGE R	276			22.9	10.4	16.7	1.2	28.3	4	1.7	18	0	0			85	18	49	7		0	0			10.7		31	8	11	12	6.0	
TEXAS																																
ABILENE	544	953.6	1015.6	25.2	13.1	19.2	0.2	32.8	3	3.3	28	1	0	12.8	71	80	8	34	7	4	0	0	2.6	18	15.6	S	9	19	4	8	3.5	73
AMARILLO	1098	891.6	1014.1	24.4	8.8	16.7	0.8	34.4	2	2.8	31	2	0	6.1	57	27	- 18	13	3	2	0	0	2.1	21	14.3	S	29	24	2	5	2.8	81
AUSTIN	182	994.6	1016.3	26.7	16.8	21.7	0.2	32.8	3	9.4	18	2	0	16.7	79	282	210	118	13	3	0	0	0.8	10	15.2	NW	30	11	8	12	5.2	61
BROWNSVILLE	6	1014.2	1014.9	29.2	20.2	24.7	0.3	33.3	3+	13.3	31	7	0	20.0	79	96	6	35	9	0	0	0	1.2	11	13.4	SE	30+	9	14	8	5.5	66
CORPUS CHRISTI	12	1013.9	1015.5	29.2	19.9	24.6	0.9	33.3	9	13.9	31	6	0	20.0	81	253	183	156	13	3	0	0	2.0	9	14.8	NW	30	10	14	7	5.2	72
DALLAS	147			26.2	15.7	21.0	1.1	31.7	10	5.6	29	0	0	15.6	75	170	102	56	9	4	0	0	1.7	16	19.7	14	10	12	6	13	5.0	
DEL RIO	313	979.0	1014.9	27.4	16.4	21.9	0.0	32.8	3+	8.3	31	3	0	16.1	75	121	71	82	9	4	0	0	2.6	11	11.2	6	4	7	15	9	5.2	
EL PASO	1194	883.2	1014.0	28.2	6.6	17.4	- 0.6	35.6	2	- 0.6	31	4	1	0.6	37	2	- 20	2	2	1	0	0	0.1	26	12.1	W	10	24	6	1	1.5	94
FORT WORTH	164	996.6	1017.0	25.8	14.5	20.2	0.2	31.1	10+	3.9	29	0	0	16.1	83	174	108	62	10	3	0	0	1.3	17	10.3	32	12+	13	6	12	4.8	
GALVESTON U	2			27.1	22.0	24.6	1.5	30.0	7+	15.0	31+	0	0			164	91	57	10		0	0			17.0	N	31					61
HOUSTON INTERCON	29	1013.2	1016.8	27.9	16.3	22.1	1.1	32.2	3+	8.9	29	2	0	17.8	82	236	142	87	13	6	0	0	1.3	8	15.6	32	1	12	11	8	4.8	57
LUBBOCK	992	904.5	1014.7	25.3	10.2	17.7	1.5	32.8	3+	2.8	31	2	0	7.8	59	23	- 28	11	3	4	0	0	1.8	21	10.3	32	10+	24	5	2	2.1	87
MIDLAND	869	917.0	1014.5	26.3	10.3	18.3	- 0.5	33.9	3+	0.6	31	2	0	9.4	63	15	- 27	10	2	1	0	0	2.3	16	13.9	30	30	22	5	4	2.4	
PORT ARTHUR	5	1016.3		27.9	16.6	22.3	1.0	31.7	10+	8.9	29	0	0	18.3	83	130	57	31	11	5	0	0	1.5	9	12.5	S	31	15	9	7	4.3	71
SAN ANGELO	580	949.5	1015.6	26.3	12.6	19.4	- 0.7	31.7	3	5.0	29	0	0	13.3	72	52	5	33	5	3	0	0	1.9	19	14.3	31	11	18	5	8	3.6	
SAN ANTONIO	240	988.5	1016.1	27.9	17.1	22.5	1.1	32.8	10	8.3	29	5	0	16.7	74	123	60	42	11	3	0	0	1.1	10	17.4	NW	30	10	9	12	5.4	53
VICTORIA	32	1011.9	1015.8	29.2	18.4	23.8	1.3	33.9	3+	11.7	29+	8	0	18.9	80	159	71	68	12	7	0	0	1.6	8	24.1Y	NW	30	13	7	11	5.5	
WACO	153	998.6	1016.5	26.1	16.1	21.1	0.3	31.1	3+	7.2	29	0	0	16.1	79	238	173	63	13	6	0	0	1.4	17	10.7	17	10	12	7	12	4.9	
WICHITA FALLS	303	980.0	1016.2	26.6	13.1	19.8	0.7	33.9	3	3.3	29	3	0	14.4	78	49	- 24	34	6	5	0	0	1.9	16	14.3	23	26+	18	6	7	3.6	
UTAH																																
MILFORD	1533	848.0		19.6	- 0.5	9.6	- 0.8	26.7	17+	- 7.2	30	0	17			20	0	18	2		81	25			20.1	SW	23	20	6	5	3.1	80
SALT LAKE CITY	1286	873.0	1016.7	19.3	5.3	12.3	1.3	27.8	1	- 1.7	30	0	3	0.6	50	17	- 12	6	4	0	33	25	1.5	16	14.3	SW	31	15	3	13	4.9	71
WENDOVER	1291	872.0	1017.4	17.2	5.2	11.2	- 0.6	26.1	1	- 0.6	27	0	1			11	- 1	11	1		0	0										
VERMONT																																
BURLINGTON	101	1005.4	1018.1	14.6	4.7	9.6	0.9	21.7	13	- 3.3	28	0	4			49	- 26	12	10	1	T	0	0.8	21	17.0	W	14	8	7	16	6.3	53
VIRGINIA																																
LYNCHBURG	279	985.1		21.4	9.0	15.2	0.7	28.3	5+	- 0.6	18	0	1			100	33	45	8		0	0			8.5	W	16	16	5	10	4.1	66
NORFOLK	7	1017.6	1018.5	22.9	12.8	17.9	1.2	31.1	5	5.0	18	0	0	11.7	70	35	- 39	26	4	2	0	0	1.0	5	11.6	5	25	16	6	9	4.2	70
RICHMOND	50	1012.2	1018.6	23.3	8.4	15.9	1.1	31.1	5	- 0.6	18	0	1	10.0	73	65	- 11	28	5	2	0	0	0.3	36	9.8	SW	29	15	9	7	4.5	73
ROANOKE	350	977.0	1019.0	21.3	8.8	15.1	0.6	28.9	4	1.7	18	0	0	8.9	72	109	27	48	8	1	T	0	0.9	29	13.9	30	30	16	5	10	4.4	
WALLOPS ISLAND	3			20.6	11.7	16.2		30.6	5	3.9	18	0	0			26		14	4		0	0			19.7Y	SE	29					
WASHINGTON																																
OLYMPIA	59	1009.8	1017.3	14.8	4.9	9.9	- 0.9	21.7	27+	- 0.6	31+	0	3	6.7	84	117	- 17	35	16	0	0	0	1.7	19	9.8	19	13	0	7	24	8.8	
QUILLAYUTE	55	1009.1	1016.5	13.9	4.6	9.3	- 1.5	17.8	4	- 1.1	9	0	3	7.8	89	258	- 9	46	23	1	0	0	0.8	16	10.7	SW	13	2	3	26	8.7	29
SEATTLE	6			14.7	8.4	11.6	- 0.8	20.6	17	5.6	4	0	0			70	- 11	29	14		0	0			14.3Y	S	24					
SEATTLE-TACOMA	122	1000.3	1016.8	14.4	8.1	11.2	- 0.1	20.0	18	4.4	31+	0	0	7.2	79	84	- 18	30	13	0	0	0	1.6	17	13.4	SW	28	0	8	23	8.6	41
SPOKANE	718	931.9	1016.2	13.7	3.2	8.4	- 1.1	21.1	18	- 2.8	9	0	8	1.7	67	25	- 15	5	8	0	20	T	2.5	20	14.3	SW	6	6	3	22	7.9	37

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station ○	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: 25 mm. or more	Precipitation: No of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb.	C	C.	C.	C.	C.		C.				C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M p.s.							%
WASHINGTON																																
STAMPEDE PASS R	1206			7.0	1.6	4.3	- 1.5	16.1	17	- 3.3	31	0	8			245	21	34	21		518	229						3	3	25	8.5	
WALLA WALLA U	289			17.7	7.2	12.4	- 0.4	25.6	18	0.0	31	0	1			47	8	26	10		89	102			22.4	W	6	6	10	15	6.6	53
YAKIMA	321	978.0	1016.9	16.7	2.3	9.6	- 0.7	21.1	18+	- 1.7	31	0	8	2.8	68	39	23	18	7	0	61	51	1.5	27	12.5	21	24	7	4	20	7.0	
WEST INDIES																																
SAN JUAN P.R.	4	1011.2	1013.5	32.1	25.1	28.6	1.9	33.9	25+	22.8	12+	16	0	21.7	69	84	- 65	27	12	3	0	0	2.7	12	13.4	NE	2	8	18	5	5.1	61
WEST VIRGINIA																																
BECKLEY	763	930.6	1018.7	18.9	6.9	12.9	0.9	25.6	4	- 0.6	19	0	4	7.8	74	82	15	23	9	0	81	51	1.6	21	10.3	26	30	12	10	9	4.6	
CHARLESTON	286	984.1	1018.4	21.5	8.4	14.9	0.9	28.9	4	1.1	19+	0	0	10.0	78	121	55	39	11	2	0	0	1.0	23	12.5	28	30	12	11	8	4.8	
ELKINS	594	947.9		19.1	4.0	11.6	0.4	25.0	4	- 3.9	19	0	11			107	30	28	14		64	T						6	12	13	6.1	
HUNTINGTON	252	987.8	1017.8	22.1	10.2	16.1	2.1	29.4	4	1.1	17	0	0	10.6	73	86	39	41	10	2	0	0	0.8	25	10.3	30	31	14	9	8	4.5	
PARKERSBURG U	187			21.2	9.2	15.2	1.3	28.3	4	1.7	19	0	0			95	43	31	10		0	0			11.2	SW	18					69
WISCONSIN																																
GREEN BAY	208	989.8	1015.5	18.1	6.9	12.5	2.8	27.2	10	- 1.7	17	0	1	7.2	75	101	52	43	9	2	0	0	0.6	25	15.2	NE	28	7	10	14	6.1	55
LA CROSSE	198	991.5	1016.2	19.8	8.1	13.9	3.3	26.7	24+	0.6	30	0	0	8.3	75	52	- 3		6	2	0		0.7	20								
MADISON	262	984.4	1015.9	18.4	6.1	12.3	2.3	26.7	11+	- 2.2	17	0	2	7.8	78	58	2	14	12	4	0	0	1.2	22	11.6	S	11	9	7	15	6.2	50
MILWAUKEE	205	990.9	1016.0	17.1	7.9	12.6	2.6	23.9	10	2.2	31+	0	0	8.3	75	75	22	25	11	2	0	0	1.7	24	13.0	NW	16	8	8	15	6.2	53
WYOMING																																
CASPER	1627	837.5	1015.3	17.2	1.3	9.3	0.2	26.7	1	- 6.7	27	0	13	- 1.7	54	15	- 6	15	2	0	150	102	3.2	24	16.5	24	5	11	8	12	5.4	
CHEYENNE	1867	813.1	1016.1	16.6	2.6	9.6	1.0	24.4	1	- 3.3	27	0	8	- 3.9	44	2	- 20	2	1	0	13	T	2.5	29	21.9	W	24	13	7	11	4.8	67
LANDER	1696	829.3	1015.5	16.2	1.6	8.9	0.5	25.6	1	- 6.1	30	0	12	- 2.2	51	37	7	23	4	0	409	102	1.1	24	16.5	SW	23	12	10	9	5.0	78
SHERIDAN	1208	878.4	1015.8	17.2	0.4	8.8	0.0	27.2	18	- 5.6	29	0	15			21	- 8	9	5	1	124	102	1.2	30	14.8	NW	25+	6	12	13	6.5	57

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	73	76	143
HUNTSVILLE	67	73	170
MOBILE	18	18	39
MONTGOMERY	57	57	93
ALASKA			
ANCHORAGE	1012	2143	1945
ANNETTE	646	1608	1333
BARROW	1407	3880	4246
BARTER ISLAND	1517	3934	4093
BETHEL	1072	2433	2392
BETTLES	1468	2850	2782
BIG DELTA	1280	2435	2379
COLD BAY	815	2360	2205
FAIRBANKS	1231	2167	2304
HOMER	894	2263	2191
JUNEAU	732	1984	1813
KING SALMON	953	2084	2177
KODIAK	837	2254	1854
KOTZEBUE	1342	2988	2818
MC GRATH	1244	2445	2443
NOME	1197	3078	2771
ST. PAUL ISLAND	848	2693	2602
SUMMIT	1401	3163	2935
TALKEETNA	1176	2416	2129
UNALAKLEET	1206	2996	2561
YAKUTAT	761	2144	1986
ARIZONA			
FLAGSTAFF	458	754	934
PHOENIX	2	2	17
TUCSON	23	23	26
WINSLOW	306	357	271
YUMA	0	0	0
ARKANSAS			
FORT SMITH	97	106	135
LITTLE ROCK	61	63	148
CALIFORNIA			
BAKERSFIELD	24	24	55
BISHOP	264	290	305
BLUE CANYON	386	594	534
EUREKA U	393	1218	1099
FRESNO	94	94	90
LONG BEACH	[illegible]	10	55
LOS ANGELES	24	25	134
LOS ANGELES U	8	9	40
MT SHASTA R	469	706	668
OAKLAND	155	414	348
RED BLUFF	96	100	82
SACRAMENTO	77	77	106
SANDBERG R	223	324	262
SAN DIEGO	6	6	65
SAN FRANCISCO	128	433	380
SAN FRANCISCO U	134	709	608
SANTA MARIA	126	402	467
STOCKTON	90	90	88
COLORADO			
ALAMOSA	633	1140	1093
COLORADO SPRINGS	378	605	633
DENVER	321	495	528
GRAND JUNCTION	266	338	384
PUEBLO	268	354	390
CONNECTICUT			
BRIDGEPORT	171	206	303
HARTFORD	322	424	502
DELAWARE			
WILMINGTON	179	194	286
DIST.OF COLUMBIA			
WASHINGTON DULLES	257	281	334
WASHINGTON NATIONAL	103	107	204
FLORIDA			
APALACHICOLA U	15	15	22
DAYTONA BEACH	10	10	0
FORT MYERS	0	0	0
JACKSONVILLE	26	26	19
KEY WEST	0	0	0
LAKELAND U	4	4	0
MIAMI	0	0	0
ORLANDO	6	6	0
PENSACOLA	17	17	32
TALLAHASSEE	47	47	31
TAMPA	6	6	0
WEST PALM BEACH	0	0	0
GEORGIA			
ATHENS	94	94	138
ATLANTA	86	87	145
AUGUSTA	96	96	104
COLUMBUS	55	55	81
MACON	56	56	82
ROME	130	133	185
SAVANNAH	47	47	60
IDAHO			
BOISE	382	502	545
LEWISTON	415	502	550
POCATELLO	500	767	727
ILLINOIS			
CAIRO U	107	124	168
CHICAGO O HARE	244	316	475
CHICAGO MIDWAY	232	303	381
MOLINE	258	336	434
PEORIA	253	307	405
ROCKFORD	281	383	513
SPRINGFIELD	191	221	338
INDIANA			
EVANSVILLE	160	171	270
FORT WAYNE	266	335	465
INDIANAPOLIS	211	231	370
SOUTH BEND	229	293	496
IOWA			
BURLINGTON	225	282	398
DES MOINES	209	277	457
DUBUQUE	302	436	594
SIOUX CITY	259	357	501
WATERLOO	313	463	596
KANSAS			
CONCORDIA	208	303	348
DODGE CITY	168	267	288
GOODLAND	365	557	495
TOPEKA	191	249	314
WICHITA	159	217	243
KENTUCKY			
COVINGTON	217	245	315
LEXINGTON	172	194	286
LOUISVILLE	144	157	276
LOUISIANA			
ALEXANDRIA	47	47	92
BATON ROUGE	18	18	54
LAKE CHARLES	11	11	36
NEW ORLEANS	18	18	40
SHREVEPORT	40	40	70
MAINE			
CARIBOU	649	1075	1190
PORTLAND	480	720	775
MARYLAND			
BALTIMORE	221	245	277
MASSACHUSETTS			
BLUE HILL OBS R	372	539	497
BOSTON	289	385	385
WORCESTER	420	636	593
MICHIGAN			
ALPENA	406	787	999
DETROIT	274	401	433
DETROIT METRO	276	384	493
FLINT	300	479	630
GRAND RAPIDS	314	458	558
HOUGHTON LAKE	420	751	940
LANSING	339	534	591
MARQUETTE U	360	700	879
MUSKEGON	328	494	610
SAULT STE MARIE	473	963	1095
MINNESOTA			
DULUTH	513	1005	1100
INTERNATIONAL FALLS	530	940	1209
MINNEAPOLIS	350	539	731
ROCHESTER	349	564	726
ST CLOUD	419	699	822
MISSISSIPPI			
JACKSON	61	61	91
MERIDIAN	49	49	111
MISSOURI			
COLUMBIA REGIONAL	191	233	289
KANSAS CITY	173	226	277
ST JOSEPH	186	243	319
ST LOUIS	182	213	259
SPRINGFIELD	147	178	268
MONTANA			
BILLINGS	446	679	723
GLASGOW	480	750	885
GREAT FALLS	483	742	844
HAVRE	505	770	968
HELENA	588	975	1005
KALISPELL	649	1082	1256
MILES CITY	446	658	750
MISSOULA	606	933	1059
NEBRASKA			
GRAND ISLAND	306	431	475
LINCOLN	281	381	412
NORFOLK	314	459	537
NORTH PLATTE	407	636	595
OMAHA	254	344	378
SCOTTSBLUFF	438	705	627
VALENTINE	376	619	642
NEVADA			
ELKO	522	782	896
ELY	591	977	939
LAS VEGAS	42	42	74
RENO	483	719	691
WINNEMUCCA	531	758	765
NEW HAMPSHIRE			
CONCORD	518	786	730
MT WASHINGTON OBS	997	2657	2813
NEW JERSEY			
ATLANTIC CITY	245	309	297
ATLANTIC CITY U	163	179	222
NEWARK	166	184	277
TRENTON U	203	235	291
NEW MEXICO			
ALBUQUERQUE	257	300	225
CLAYTON	263	386	397
ROSWELL	130	157	150
NEW YORK			
ALBANY	431	636	588
BINGHAMTON	374	606	689
BUFFALO	326	513	602
NEW YORK U	162	191	238
NEW YORK KENNEDY	234	298	289
NEW YORK LA GUARDIA	167	197	254
ROCHESTER	305	483	559
SYRACUSE	344	522	541
NORTH CAROLINA			
ASHEVILLE	205	212	319
CAPE HATTERAS R	31	31	76
CHARLOTTE	124	126	162
GREENSBORO	179	183	233
RALEIGH	126	128	198
WILMINGTON	39	39	80
NORTH DAKOTA			
BISMARCK	557	889	869
FARGO	451	795	838
WILLISTON	546	852	929
OHIO			
AKRON	240	332	495
CINCINNATI ABBE OB	151	168	282
CLEVELAND	234	319	475
COLUMBUS	219	257	426
DAYTON	227	260	377
MANSFIELD	223	283	421
TOLEDO	289	422	501
YOUNGSTOWN	308	453	533
OKLAHOMA			
OKLAHOMA CITY	99	136	160
TULSA	95	119	153
OREGON			
ASTORIA	421	1023	893
BURNS U	570	880	873
EUGENE	374	570	577
MEACHAM	615	1169	1109
MEDFORD	352	392	481
PENDLETON	372	486	500
PORTLAND	326	438	570
SALEM	398	619	582
SEXTON SUMMIT R	553	1055	841
PENNSYLVANIA			
ALLENTOWN	290	364	435
ERIE	309	477	623
HARRISBURG	239	274	344
PHILADELPHIA	196	214	287
PITTSBURGH	274	339	493
SCRANTON	368	521	532
WILLIAMSPORT	354	494	479
RHODE ISLAND			
BLOCK ISLAND	272	371	400
PROVIDENCE	331	461	453
SOUTH CAROLINA			
CHARLESTON	34	34	74
CHARLESTON U	22	22	50
COLUMBIA	57	57	112
GRNVLLE-SPRTNBRG	132	133	154
SOUTH DAKOTA			
ABERDEEN	442	683	765
HURON	380	612	673
RAPID CITY	416	678	695
SIOUX FALLS	373	552	658
TENNESSEE			
BRISTOL	169	181	286
CHATTANOOGA	143	146	191
KNOXVILLE	135	145	185
MEMPHIS	67	75	149
NASHVILLE	84	92	190
OAK RIDGE R	139	150	236
TEXAS			
ABILENE	60	66	89
AMARILLO	154	210	226
AUSTIN	8	8	39
BROWNSVILLE	0	0	5
CORPUS CHRISTI	0	0	7
DALLAS	26	27	55
DEL RIO	1	1	34
EL PASO	90	97	92
FORT WORTH	36	37	60
GALVESTON U	1	1	12
HOUSTON INTERCON	8	8	24
LUBBOCK	99	130	170
MIDLAND	81	96	81
PORT ARTHUR	13	13	35
SAN ANGELO	33	34	73
SAN ANTONIO	4	4	32
VICTORIA	0	0	15
WACO	22	22	51
WICHITA FALLS	42	52	92
UTAH			
MILFORD	486	688	570
SALT LAKE CITY	333	474	512
WENDOVER	391	497	470
VERMONT			
BURLINGTON	480	763	762
VIRGINIA			
LYNCHBURG	192	201	267
NORFOLK	83	83	150
RICHMOND	163	168	224
ROANOKE	196	208	267
WALLOPS ISLAND			
WASHINGTON			
OLYMPIA	465	916	836
QUILLAYUTE	499	1257	1078
SEATTLE	371	629	568
SEATTLE-TACOMA	388	683	729
SPOKANE	546	803	797
STAMPEDE PASS R	777	1858	1710
WALLA WALLA U	321	410	419
YAKIMA	485	668	666
WEST VIRGINIA			
BECKLEY	295	368	526
CHARLESTON	202	222	313
ELKINS	373	507	615
HUNTINGTON	159	177	311
PARKERSBURG U	193	227	314
WISCONSIN			
GREEN BAY	330	566	757
LA CROSSE	267	398	578
MADISON	349	558	700
MILWAUKEE	324	450	631
WYOMING			
CASPER	495	827	795
CHEYENNE	482	889	808
LANDER	521	891	812
SHERIDAN	523	849	837

COOLING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals January through this month
	This month	Period January through this month	
ALABAMA			
BIRMINGHAM	129	1859	
HUNTSVILLE	138	1938	
MOBILE	293	2861	
MONTGOMERY	165	2422	
ALASKA			
ANCHORAGE	0	0	
ANNETTE	1	[illegible]	
BARROW	0	0	
BARTER ISLAND	0	0	
BETHEL	0	0	
BETTLES	0	9	
BIG DELTA	0	14	
COLD BAY	0	0	
FAIRBANKS	0	39	
HOMER	0	0	
JUNEAU	0	0	
KING SALMON	0	3	
KODIAK	0	0	
KOTZEBUE	0	0	
MC GRATH	0	4	
NOME	0	0	
ST. PAUL ISLAND	0	0	
SUMMIT	0	0	
TALKEETNA	0	0	
UNALAKLEET	0	0	
YAKUTAT	0	0	
ARIZONA			
FLAGSTAFF	0	143	
PHOENIX	302	3988	
TUCSON	205	2657	
WINSLOW	2	951	
YUMA	325	3960	
ARKANSAS			
FORT SMITH	90	1733	
LITTLE ROCK	147	2073	
CALIFORNIA			
BAKERSFIELD	137	2674	
BISHOP	0	1063	
BLUE CANYON	0	470	
EUREKA U	0	1	
FRESNO	47	1887	
LONG BEACH	86	982	
LOS ANGELES	52	457	
LOS ANGELES U	133	1118	
MT SHASTA R	0	430	
OAKLAND	6	136	
RED BLUFF	26	1909	
SACRAMENTO	34	1351	
SANDBERG R	36	965	
SAN DIEGO	70	624	
SAN FRANCISCO	1	129	
SAN FRANCISCO U	15	107	
SANTA MARIA	8	115	
STOCKTON	41	1491	
COLORADO			
ALAMOSA	0	52	
COLORADO SPRINGS	0	442	
DENVER	1	631	
GRAND JUNCTION	6	1167	
PUEBLO	2	1024	
CONNECTICUT			
BRIDGEPORT	21	1001	
HARTFORD	8	1038	
DELAWARE			
WILMINGTON	29	1434	
DIST.OF COLUMBIA			
WASHINGTON DULLES	15	1216	
WASHINGTON NATIONAL	57	1703	
FLORIDA			
APALACHICOLA U	269	2787	
DAYTONA BEACH	326	2947	
FORT MYERS	393	3541	
JACKSONVILLE	221	2606	
KEY WEST	483	4254	
LAKELAND U	306	3031	
MIAMI	394	3828	
ORLANDO	341	3463	
PENSACOLA	288	2897	
TALLAHASSEE	209	2627	
TAMPA	348	3281	
WEST PALM BEACH	397	3746	
GEORGIA			
ATHENS	62	1672	
ATLANTA	79	1654	
AUGUSTA	95	1987	
COLUMBUS	146	2248	
MACON	136	2372	
ROME	68	1753	
SAVANNAH	177	2454	
HAWAII			
HILO	340	2805	
HONOLULU	455	3896	
KAHULUI	396	3068	
LIHUE	406	3423	
IDAHO			
BOISE	1	890	
LEWISTON	0	981	
POCATELLO	0	483	
ILLINOIS			
CAIRO U	91	1796	
CHICAGO O HARE	32	946	
CHICAGO MIDWAY	39	1151	
MOLINE	27	995	
PEORIA	35	999	
ROCKFORD	25	828	
SPRINGFIELD	64	1221	
INDIANA			
EVANSVILLE	76	1564	
FORT WAYNE	19	928	
INDIANAPOLIS	44	1154	
SOUTH BEND	29	978	
IOWA			
BURLINGTON	37	999	
DES MOINES	30	1152	
DUBUQUE	18	685	
SIOUX CITY	19	1028	
WATERLOO	12	828	
KANSAS			
CONCORDIA	29	1248	
DODGE CITY	56	1525	
GOODLAND	0	837	
TOPEKA	52	1283	
WICHITA	47	1552	
KENTUCKY			
COVINGTON	36	1046	
LEXINGTON	51	1269	
LOUISVILLE	71	1542	
LOUISIANA			
ALEXANDRIA	186	2204	
BATON ROUGE	282	2828	
LAKE CHARLES	257	2550	
NEW ORLEANS	289	2826	
SHREVEPORT	145	2088	
MAINE			
CARIBOU	0	307	
PORTLAND	0	502	
MARYLAND			
BALTIMORE	19	1219	
MASSACHUSETTS			
BLUE HILL OBS R	1	664	
BOSTON	3	904	
WORCESTER	0	617	
MICHIGAN			
ALPENA	5	337	
DETROIT	13	979	
DETROIT METRO.	11	778	
FLINT	6	587	
GRAND RAPIDS	12	768	
HOUGHTON LAKE	2	395	
LANSING	12	657	
MARQUETTE U	6	389	
MUSKEGON	13	573	
SAULT STE MARIE	0	220	
MINNESOTA			
DULUTH	0	175	
INTERNATIONAL FALLS	0	334	
MINNEAPOLIS	8	769	
ROCHESTER	11	560	
ST CLOUD	2	442	
MISSISSIPPI			
JACKSON	181	2460	
MERIDIAN	191	2302	
MISSOURI			
COLUMBIA REGIONAL	53	1275	
KANSAS CITY	46	1231	
ST JOSEPH	33	1306	
ST LOUIS	57	1391	
SPRINGFIELD	66	1329	
MONTANA			
BILLINGS	0	590	
GLASGOW	0	538	
GREAT FALLS	0	570	
HAVRE	0	462	
HELENA	0	311	
KALISPELL	0	258	
MILES CITY	0	724	
MISSOULA	0	347	
NEBRASKA			
GRAND ISLAND	9	1065	
LINCOLN	14	1055	
NORFOLK	9	1003	
NORTH PLATTE	3	702	
OMAHA	22	1106	
SCOTTSBLUFF	0	641	
VALENTINE	1	837	
NEVADA			
ELKO	0	423	
ELY	0	200	
LAS VEGAS	134	3147	
RENO	0	381	
WINNEMUCCA	0	585	
NEW HAMPSHIRE			
CONCORD	2	645	
MT WASHINGTON OBS	0	0	
NEW JERSEY			
ATLANTIC CITY	20	1063	
ATLANTIC CITY U	29	937	
NEWARK	28	1466	
TRENTON U	19	1251	
NEW MEXICO			
ALBUQUERQUE	0	1270	
CLAYTON	5	747	
ROSWELL	25	1469	
NEW YORK			
ALBANY	2	753	
BINGHAMTON	0	501	
BUFFALO	3	678	
NEW YORK U	22	1287	
NEW YORK KENNEDY	14	923	
NEW YORK LA GUARDIA	24	1229	
ROCHESTER	4	851	
SYRACUSE	2	795	
NORTH CAROLINA			
ASHEVILLE	19	969	
CAPE HATTERAS R	126	1799	
CHARLOTTE	39	1534	
GREENSBORO	25	1342	
RALEIGH	48	1471	
WILMINGTON	116	2019	
NORTH DAKOTA			
BISMARCK	0	411	
FARGO	0	448	
WILLISTON	0	467	
OHIO			
AKRON	5	822	
CINCINNATI ABBE OB.	58	1265	
CLEVELAND	17	841	
COLUMBUS	25	1042	
DAYTON	39	1172	
MANSFIELD	19	931	
TOLEDO	9	742	
YOUNGSTOWN	0	638	
OKLAHOMA			
OKLAHOMA CITY	83	1676	
TULSA	101	1826	
OREGON			
ASTORIA	0	13	
BURNS U	0	407	
EUGENE	0	235	
MEACHAM	0	222	
MEDFORD	0	844	
PENDLETON	0	831	
PORTLAND	0	403	
SALEM	0	231	
SEXTON SUMMIT R	0	271	
PACIFIC AREA			
GUAM TAGUAC R	434	4273	
JOHNSTON	463	4045	
KOROR R	529	5253	
KWAJALEIN	520	5243	
MAJURO	484	4902	
PAGO PAGO	436	4905	
PONAPE R	485	4970	
TRUK MOEN ISLAND	503	5163	
WAKE	505	4582	
YAP R	472	4975	
PENNSYLVANIA			
ALLENTOWN	4	982	
ERIE	1	497	
HARRISBURG	9	1130	
PHILADELPHIA	23	1400	
PITTSBURGH	5	846	
SCRANTON	7	650	
WILLIAMSPORT	1	692	
RHODE ISLAND			
BLOCK ISLAND	4	536	
PROVIDENCE	3	883	
SOUTH CAROLINA			
CHARLESTON	184	2422	
CHARLESTON	193	2382	
COLUMBIA	116	2092	
GRNVLLE-SPRTNBRG	36	1532	
SOUTH DAKOTA			
ABERDEEN	0	761	
HURON	3	691	
RAPID CITY	0	599	
SIOUX FALLS	8	872	
TENNESSEE			
BRISTOL	32	1100	
CHATTANOOGA	79	1708	
KNOXVILLE	60	1443	
MEMPHIS	156	2216	
NASHVILLE	128	1762	
OAK RIDGE R	56	1338	
TEXAS			
ABILENE	111	2093	
AMARILLO	67	1455	
AUSTIN	205	2556	
BROWNSVILLE	365	3327	
CORPUS CHRISTI	353	3278	
DALLAS	184	2494	
DEL RIO	207	2914	
EL PASO	44	1805	
FORT WORTH	146	2372	
GALVESTON U	354	2824	
HOUSTON INTERCON	225	2492	
LUBBOCK	71	1592	
MIDLAND	88	1732	
PORT ARTHUR	242	2459	
SAN ANGELO	104	2317	
SAN ANTONIO	242	2732	
VICTORIA	313	3078	
WACO	182	2481	
WICHITA FALLS	132	2089	
UTAH			
MILFORD	0	598	
SALT LAKE CITY	2	1048	
WENDOVER	1	1165	
VERMONT			
BURLINGTON	0	650	
VIRGINIA			
LYNCHBURG	24	1163	
NORFOLK	64	1733	
RICHMOND	32	1533	
ROANOKE	23	1208	
WALLOPS ISLAND			
WASHINGTON			
OLYMPIA	0	67	
QUILLAYUTE	0	12	
SEATTLE	0	131	
SEATTLE-TACOMA	0	140	
SPOKANE	0	530	
STAMPEDE PASS R	0	30	
WALLA WALLA U	0	979	
YAKIMA	0	585	
WEST INDIES			
SAN JUAN P.R.	579	5084	
WEST VIRGINIA			
BECKLEY	2	574	
CHARLESTON	22	1128	
ELKINS	3	428	
HUNTINGTON	41	1296	
PARKERSBURG U	27	1161	
WISCONSIN			
GREEN BAY	13	638	
LA CROSSE	28	787	
MADISON	19	613	
MILWAUKEE	6	693	
WYOMING			
CASPER	0	400	
CHEYENNE	0	293	
LANDER	0	412	
SHERIDAN	0	376	

STORM SUMMARY

OCTOBER 1973

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				@ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				Ø ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS
Alabama *																													
Alaska																												6	
Arizona *																													
Arkansas	1	1			3																								
California											2	5																	
Colorado											1	5								4	4								
Connecticut																										3	3	2	2
Delaware *																													
Florida	3	2		20	6							3			4	3													
Georgia *																													
Hawaii *																													
Idaho *																													
Illinois	1	1			2			2	2			2	2			2	2											5	2
Indiana											2	5																	
Iowa	2	1			5							5	5																
Kansas	7	5		15	6			5	4			4				4												6	6
Kentucky *																													
Louisiana	1	1			4																								
Maine *																													
Maryland																3													
Massachusetts																												3	
Michigan										3		4																3	
Minnesota	2	2			4			3	4		5	5	4		1													4	
Mississippi															1	1													
Missouri								4	2		9	5	2			5	2												
Montana												4								4						3	2		
Nebraska	2	1		5	5			4				4				5													
Nevada *																													
New Hampshire *																													
New Jersey																										10	57	2	2
New Mexico *																													
New York												4			1	5	2									3	6	2	
North Carolina																4													
North Dakota *																													
Ohio												4																	
Oklahoma	3	2			5						2	5				4										9	13	7	7
Oregon *																													
Pacific Area *																													
Pennsylvania	1	1		1	5			1	1		1	5				5										2	20	4	
Puerto Rico																											1	5°	C
Rhode Island												3																	
South Carolina																												4	
South Dakota *																													
Tennessee														2	2														
Texas	3	3		1	4			4				4				4										6		4	
Utah												4																	
Vermont *																													
U.S. Virgin Is. *																													
Virginia	1	1			2											3										1		4	
Washington												5																	
West Virginia *																													
Wisconsin	1	1			4							4				5													
Wyoming *																													

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

OCTOBER 1973

Herbert J. Thompson and Ray J. Haley,
Office of Hydrology

The month was marked by serious and widespread flooding over much of the central Midwest. The Kansas, Lower Missouri, and Arkansas River Basins were affected. At Enid, Oklahoma, a record 24-hour rainfall total was observed accompanied by severe flash flooding. The highest stages of any October on record were observed on many streams in these basins, and some new all-time record stages were established. The recurrence intervals of crest discharges at points on the Nemaha, Smoky Hill, Solomon, and Arkansas Rivers and for a number of smaller streams were estimated by the U. S. Geological Survey to be in excess of 100 years.

Extensive flooding also occurred in Texas with less serious flooding in Puerto Rico, Iowa, and Nebraska, and a flash flood in South Carolina. Minor flooding was reported in New Jersey, Minnesota, and Illinois. A dam failure occurred in Alaska.

Hydrologic events of unusual significance or involving loss of life or property damages are discussed in more detail below.

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	ATLANTIC SLOPE DRAINAGE		
Santee River Basin	General rainfall of 2.5 to 4.5 inches occurred over the Broad River Basin on the 1st-2d. A high rainfall center of more than 4 inches over Union, S. C., caused flash flooding there along a tributary of the Broad River. Some automobiles and mobile homes were damaged.	0	5
	UPPER MISSISSIPPI BASIN		
Fabius and North River Basins	An estimated 17,000 acres were flooded in Marion County, Missouri, including 11,500 acres along the South Fabius River, 2,500 acres along the North River, 2,000 acres along Troublesome Creek, and 1,000 acres along Grassy Creek. Damage to the soybean crop was estimated at $315,000. Other damage included: Livestock; $2,000, Fences; $4,000, and roads; $3,000.	0	324
	MISSOURI BASIN		
Lower Platte River Basin	A slowly moving cold front with overrunning Gulf moisture supported by a deep trough aloft moved across the area on the 9th-10th. The resulting precipitation was particularly heavy over the headwaters of Salt Creek, with a 24-hour total of 4.3 inches at Roca, Nebraska. Storm totals were somewhat larger. In general, flooding along Salt Creek was contained by control structures. However, there was considerable overflow into parks and inundation of secondary roads and highways. On the Platte River some flooding occurred around Ashland with damage to control structures estimated at $50,000.	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

OCTOBER 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	MISSOURI BASIN-Cont'd.		
Kansas River Basin	The storm discussed above deposited rainfall amounts of 4 to 6 inches over the eastern half of the basin resulting in record crests at some stations and the highest October crests of record at nearly all stations in this area. The flooding was intensified by the record-breaking September rainfall which had filled Kanopolis, Milford, and Tuttle Creek Reservoirs to well above conservation levels and left most streams at half bankfull stages prior to the storm. On the Solomon River the crest of 32.30 feet at Minneapolis, Ks., was exceeded only by the 34.14 foot crest of July 1951. On the Saline River the crest of 29.4 feet at Tescott was exceeded in earlier years only by the 30.06 foot crest of July 13, 1951. Substantial residential flooding occurred along the lower Smoky Hill River where flooding was the worst since 1951. On the lower Republican River the most serious flooding since 1958 occurred. On the Little Blue River the highest stages of record were observed. The crest of 18.96 feet at Fairbury, Nebraska, was 1.4 feet higher than the previous record stage of June 27, 1951. At Hanover, Kansas, the crest of 25.24 feet was 0.2 feet higher than the previous record stage of June 10, 1941. The highest stages for any October were observed along the entire length of the Big Blue River and the highest of record were reported at two points. The crest of 32.90 feet at Beatrice, Nebraska, was 4.6 feet higher than the previous record of 28.3 feet occurring June 4, 1951, and at Blue Rapids the crest stage was 8.0 feet higher than the record stage observed June 10, 1941. Blue Rapids, Frankfort, and Winkler, Kansas, were affected by backwater from the Tuttle Creek Reservoir. At Barneston, Nebraska, the crest of 33.50 feet was second only to the record stage of 34.3 feet established June 9, 1941. At Marysville, Kansas, the crest of 43.68 feet was the highest stage recorded since the station was established in 1950, but 1.7 feet lower than the record high water mark from the crest of June 9, 1941. Substantial residential flooding occurred with 500-600 residences inundated in the vicinities of Wilber and Beatrice in Nebraska and Marysville in Kansas. The most serious flooding since 1951 occurred on the Kansas River but in general it was controlled by dikes in populated areas along the main stem. However, residential flooding	N.A.	N.A.

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	MISSOURI BASIN-Cont'd		
	on many of the smaller tributaries including: Louisville on Rock Creek; Rossville on Cross Creek; Onaga on Vermillion Creek; and Easton on Stranger Creek. On the lower Kansas River 1,000 acres were inundated with $50,000 damage to soybeans and corn, and 160 mobile homes were damaged to the extend of $500,000. The highest stage of record was reported on Soldier Creek near Topeka where the crest of 23.30 feet was 3.2 feet above the previous record of June 12, 1967.		
Missouri River Basin Rulo, Nebraska to Mouth	The lower reaches of the Grand and Missouri Rivers were still above flood stage at the beginning of the month as a result of the September flooding and had just fallen below flood stage when the storm of the 10th-11th, discussed above, caused renewed flooding. The highest stage of record occurred on the Nemaha River at Falls City, Nebraska, where the crest was 31.36 feet compared with the previous record of 28.9 feet on June 29, 1965. Along this stream 21,200 acres were flooded with damage of $2,423,000, much of it to field crops, soybeans, corn, and milo. Along the Little Nemaha 5,200 acres were flooded but most damage was to highways and railroads, amounting to $1,057,000 total. Along the Platte River in Missouri, 33,000 acres were flooded with damage of $2,580,000, nearly all of it to crops. On the Little Platte nearly 24,000 acres were inundated with total damage of $4,260,000, about 80 percent of it to crops. Considerable damage occurred along a number of other smaller tributaries including: the Tarkio River, $797,000 with 11,000 acres flooded; the Nodaway River, $1,604,000 with 33,000 acres flooded; the Blackwater River, $285,000 with 30,000 acres flooded, the 102 River, $628,000 with 31,000 acres flooded; and the Chariton River, $1,815,000 with 22,000 acres flooded. On all of these streams damage was mostly agricultural in nature. Along the North Grand River, 70 homes and 80,500 acres were flooded. Total damage was $7,762,000, mostly to agricultural, but some highway and railroad damage. Significant flooding occurred along the Marais des Cygnes River with the crest at Garnett, Kansas, of 32.8 feet, the third highest of record, 2.6 feet below the record crest of September 13, 1961. At Lane, Kansas, the	0	66,000

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

OCTOBER 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	MISSOURI BASIN-Cont'd		
	crest of 32.2 feet was the fourth highest of record, 1.7 feet below the record crest of September 14, 1961. Total damage along the main stem of the Missouri River amounted to $41,828,000, about 90 percent agricultural. More than 373,000 acres were inundated and 308 dwellings were flooded. Considerable damage was sustained by roads, bridges, and levees. The highest stage of record was observed at Waverly, Missouri, where the crest of 28.84 feet was 0.6 feet higher than the previous record of July 14, 1951.		
	ARKANSAS BASIN		
Arkansas Basin Ponca City to Tulsa, Okla.	A low pressure center moving northeastward along a slowly moving cold front stalled over north-central Oklahoma late on the 10th depositing record-breaking rainfall over the area. The 24-hour total at Enid, Oklahoma, of 15.68 inches exceeded the previous record for the area which occurred September 3-4, 1940, at Sapalpa. The rain at Enid actually fell in 12 hours, with 75 percent of it falling in 4 hours. Unofficial amounts of more than 20 inches were noted in a special survey of the area. Severe flash flooding resulted at Enid from this rainfall and extensive flooding occurred along the Cimarron, Chikaskia and Salt Fork and main stem of the Arkansas River. Among the communities affected were Tonkawa on the Salt Fork where a section of Interstate 35 was washed out stranding several hundred travelers; Ponca City and Ralston on the Arkansas; Blackwell on the Chikaskia; and Waynoka, Dover, Guthrie, and Perkins on the Cimarron. The previous record flood in this area occurred in June 1923 and the crest at Tonkawa was about 2 feet higher than the old record. Crests at Blackwell and Ralston were only slightly lower than those of 1923. Property damage along the main stem of the Arkansas is estimated at$10 million with agricultural loss at$20 million.	0	30,000
	WEST GULF OF MEXICO DRAINAGE		
Sabine River Basin	Two periods of heavy rainfall occurred during the month over the Upper Sabine Basin. Storm totals of 4 to 5 inches were reported for the period of the 9th-15th. Most of this rainfall occurred during a 36-hour period on the 11th-12th. On the 30th-31st, rainfall of 2 to 3 inches was reported along a 40-mile wide strip from Emory to Quitman, Texas. Flooding was minor to moderate in severity. Corps of Engineers estimates of damage were $11,000 from Iron Bridge Dam to Mineola, Texas; $88,000 from near Gladewater to near River Hill, Texas; and $54,000 from	0	153

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

OCTOBER 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	WEST GULF OF MEXICO DRAINAGE-Cont'd		
	River Hill, Texas, to Logansport, Louisiana.		
Trinity River Basin	Moderate flooding occurred along the Upper Trinity River from Dallas to Long Lake and along the East Fork Trinity around Crandall, Texas. General rains of 3 to 5 inches with point totals of as much as 7 inches occurred over the area during a 60-hour period on the 10th-13th. Flooding along the East Fork was prolonged by releases from upstream reservoirs. Another storm deposited from 1-4 inches over the basin above Dallas on the 30th-31st. Damage estimates by the Corps of Engineers are: $609,000 along the main stem from Dallas to Long Lake; $154,000 along the East Fork; and $75,000 along Chambers Creek and other minor tributaries.	0	838
Guadalupe Nueces and Colorado River Basins	Surface soil conditions continued abnormally wet during October over southeast Texas. Rainfall totals for the first ten months of the year for several cities in the area, including San Antonio, were the highest in almost 90 years of record. The Edwards underground artesian water system had the highest level in 50 years of record. For October, rainfall totaled 6 to 12 inches over the area with 4 to 9 inches falling during the 10th-17th. Sharp rises and minor flooding was reported on several streams in the area including the Navidad, Guadalupe, San Antonio, Frio, Sabinal, and Nueces Rivers. However, the only significant damage reported occurred in the Colorado River Basin. The Upper Colorado and San Saba River which received 3 to 8 inches of rain on the 10th-11th suffered $20,000 in damage mostly along the San Saba River. The damage was agricultural with 20,000 acres inundated. The Llano River crested 16 feet above flood stage at Junction where mobile homes were evacuated from three trailer parks. The advance warning limited damage to an estimated $50,000 along the Llano River and permitted the Lower Colorado River Authority to schedule releases of as much as 175,000 c.f.s. from Lake LBJ, which limited damage to property along the lakeshore and downstream to about $10,000.	0	80
	ALASKA		
Carlanna Creek	Heavy rainfall in extreme southeastern Alaska caused failure of an earth dam on Carlanna Creek, northeast of Ketchikan. Rainfall at nearby Annette totaled 4.61 inches just prior to the incident. A bridge was washed out and several cars and mobile	0	1,500

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

OCTOBER 1973

Basin and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	ALASKA-Cont'd		
	homes were carried out to sea. No loss of life was reported although 50 people were evacuated. Damage was estimated at $1,500,000.		
	PUERTO RICO		
	On the 11th a tropical wave system merging with an upper trough caused heavy rains over the southern coast. There were two centers of heavy rainfall. Guyana reported 8.63 inches and Yabucoa 8.41 inches, both during a period of 8-10 hours. Four homes were swept away by the Guayana River in Barrio Borinquen and Barrio Puento Jobos. Two families were evacuated in Patillas and four in Ponce. Portions of six towns were evacuated into Civil Defense Shelters with a number of highways blocked by flooding.	0	N.A.

N.A. Not Available

FLOOD STAGE DATA

(All dates in October unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–	Above flood stages -dates To–	Crest Stage	Crest Date
	Ft			Ft	
ATLANTIC SLOPE DRAINAGE					
[illegible]					
Chatham, N. J.	[illegible]	29	30	6.02	29
Raritan:					
Bound Brook, N. J.	8	29	30	8.6	30
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Kishwaukee River:					
Perryville, Ill.	10	[illegible]	[illegible]	11.1	3
Iowa River:					
Marshalltown, Iowa	13	11	14	14.9[illegible]	12
Iowa City, Iowa	[illegible]	Sept 29	9	14.80	Sept 30
South Skunk River:					
Ames, Iowa (Blo Squaw Cr)	10	11	13	11.7	12
Oskaloosa, Iowa	15	12	16	17.18	14
North Raccoon River:					
Perry, Iowa	13	Sept 27 13	4 16	17.29 13.77	Sept 30 15
Jefferson, Iowa	10	Sept 26 11	7 20	15.9 13.8	Sept 29 14
Raccoon River:					
Van Meter, Iowa	13	Sept 29 11	3 12	[illegible] [illegible]	1 11
Des Moines SW 18th, Iowa	12	Sept 29 11	[illegible] 12	12.7 12.2	2 11
North River:					
Norwalk, Iowa	18	11	14	21.85	13
Middle River:					
Indianola, Iowa	19	11	12	22.27	12
South River:					
Ackworth, Iowa	19	11	13	28.31	12
Whitebreast Creek:					
Dallas, Iowa	22	11	13	25.59	11
Cedar Creek:					
Bussey, Iowa	16.5	3 11	6 12	23.03 19.56	4 11
Des Moines River:					
Saylorville, Iowa	13	Sept 29 13	[illegible] 17	15.98 14.62	2 15
Des Moines 14th St., Iowa	21	Sept 29 11	4 15	23.34 22.46	2 12
Mississippi River:					
Ft. Ripley, Minn.	10	11	20	11.20	15
Missouri Basin					
Salt Creek:					
Roca, Nebr.	19	10 10	10 11	19.86 20.08	10 11
Lincoln, Nebr.	20.5	11	11	23.87	11
Greenwood, Nebr.	20	11	12	23.50	11
Ashland, Nebr.	16	11	12	E21.0	11
Platte River:					
Grand Island, Nebr.	4	Sept 28 [illegible]	[illegible] 12	[illegible] 4.17	Sept 29 11
Nishnabotna River:					
Hamburg, Iowa (Rural FS)	18	10	13	23.8[illegible]	12
Nemaha River:					
Falls City, Nebr.	[illegible]	10	12	[illegible]	11
Tarkio River:					
Fairfax, Mo.	[illegible]	10	12	23.1[illegible]	11
Nodaway River:					
Clarinda, Iowa	14	10	12	18.2[illegible]	11
MISSISSIPPI SYSTEM-Contd.					
Missouri Basin-Contd.					
Nodaway River-Continued:					
Burlington Jct., Mo.	18	10	12	[illegible]	11
One Hundred and Two River:					
Maryville, Mo.	14	11	12	19.26	11
Rosendale, Mo.	13	11	14	20.9	13
Little Platte River:					
Smithville, Mo.	24	Sept 28 10	2 13	29.02 36.40	Sept [illegible] 11
Platte River:					
Agency, Mo.	20	Sept 25 11	[illegible] 17	23.6 [illegible]	Sept 29 14
Buffalo Creek:					
Jamestown, Kansas	16	11	11	#17.55	11
Republican River:					
Hardy, Nebr.	11	10	13	#12.46	11
Scandia, Kansas	10	10	12	12.85	11
Concordia, Kansas	10	11	13	#13.88	12
Clay Center, Kansas	15	10	16	#21.3 #21.4	12 14
Mulberry Creek:					
Salina, Kansas	26	11	12	27.00	11
Saline River:					
Lincoln, Kansas	30	11	14	#34.0	12
Tescott, Kansas	25	Sept 26 11	1 16	#29.5 #29.4	Sept 27 12
North Fork Solomon River:					
Portis, Kansas	15	10	12	#18.53	11
Solomon River:					
Beloit, Kansas	20	11	12	#26.35	11
Glasco, Kansas	22	Sept 27 10	1 14	25.50 29.70	Sept 28 11
Minneapolis, Kansas	26	11	15	32.30	12
Niles, Kansas	[illegible]	Sept 26 11	4 18	#30.37 #30.70 30.35	Sept [illegible] 11 13
Chapman Creek:					
Chapman, Kansas	19	11	13	#24.14	12
Lyons Creek:					
Woodbine, Kansas	17	11	12	30.20	11
Smoky Hill River:					
Lindsborg, Kansas	21	11	13	#28.43	12
Mentor, Kansas	[illegible]	11	14	#24.96	12
New Cambria, Kansas	25	Sept 27 11	2 16	#29.18 #29.64	Sept 29 12
Abilene, Kansas	22	Sept 28 11	3 18	26.97 26.88	Sept 29 12
Enterprise, Kansas	21	Sept 27 11	[illegible] 19	#26.4 #26.9	Sept 30 13
Junction City, Kansas	22	Sept 28 11	4 18	#26.83 #29.05	1 13
Turkey Creek:					
Wilber, Nebr.	11	9	16	#17.25	10
Mill Creek:					
Washington, Kansas	[illegible]	10	13	26.62	12
Little Blue River:					
Deweese, Nebr.	[illegible]	10	[illegible]	#12.05	11
Fairbury, Nebr.	[illegible]	Sept 26 10	2 14	11.87 [illegible] 18.96	Sept 26 1 12
Hanover, Kansas	[illegible]	Sept 26 10	2 15	[illegible] [illegible]	[illegible] 12

FLOOD STAGE DATA

(All dates in October unless otherwise specified)

OCTOBER 1973

River and station	Flood stage	Above flood stages -dates		Crest	
		From–	To–	Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM-Contd.					
Missouri Basin-Contd.					
Black Vermillion River:					
Frankfort, Kansas (Hway 9)	19	10 15	13 23	E31.0 #21.25	11 17
Fancy Creek:					
Winkler, Kansas	11	10 13	12 Nov 6	#21.05 #26.49	11 18
Big Blue River:					
Seward, Nebr.	18	11	12	#20.1	12
Crete, Nebr.	18	10	16	#23.1 23.04	11 13
Beatrice, Nebr.	16	10	16	32.90	12
Barneston, Nebr.	18	10	16	33.50	12
Marysville, Kansas	35	11	16	#43.68	13
Blue Rapids, Kansas	1101	Sept 26	1/	#1128.19	18
Vermillion Creek:					
Wamego, Kansas	24	U	U	29.50	U
Mill Creek:					
Paxico, Kansas	19	11	12	#30.70	11
Soldier Creek:					
Delia, Kansas	17	U	U	21.43	11
Topeka, Kansas	12	11	13	#23.30	11
Delaware River:					
Muscotah, Kansas	27	10	12	#30.37	11
Wakarusa River:					
Lawrence, Kansas	23	11	13	#30.7	11
Stranger Creek:					
Easton, Kansas	15	10	13	#24.0	12
Tonganoxie, Kansas	22	11	14	26.20	13
Kansas River:					
Ft. Riley, Kansas	21	13	15	#23.67	14
Manhattan, Kansas	18	11 18	17 19	22.38 21.92 18.56	11 14 18
Topeka, Kansas	21	11	12	#27.30	12
Lecompton, Kansas	17	11	13	#22.29	12
Lawrence, Kansas	18	11	13	#22.7	12
Kansas City 23d St. Br., Kans	23	11	17	32.6	13
Blue River:					
Kansas City Bannister Rd, Mo.	21	11	12	30.47	11
Little Blue River:					
Lake City, Mo.	18	11	13	23.60	12
Grand River:					
Pattonsburg, Mo.	25	1 10	2 15	25.90 U	1 U
Gallatin, Mo.	21	1 11	2 15	23.8 32.82	2 13
Chillicothe, Mo.	24	1 11	2 17	27.3 32.3	2 13
Sumner, Mo.	26	Sept 25 11	6 20	32.96 32.36 36.35	Sept 27 3 16
Brunswick, Mo.	12	Sept 25 11	8 23	22.6 24.8	Sept 30 17
Chariton River:					
Novinger, Mo.	20	3	4	22.92	3
Prairie Hill, Mo.	15	4	7	20.5	5
Lamine River:					
Clifton City, Mo.	19	4	5	22.50	4
Blackwater River:					
Valley City, Mo.	22	3	5	27.80	4
MISSISSIPPI SYSTEM-Contd.					
Missouri Basin-Contd.					
Blackwater River-Continued:					
Blue Lick, Mo.	25	4	10	29.80	7
Salt Creek:					
Lyndon, Kansas	10	11	12	#12.23	11
Pottawatomie Creek:					
Garnett, Kansas	26	11	12	#32.81	11
Lane, Kansas	23	11	14	32.2	12
Marais Des Cygnes River:					
Reading, Kansas	18	11	12	#22.9	11
Quenemo, Kansas	28	11	13	33.46	12
Pomona 2 S, Kansas	20	11	13	#28.19	12
Ottawa, Kansas	27	Sept 27 11	U 13	#33.4 31.9	Sept 28 12
Osawatomie, Kansas	28	Sept 25 11	2 15	35.9 40.1	Sept 30 13
Lacygne, Kansas	25	Sept 26 11	4 17	#31.32 #33.72	2 13
State Line, Kansas	25	Sept 27 12	5 18	#29.9 #32.3	3 15
Missouri River:					
Rulo, Nebr.	17	10	14	23.38	12
St. Joseph, Mo.	17	10	16	25.63	13
Atchison, Kansas	22	11	15	27.41	13
Leavenworth, Kansas	19	11	17	26.85	14
Kansas City, Mo.	22	11	16	28.79	13
Sibley, Mo.	22	11	19	32.47	13
Napoleon, Mo.	17	11	20	26.6	13
Lexington, Mo.	22	Sept 25 11	5 24	30.0 32.3	Sept 29 13
Waverly, Mo.	18	Sept 25 11	10 Nov 3	28.8 28.84	Sept 29 13
Miami, Mo.	18	Sept 27 11	8 31	26.6 28.0	Sept 30 15
Glasgow, Mo.	25	Sept 27 11	8 22	31.3 32.7	Sept 30 18
Boonville, Mo.	21	Sept 26 12	[illegible] 23	27.83 28.78	1 16
Jefferson City, Mo.	23	Sept 29 13	7 22	26.07 17.00	2 18
Hermann, Mo.	21	Sept 28	25	27.28	19
St. Charles, Mo.	25	Sept 30	26	29.8	20
Arkansas Basin					
Cow Creek:					
Lyons, Kansas	18	11	13	19.0	12
Little Arkansas:					
Halstead, Kansas	19	Sept 27 12	2 15	20.85 22.25	Sept 29 12
Sedgwick, Kansas	18	Sept 28 11	3 16	23.8 25.2	Sept 30 13
South Fork Ninnescah:					
Murdock, Kansas	8	11	12	11.8	11
Ninnescah:					
Peck, Kansas	17	11	12	19.79	12
Walnut:					
Eldorado, Kansas	18	11	U	21.60	11
Augusta, Kansas	23	11	13	26.12	12
Winfield, Kansas	30	11	14	34.30	12
Arkansas City, Kansas	18	11	15	24.85	13
Whitewater:					
Towanda, Kansas	22	11	13	24.9	12
Augusta, Kansas	23	11	13	26.12	12

FLOOD STAGE DATA

River and station	Flood stage	Above flood stages -dates From–	Above flood stages -dates To–	Crest Stage	Crest Date
	Ft			Ft	
MISSISSIPPI SYSTEM-Contd.					
Arkansas Basin-Contd.					
Chikaskia:					
Blackwell, Kansas	[illegible]	11	[illegible]	[illegible]	[illegible]
Salt Fork:					
Tonkawa, Okla.	17	11	15	[illegible]	11
Cimarron:					
Waynoka, Okla.	8	11	11	8.9	11
Dover, Okla.	17	11	11	#21.0	11
Guthrie, Okla.	10	11	14	E14.5	12
Perkins, Okla.	12	12	14	E14.0	[illegible]
Cottonwood:					
Florence, Kansas	22	11	12	[illegible]	12
Cottonwood Falls, Kansas	9	11	13	14.0	[illegible]
Plymouth, Kansas	28	11	[illegible]	34.58	11
Emporia, Kansas	[illegible]	Sept [illegible] [illegible]	[illegible] [illegible]	25.81 27.05	Sept 28 12
Neosho:					
Americus, Kansas	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Neosho Rapids, Kansas	[illegible]	11	17	28.31	13
Leroy, Kansas	[illegible]	11	[illegible]	27.30	11
Iola, Kansas	[illegible]	11 [illegible]	13 [illegible]	25.40 20.4	[illegible] [illegible]
Chanute, Kansas	[illegible]	11 21	16 [illegible]	29.15 23.31	13 [illegible]
Oswego, Kansas	17	Sept 28 13	[illegible] 16	20.19 20.30	1 16
Little:					
Tecumseh, Okla.	11	11	11	11.7	11
Petit Jean Creek:					
Danville, Ark.	20	13	15	[illegible]	14
Arkansas:					
Hutchinson, Kansas	9	Sept 27 11	4 16	#13.5 10.70	Sept 27 13
Oxford, Kansas	14	13	[illegible]	[illegible]	13
Arkansas City, Kansas	17	Sept 27 11	5 17	#21.98 23.51	Sept 30 13
Ponca City, Okla.	[illegible]	11	16	E918.5	14
Ralston, Okla.	16	[illegible]	16	23.7	[illegible]
Red Basin					
Sulphur:					
Hagansport, Texas	44	Sept 26 12 27	1 18 Nov 7	46.95 46.75 47.69	Sept 29 16 31
Naples, Texas	[illegible]	[illegible] 18	[illegible] [illegible]	23.94 26.71	6 [illegible]
Ouachita:					
Arkadelphia, Ark.	17	31	[illegible]	[illegible]	[illegible]
WEST GULF OF MEXICO DRAINAGE					
Calcasieu:					
Hineston, La.	11	14	21	[illegible]	17
Sabine:					
Emory, Texas	[illegible]	1 13 31	[illegible] 24 Nov [illegible]	12.26 14.10 [illegible]	1 17 Nov [illegible]
Mineola, Texas	14	15	Nov 18	17.07 17.65	[illegible] Nov [illegible]
Attoyac Bayou:					
Chireno, Texas (Near)	14	17	[illegible]	[illegible]	[illegible]
Angelina:					
Lufkin, Texas (Near)	[illegible]	14	4	[illegible]	4
Neches:					
Alto, Texas (Near)	[illegible]	11	[illegible]	[illegible]	[illegible]
WEST GULF OF MEXICO DRAINAGE (Continued)					
Neches-Continued:					
Diboll, Texas (Near)	[illegible]	Sept 19 13	4 [illegible]	[illegible] 14.30	1 [illegible]
[illegible] Crossing, Texas	4	12	13	4.0	[illegible]
East Fork Trinity:					
Crandall, Texas	13	Sept 28 20	17 Nov 4	14.71 16.95 16.23	10 14 31
Chambers Creek:					
[illegible], Texas (Near)	20	12	[illegible]	22.49	15
Trinity:					
Dallas, Texas	[illegible]	11 31	14 Nov 1	[illegible] 32.08	14 31
Rosser, Texas	26	13	18	29.95	16
Trinidad, Texas	[illegible]	13	23	35.89	17
Long Lake, Texas	35	17	28	38.13	23
Goodrich, Texas	36	16	19	37.9	17
Liberty, Texas	24	13	Nov 9	28.0	20-22
Moss Bluff, Texas	4	[illegible]	[illegible]	8.2	22
Navasota:					
Easterly, Texas (Near)	14	11	21	16.5	16
Bryan, Texas (Near)	12	Sept 27	2	13.51	Sept 28
San Saba:					
Menard, Texas	12	12	13	17.22	13
San Saba, Texas (Near)	24	13	14	29.05	14
Colorado:					
San Saba, Texas	30	14	14	31.35	14
Navidad:					
Ganado, Texas (Near)	21	11	19	27.93	15
San Antonio:					
Goliad, Texas	35	1	5	40.1	2
Guadalupe:					
Gonzales, Texas	20	11	19	25.1	17
Cuera USGS, Texas	20	11	22	28.6	14-15
Victoria, Texas	21	11	24	29.0	[illegible]
Dupont, Texas	20	[illegible] 11	10 Nov 30	24.8 26.5	[illegible] 14
Frio:					
Derby, Texas (Near)	6	14	18	8.6	16
Tilden, Texas	12	[illegible]	[illegible]	21.24	[illegible]
Calliham, Texas	12	Sept 27	6	[illegible]	1
Atascosa:					
Whitsett, Texas	20	Sept 28	1	22.5	Sept [illegible]
Neuces:					
Blo Uvalde, Texas	11	[illegible]	[illegible]	23.0	13
Asherton, Texas	20	[illegible]	[illegible]	29.5	17
Cotulla, Texas	15	17	23	19.6	19
Tilden, Texas	14	Sept 26	Nov 5	22.4	[illegible]
Three Rivers, Texas (Near)	25	Sept 28 [illegible]	[illegible] 31	37.44 30.6	11 28
Mathis Bridge, Texas	15	Sept 27	Nov 4	30.1	12
Calallen, Texas	7	Sept 28	Nov [illegible]	11.0	13

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	86	6.1	4.5	25	.7
1000	27	175	8.2	5.6	23	.8
950	31	582	9.0	3.1	27	3.1
900	31	1,029	7.8	.2	28	4.9
850	31	1,499	5.8	-4.4	29	6.6
800	31	1,994	3.8	-7.7	29	7.2
750	31	2,515	1.1	-10.5	29	8.4
700	31	3,067	-1.6	-14.3	29	9.0
650	31	3,654	-4.8	-15.6	28	10.6
600	31	4,280	-8.1	-20.0	28	11.8
550	31	4,951	-12.3	-25.8	29	13.6
500	31	5,673	-16.8	-30.9	29	15.1
450	31	6,456	-22.0	-34.7	29	15.4
400	31	7,312	-28.2	-40.5	29	19.1
350	30	8,256	-35.1	-46.5	29	20.1
300	30	9,310	-43.0	-52.5	29	21.7
250	30	10,518	-50.7		28	22.8
200	31	11,949	-56.5		28	21.4
175	31	12,794	-57.4		28	22.9
150	30	13,765	-58.9		28	22.0
125	30	14,906	-60.4		28	18.8
100	29	16,292	-61.1		28	14.5
80	28	17,682	-60.6		28	10.4
70	27	18,517	-59.6		28	8.2
60	27	19,482	-59.4		28	6.9
50	26	20,624	-58.3		28	6.0
40	26	22,032	-57.3		28	6.7
30	25	23,856	-55.7		27	7.7
25	25	25,021	-54.2		27	8.9
20	22	26,471	-51.6		27	10.2
15	20	28,347	-49.8		27	14.5
10	8	31,018	-46.3			
7						

ALBUQUERQUE, N. MEX.
840 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,619	7.1	-3.7	09	1.2
1000						
950						
900						
850						
800	31	2,022	11.0	-6.6	23	1.0
750	31	2,558	8.4	-9.1	28	3.9
700	31	3,123	4.5	-12.0	28	4.5
650	31	3,723	.6	-15.3	27	5.9
600	31	4,360	-3.5	-19.6	27	7.9
550	31	5,042	-7.8	-24.6	26	8.5
500	31	5,777	-12.6	-29.4	26	9.0
450	31	6,572	-18.2	-35.1	27	10.3
400	31	7,441	-24.8	-41.2	27	11.1
350	31	8,401	-32.1	-46.3	26	13.1
300	31	9,468	-40.4	-52.5	26	15.7
250	31	10,667	-48.9		26	18.7
200	31	12,127	-56.2		27	20.9
175	31	12,970	-59.3		27	19.4
150	31	13,928	-62.6		26	18.7
125	31	15,043	-66.0		26	17.1
100	31	16,387	-68.5		27	13.5
80	30	17,735	-67.4		27	5.9
70	29	18,544	-65.3		28	3.3
60	29	19,489	-62.9		28	2.6
50	29	20,620	-60.0		30	2.5
40	29	22,020	-57.4		31	2.2
30	29	23,853	-54.5		30	3.1
25	27	25,023	-52.9		29	3.9
20	26	26,467	-51.8		28	6.2
15	26	28,343	-49.1		27	10.9
10	21	31,015	-47.0		27	15.0
7						

AMARILLO, TEXAS
892 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,095	10.5	5.7	23	2.3
1000						
950						
900						
850	31	1,503	14.8	1.9	24	6.7
800	31	2,014	13.0	-2.0	26	5.7
750	31	2,553	9.8	-5.9	26	5.5
700	31	3,122	6.2	-10.7	26	5.4
650	31	3,725	2.0	-14.9	26	5.3
600	31	4,366	-2.0	-18.4	26	6.8
550	31	5,052	-6.6	-23.4	26	7.9
500	31	5,789	-11.8	-29.5	27	8.9
450	31	6,587	-17.8	-33.9	27	9.7
400	31	7,456	-24.3	-39.0	27	11.2
350	31	8,419	-31.5	-45.2	26	13.0
300	31	9,489	-39.8	-51.8	27	16.1
250	31	10,710	-48.9		27	19.8
200	31	12,151	-56.3		27	22.9
175	31	12,994	-59.2		26	23.5
150	30	13,959	-62.7		26	23.0
125	30	15,075	-65.9		26	19.8
100	30	16,420	-68.3		27	13.9
80	30	17,758	-68.0		27	6.4
70	30	18,565	-65.8		28	4.3
60	30	19,508	-63.1		28	3.0
50	30	20,638	-60.3		28	2.6
40	29	22,043	-58.1		32	2.3
30	28	23,874	-54.2		29	3.7
25	28	25,046	-53.1		28	5.3
20	27	26,491	-51.7		27	7.8
15	26	28,365	-49.2		27	11.9
10	10	31,085	-44.7			
7						

* ANCHORAGE, ALASKA
997 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	45	-.2	-4.2	05	.4
1000	13	89	-.1	-4.7	04	.4
950	31	432	-.3	-5.2	03	1.5
900	31	864	-1.7	-6.3	05	1.2
850	30	1,316	-4.1	-8.9	12	1.0
800	30	1,792	-6.5	-11.7	14	.9
750	30	2,294	-9.5	-14.8	17	1.5
700	30	2,824	-12.9	-19.4	17	2.0
650	30	3,366	-16.3	-22.0	18	2.9
600	30	3,984	-19.9	-25.1	19	3.1
550	30	4,624	-24.1	-29.6	22	3.6
500	30	5,314	-28.4	-35.0	23	4.1
450	30	6,061	-33.9	-39.4	24	4.2
400	30	6,875	-40.1	-40.9	25	4.6
350	30	7,777	-46.3		27	4.3
300	30	8,786	-51.6		28	5.0
250	30	9,963	-52.6		28	8.4
200	30	11,410	-51.0		28	8.1
175	30	12,279	-51.0		28	8.4
150	30	13,283	-50.8		28	7.8
125	30	14,469	-51.4		28	8.3
100	30	15,917	-51.9		28	8.4
80	30	17,360	-52.7		27	7.5
70	30	18,221	-53.2		27	7.6
60	30	19,214	-53.7		27	7.8
50	30	20,383	-54.7		27	7.5
40	30	21,809	-55.3		27	7.2
30	30	23,644	-55.5		27	8.7
25	30	24,806	-55.7		27	9.2
20	27	26,223	-56.2		28	10.3
15	26	28,059	-55.9		29	12.1
10	19	30,671	-54.3		29	14.1
7	7	32,866	-55.1			

* ANNETTE, ALASKA
1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	37	6.1	3.1	14	2.7
1000	25	102	6.5	4.0	15	3.1
950	31	505	3.7	1.7	17	6.1
900	31	942	.6	-.9	18	6.7
850	31	1,399	-2.4	-4.6	20	7.8
800	31	1,878	-5.2	-8.4	21	8.2
750	31	2,382	-8.2	-13.4	21	9.0
700	31	2,914	-11.8	-18.7	22	9.3
650	30	3,477	-15.5	-22.5	22	9.1
600	30	4,077	-19.4	-27.0	23	10.0
550	30	4,718	-23.8	-32.3	23	11.2
500	30	5,407	-28.6	-37.5	24	12.8
450	30	6,155	-33.4	-40.8	24	15.7
400	30	6,972	-39.3	-43.7	24	18.6
350	30	7,878	-45.1	-47.4	25	20.7
300	30	8,893	-49.9		26	20.4
250	30	10,079	-52.1		27	21.1
200	29	11,523	-51.6		28	17.1
175	29	12,390	-51.4		27	15.6
150	29	13,390	-52.1		27	14.4
125	29	14,567	-53.5		27	12.7
100	28	16,001	-54.2		27	10.2
80	29	17,432	-54.2		26	8.6
70	27	18,286	-54.6		26	7.7
60	27	19,272	-55.2		26	8.3
50	26	20,435	-55.4		27	7.1
40	26	21,856	-56.0		28	6.3
30	25	23,689	-55.4		28	5.4
25	25	24,853	-55.4		28	5.2
20	24	26,275	-55.8		29	6.1
15	20	28,127	-54.7		30	6.7
10	13	30,769	-52.8			
7	6	33,187	-47.1			

ATHENS, GEORGIA
990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	12.2	10.5	34	1.2
1000						
950	30	598	16.2	8.2	06	1.9
900	30	1,056	13.9	6.2	35	1.2
850	30	1,537	11.4	3.1	33	1.9
800	30	2,042	9.1	-2.1	32	2.3
750	30	2,574	6.3	-6.8	32	3.3
700	30	3,137	3.4	-11.6	31	2.6
650	30	3,735	.6	-15.0	29	3.3
600	30	4,373	-2.6	-19.6	28	5.5
550	30	5,059	-6.5	-23.8	28	7.5
500	30	5,796	-11.5	-27.5	28	8.9
450	30	6,596	-17.1	-31.3	28	10.2
400	30	7,468	-23.6	-37.1	29	12.0
350	30	8,433	-30.8	-43.3	28	13.1
300	30	9,507	-38.7	-49.6	28	17.4
250	29	10,738	-47.3		28	22.0
200	29	12,185	-55.7		28	25.3
175	29	13,029	-59.2		28	25.2
150	28	13,986	-63.1		28	23.2
125	27	15,106	-67.0		28	19.2
100	27	16,442	-69.6		29	13.5
80	26	17,777	-67.6		29	7.7
70	26	18,586	-65.1		29	4.8
60	26	19,532	-62.7		27	3.1
50	26	20,662	-60.1		28	3.3
40	26	22,064	-57.0		27	3.3
30	25	23,909	-52.8		28	3.8
25	24	25,087	-51.5		27	4.6
20	24	26,544	-49.3		27	7.0
15	19	28,438	-47.0		27	11.5
10	11	31,123	-44.9			

* BARROW, ALASKA
1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	-6.6	-8.5	10	1.7
1000	22	103	-7.3	-9.3	08	2.8
950	30	464	-7.3	-8.8	09	2.5
900	30	883	-9.5	-11.3	06	1.1
850	30	1,324	-11.3	-15.0	05	1.0
800	30	1,788	-12.6	-17.9	13	.2
750	30	2,279	-14.6	-20.2	21	1.0
700	30	2,799	-17.2	-22.3	20	2.3
650	30	3,352	-20.1	-25.0	21	2.0
600	30	3,941	-23.3	-27.8	21	3.0
550	30	4,573	-27.1	-31.6	21	3.7
500	30	5,254	-31.5	-36.4	21	4.7
450	30	5,993	-36.4	-40.4	21	5.7
400	30	6,799	-42.3	-40.7	21	6.3
350	30	7,694	-48.3		22	6.6
300	30	8,692	-54.2		23	7.7
250	30	9,858	-55.0		23	7.8
200	29	11,293	-52.3		24	6.8
175	28	12,162	-51.5		25	6.6
150	28	13,164	-51.3		25	6.6
125	28	14,348	-52.0		25	6.6
100	26	15,793	-52.4		26	7.3
80	26	17,233	-53.4		26	7.5
70	25	18,086	-54.1		26	8.2
60	24	19,070	-54.9		26	9.3
50	22	20,229	-56.2		26	10.3
40	20	21,647	-57.3		27	8.8
30	16	23,487	-57.5		27	10.9
25	9	24,737	-55.0			
20						
15						
10						

BARTER IS., ALASKA
1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	-8.7	-10.2	15	.5
1000	22	106	-8.7	-9.7	07	1.1
950	31	463	-8.1	-10.7	02	1.2
900	31	883	-8.2	-13.0	32	.6
850	31	1,326	-9.2	-15.8	31	.4
800	31	1,794	-10.8	-17.6	27	1.1
750	31	2,288	-12.8	-19.4	28	1.1
700	31	2,812	-15.5	-21.3	26	2.1
650	31	3,368	-18.5	-25.2	25	2.7
600	31	3,961	-22.0	-29.7	25	2.9
550	31	4,597	-25.6	-34.5	24	4.0
500	31	5,281	-30.2	-37.3	24	4.7
450	31	6,024	-35.1	-42.8	24	5.3
400	31	6,835	-41.2	-44.1	24	5.4
350	31	7,732	-47.8		24	5.9
300	31	8,732	-54.1		28	6.6
250	31	9,897	-55.0		25	7.2
200	31	11,331	-52.4		25	6.0
175	31	12,195	-51.8		26	5.7
150	31	13,196	-51.4		25	6.0
125	31	14,381	-51.3		25	6.5
100	31	15,829	-52.1		25	6.8
80	31	17,270	-53.2		26	7.4
70	31	18,129	-53.8		26	7.9
60	31	19,119	-54.4		26	8.4
50	31	20,284	-55.5		27	9.0
40	31	21,703	-56.7		27	9.6
30	30	23,516	-57.9		27	11.6
25	29	24,654	-58.7		27	12.3
20	27	26,034	-59.6		28	13.7
15	19	27,784	-60.6		28	15.3
10	7	30,296	-59.7			

BETHEL, ALASKA
1000 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	-1.2	-3.1	31	1.5
1000	16	119	-1.7	-4.3	32	3.6
950	31	447	-2.1	-4.3	32	2.6
900	31	875	-4.6	-6.8	32	2.5
850	31	1,323	-6.8	-10.4	29	2.9
800	31	1,795	-8.9	-14.8	29	3.8
750	31	2,292	-11.3	-18.0	29	4.1
700	31	2,819	-14.0	-22.2	29	4.7
650	31	3,379	-16.8	-26.1	29	5.0
600	31	3,976	-19.9	-29.1	29	5.5
550	31	4,617	-23.8	-32.9	30	6.8
500	31	5,307	-28.2	-35.8	29	7.5
450	31	6,055	-33.3	-39.3	29	8.0
400	31	6,873	-38.9	-41.6	29	8.7
350	31	7,781	-44.3	-44.4	28	9.8
300	31	8,800	-49.4		28	12.5
250	31	9,987	-51.8		27	12.2
200	31	11,435	-51.3		27	12.0
175	30	12,299	-50.6		27	12.1
150	30	13,304	-51.0		27	10.3
125	30	14,490	-51.5		26	10.2
100	30	15,937	-51.9		26	9.8
80	29	17,380	-53.0		25	9.2
70	29	18,240	-53.2		26	9.5
60	29	19,233	-53.7		26	8.8
50	28	20,399	-54.5		26	9.0
40	28	21,825	-54.9		27	8.9
30	27	23,657	-54.8		27	8.7
25	27	24,824	-54.6		27	9.0
20	26	26,244	-54.7		27	10.2
15	21	28,066	-55.3		28	13.3
10	8	30,660	-53.6			

* BISMARCK, N. DAK.
954 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	503	3.3	2.1	31	1.0
1000						
950	22	565	4.4	1.9	31	1.3
900	31	982	8.8	-.4	29	3.5
850	31	1,455	8.7	-6.2	29	4.2
800	31	1,954	6.0	-8.5	29	5.8
750	31	2,480	2.8	-9.9	29	6.8
700	31	3,035	-.4	-13.7	28	7.9
650	31	3,624	-4.0	-17.0	27	9.4
600	31	4,250	-8.0	-20.2	27	11.3
550	31	4,921	-12.7	-24.5	27	12.3
500	30	5,640	-17.6	-30.4	27	13.8
450	30	6,421	-23.1	-34.4	27	15.5
400	30	7,273	-29.5	-38.0	27	15.9
350	30	8,214	-36.7	-42.8	26	17.8
300	30	9,262	-44.5		26	19.0
250	30	10,462	-52.5		26	20.4
200	30	11,886	-56.9		26	21.8
175	30	12,730	-57.5		27	21.4
150	30	13,703	-57.9		27	19.7
125	30	14,851	-59.0		27	16.8
100	30	16,248	-59.4		27	13.4
80	30	17,642	-59.9		27	11.8
70	29	18,475	-59.4		27	8.8
60	29	19,440	-59.5		28	7.8
50	28	20,583	-59.4		28	6.5
40	27	21,985	-58.8		29	6.4
30	26	23,791	-57.9		29	6.8
25	25	24,947	-56.3		29	6.2
20	23	26,382	-54.5		28	7.2
15	19	28,247	-52.3		28	7.4
10	17	30,907	-48.9		27	10.5

BOISE, IDAHO
917 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	871	7.0	-.6	15	1.0
1000						
950						
900	31	1,021	9.3	-1.4	19	.5
850	31	1,496	9.4	-4.9	26	1.5
800	31	1,996	6.5	-7.3	27	3.4
750	31	2,523	3.4	-8.9	27	5.3
700	31	3,079	-.1	-10.8	27	6.3
650	31	3,669	-3.9	-13.3	26	8.3
600	31	4,295	-8.1	-19.8	26	10.1
550	31	4,967	-11.7	-24.5	26	11.8
500	31	5,691	-16.1	-28.8	27	13.1
450	31	6,476	-21.6	-32.4	27	14.3
400	30	7,330	-28.2	-38.8	28	14.6
350	30	8,276	-35.6	-44.5	27	15.9
300	30	9,327	-43.9		28	17.3
250	30	10,528	-52.6		28	20.0
200	30	11,951	-57.9		28	22.6
175	30	12,791	-58.7		27	21.0
150	30	13,758	-59.6		27	20.5
125	30	14,894	-60.8		27	19.1
100	28	16,281	-61.3		27	15.3
80	28	17,667	-60.7		26	12.1
70	28	18,499	-60.3		26	10.3
60	28	19,461	-59.9		27	8.4
50	28	20,602	-58.8		27	7.3
40	28	22,003	-59.0		28	7.3
30	28	23,816	-57.5		28	7.4
25	28	24,971	-56.4		29	9.0
20	26	26,388	-55.3		28	9.1
15	22	28,254	-52.9		28	9.7
10	7	30,860	-51.9			
7						

BOOTHVILLE, LA.
1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1	22.2	19.4	05	1.0
1000	31	146	22.9	18.1	08	2.6
950	31	592	19.7	14.8	10	4.7
900	31	1,056	16.6	10.5	11	4.1
850	31	1,541	13.7	6.0	11	2.4
800	31	2,051	11.6	1.2	10	1.5
750	31	2,589	9.2	-3.8	07	.5
700	31	3,158	6.3	-8.0	31	1.2
650	31	3,762	3.6	-11.4	30	2.1
600	31	4,409	.4	-16.2	28	3.9
550	31	5,101	-3.7	-20.5	27	5.2
500	31	5,847	-8.6	-25.5	27	7.2
450	30	6,658	-14.1	-29.0	28	9.0
400	29	7,541	-20.5	-34.1	27	10.9
350	29	8,518	-27.6	-40.0	27	13.1
300	29	9,605	-35.9	-47.5	27	16.4
250	29	10,849	-44.8		27	20.1
200	28	12,307	-55.1		27	24.0
175	28	13,149	-60.5		28	22.6
150	27	14,090	-66.2		28	18.3
125	27	15,183	-70.9		27	15.5
100	27	16,493	-73.7		28	9.5
80	27	17,803	-70.7		30	3.5
70	27	18,601	-67.8		31	1.0
60	27	19,538	-63.4		18	1.0
50	27	20,668	-60.0		32	1.1
40	27	22,073	-56.8		07	.7
30	26	23,915	-52.6		13	.6
25	24	25,097	-50.1		18	.9
20	23	26,562	-47.3		27	1.5
15	21	28,478	-45.3		26	2.9
10	9	31,213	-41.9			
7						

* BROWNSVILLE, TEXAS
1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	7	21.3	19.1	05	.4
1000	31	126	23.7	20.3	10	1.3
950	31	575	21.3	17.5	12	3.9
900	31	1,042	18.5	14.1	14	4.3
850	31	1,531	15.9	8.4	16	3.4
800	31	2,045	13.5	4.4	16	2.7
750	31	2,586	10.8	.1	17	1.4
700	31	3,159	7.9	-5.1	25	1.3
650	31	3,767	4.4	-8.5	26	3.0
600	31	4,414	1.0	-13.0	24	3.4
550	31	5,109	-3.2	-16.5	24	3.8
500	31	5,856	-7.8	-22.4	25	4.9
450	30	6,666	-12.9	-28.0	25	6.0
400	31	7,554	-19.1	-34.0	26	7.8
350	30	8,536	-26.3	-40.3	26	9.9
300	30	9,629	-34.7	-48.0	26	12.4
250	30	10,878	-43.7		26	15.6
200	30	12,341	-54.9		26	17.1
175	29	13,181	-61.3		26	16.6
150	29	14,123	-67.7		26	15.7
125	29	15,205	-73.2		27	12.0
100	27	16,498	-76.1		28	6.3
80	27	17,791	-73.0		31	2.0
70	27	18,584	-68.6		07	1.3
60	27	19,516	-65.0		13	2.6
50	27	20,638	-61.4		12	1.7
40	25	22,033	-57.2		07	4.7
30	24	23,872	-53.3		09	5.9
25	22	25,050	-50.8		08	6.5
20	20	26,519	-47.1		09	6.2
15	19	28,439	-43.7		08	4.0
10	16	31,182	-40.9		06	.1
7	10	33,604	-40.2		24	5.8

BUFFALO, N. Y.
992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	218	9.1	7.0	21	.5
1000						
950	31	578	10.7	5.3	26	3.0
900	31	1,028	8.6	2.6	26	4.5
850	31	1,499	6.4	-2.1	26	5.3
800	31	1,995	4.0	-6.3	27	6.1
750	31	2,517	1.5	-11.0	27	7.1
700	31	3,070	-1.6	-14.6	27	7.9
650	31	3,657	-4.7	-18.1	28	8.0
600	31	4,283	-7.6	-21.5	28	9.6
550	31	4,955	-11.6	-25.5	28	10.4
500	31	5,679	-16.4	-29.5	29	11.7
450	31	6,463	-21.8	-34.4	28	13.8
400	31	7,319	-28.2	-39.9	28	14.4
350	31	8,267	-35.2	-46.1	28	15.1
300	31	9,321	-42.9	-51.6	28	17.6
250	31	10,529	-50.9		28	20.0
200	30	11,957	-56.3		28	18.8
175	30	12,803	-57.9		28	17.5
150	30	13,771	-59.2		28	17.1
125	29	14,919	-60.7		28	15.2
100	28	16,299	-61.3		28	13.5
80	28	17,685	-60.6		29	10.5
70	28	18,519	-60.0		28	8.2
60	27	19,481	-59.4		28	7.3
50	26	20,626	-59.1		29	6.0
40	26	22,028	-58.3		29	5.5
30	25	23,850	-56.1		28	6.4
25	23	25,009	-54.7		27	7.9
20	20	26,445	-52.5		27	11.5
15	17	28,299	-50.3		27	14.3
10	5	30,934	-48.7			
7						

CAPE HATTERAS, N. C.
1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	18.2	14.7	01	3.1
1000	31	154	19.0	13.7	02	3.8
950	31	593	16.3	10.4	02	3.4
900	31	1,051	13.3	7.0	01	1.7
850	31	1,530	10.6	2.0	32	2.0
800	31	2,034	8.7	-2.8	30	2.9
750	31	2,566	6.4	-8.4	29	3.6
700	31	3,129	4.0	-11.7	28	5.0
650	31	3,728	.9	-14.9	28	6.6
600	31	4,367	-2.7	-19.1	28	7.7
550	31	5,052	-6.8	-23.4	28	8.6
500	31	5,789	-11.8	-27.5	28	10.3
450	31	6,587	-17.5	-31.6	28	11.8
400	31	7,457	-24.2	-37.6	28	12.8
350	29	8,422	-31.3	-43.9	28	15.0
300	28	9,490	-39.2	-50.1	27	16.4
250	28	10,717	-47.4		27	19.5
200	27	12,161	-55.5		27	24.2
175	27	13,007	-58.8		27	25.0
150	27	13,967	-62.1		27	23.2
125	27	15,084	-65.6		28	20.2
100	27	16,435	-66.9		28	15.4
80	27	17,787	-65.1		29	9.4
70	27	18,606	-62.9		28	5.8
60	27	19,558	-61.3		27	5.5
50	27	20,697	-58.7		28	4.6
40	26	22,109	-55.3		26	5.3
30	26	23,957	-52.2		26	6.5
25	25	25,138	-50.2		26	8.0
20	22	26,606	-48.6		26	10.9
15	21	28,509	-46.6		27	14.2
10	11	31,202	-44.8			
7						

RAWINSONDE DATA

Average monthly values

* CARIBOU, MAINE 993 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	191	3.6	1.1	30	1.2
1000	9	215	1.2	-1.7		
950	31	551	4.2	.7	29	3.8
900	31	991	3.0	-1.3	30	6.1
850	31	1,453	1.5	-4.8	30	7.3
800	31	1,940	-.4	-7.6	30	8.2
750	31	2,455	-2.6	-10.8	30	9.0
700	31	3,010	-5.2	-14.4	30	9.9
650	31	3,579	-7.7	-17.5	29	11.2
600	31	4,198	-10.9	-22.2	29	11.6
550	31	4,862	-14.9	-26.5	29	12.1
500	31	5,576	-19.8	-31.6	29	13.0
450	31	6,350	-25.2	-35.8	30	12.8
400	31	7,195	-31.2	-40.1	30	14.3
350	30	8,140	-37.6	-45.2	30	15.4
300	30	9,184	-44.7		29	17.1
250	30	10,384	-51.9		29	19.9
200	29	11,818	-55.9		29	20.8
175	27	12,682	-56.9		29	20.8
150	27	13,658	-56.8		29	19.2
125	27	14,813	-57.4		29	15.6
100	27	16,222	-58.2		28	12.6
80	27	17,626	-58.4		28	9.9
70	27	18,467	-57.8		28	9.8
60	27	19,461	-57.6		29	7.7
50	27	20,591	-57.9		29	6.8
40	25	22,003	-57.5		29	6.1
30	24	23,828	-55.7		28	6.7
25	23	24,993	-54.6		28	7.5
20	23	26,427	-53.0		27	8.3
15	17	28,302	-51.0		27	12.1
10	14	30,982	-47.3		26	17.2
7	8	33,340	-44.8			

CHARLESTON, S. C. 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	13	15.9	13.3	34	2.0
1000	31	152	13.0	10.1	02	3.1
950	31	592	17.2	9.5	03	3.9
900	31	1,052	14.7	5.7	04	3.3
850	31	1,534	11.4	3.6	33	1.9
800	31	2,040	9.8	-2.5	34	2.1
750	31	2,574	7.7	-6.9	31	2.5
700	31	3,140	5.0	-11.9	28	3.6
650	31	3,741	1.9	-15.9	28	4.5
600	31	4,382	-1.9	-19.1	28	5.4
550	31	5,068	-6.4	-24.2	28	6.6
500	31	5,807	-11.1	-28.1	28	8.4
450	31	6,607	-16.6	-33.6	28	10.2
400	31	7,481	-22.9	-38.4	28	12.3
350	31	8,449	-30.0	-41.8	27	14.5
300	31	9,526	-38.2	-44.5	27	18.7
250	31	10,758	-46.7		28	22.3
200	31	12,209	-55.3		27	24.2
175	31	13,053	-59.7		28	24.3
150	31	14,006	-64.2		28	22.7
125	31	15,111	-67.9		28	18.8
100	30	16,448	-69.2		28	12.1
80	29	17,786	-67.3		29	6.2
70	29	18,597	-64.7		29	3.0
60	28	19,542	-62.7		28	3.8
50	28	20,676	-59.1		29	2.7
40	27	22,084	-55.9		26	3.2
30	25	23,938	-52.1		26	3.0
25	25	25,125	-50.0		26	3.4
20	25	26,591	-47.8		25	5.9
15	20	28,506	-45.8		27	11.1

CHATHAM, MASS. 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	16	11.0	.8	33	1.1
1000	31	155	11.4	6.1	31	1.6
950	31	577	9.9	-.1	30	3.1
900	31	1,025	[illegible]	-2.3	27	3.4
850	31	1,495	5.9	-6.1	30	4.6
800	31	1,990	3.9	-8.1	30	5.9
750	31	2,513	1.4	-11.9	29	7.2
700	31	3,065	-1.6	-14.1	29	8.4
650	30	3,655	-4.5	-18.1	29	10.9
600	30	4,282	-7.5	-22.5	29	11.8
550	30	4,953	-11.8	-25.9	29	13.5
500	30	5,676	-16.5	-31.2	29	14.9
450	30	6,460	-21.9	-34.3	28	16.7
400	30	7,316	-28.0	-41.1	29	17.4
350	30	8,264	-35.0	-46.9	28	19.1
300	30	9,319	-42.7	-49.5	28	22.2
250	30	10,529	-50.5		28	24.1
200	30	11,959	-57.4		28	24.0
175	30	12,802	-58.3		28	22.2
150	30	13,771	-59.3		28	20.6
125	30	14,908	-61.1		28	18.4
100	30	16,290	-61.9		28	14.5
80	29	17,671	-61.0		28	10.4
70	27	18,502	-60.2		28	9.3
60	27	19,466	-59.5		28	7.8
50	26	20,607	-58.9		28	6.2
40	26	22,012	-57.6		28	7.5
30	23	23,829	-55.4		27	9.4
25	21	24,996	-54.0		27	11.1
20	19	26,429	-52.7		27	13.4
15	16	28,301	-50.0		27	15.9
10	14	30,964	-47.4		27	21.6
7	6	33,248	-44.7			

CHIHUAHUA, MEXICO 859 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	1,428	9.8	3.3	24	.5
850	31	1,515	13.5	2.4	23	.5
800	31	2,030	14.9	.5	21	1.1
750	31	2,572	11.5	-2.7	21	1.4
700	31	3,145	7.6	-5.7	24	1.9
650	31	3,752	3.9	-10.5	21	1.8
600	31	4,397	.1	-15.5	23	2.3
550	31	5,089	-4.2	-21.7	26	3.8
500	31	5,833	-9.0	-27.1	27	5.2
450	31	6,641	-14.5	-32.4	27	6.5
400	31	7,522	-21.0	-37.8	27	9.2
350	31	8,497	-28.1	-43.0	27	11.5
300	31	9,583	-36.1	-49.6	26	16.8
250	31	10,825	-44.8		27	22.8
200	31	12,284	-55.0		26	25.6
175	31	13,127	-60.4		27	24.5
150	31	14,075	-65.7		26	22.0
125	31	15,170	-71.6		27	16.0
100	31	16,483	-73.6		27	8.9
80	29	17,790	-71.0		28	4.5
70	29	18,586	-68.2		31	1.7
60	28	19,522	-64.5		10	.2
50	28	20,648	-60.9		06	.4
40	27	22,048	-57.7		07	2.0
30	26	23,881	-53.7		09	2.6
25	26	25,059	-51.3		07	1.9
20	24	26,519	-49.1		05	1.5
15	22	28,419	-46.7		27	2.9
10	15	31,103	-44.2		28	10.5

* COLD BAY, ALASKA 1004 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	30	3.6	1.4	29	4.4
1000	25	137	3.3	-.1	31	7.6
950	31	478	1.0	-1.4	30	7.7
900	31	911	-2.1	-4.1	30	8.3
850	31	1,363	-4.2	-7.1	30	9.7
800	31	1,839	-6.7	-12.3	30	9.9
750	31	2,341	-8.9	-17.5	30	11.0
700	31	2,873	-11.4	-21.6	30	11.3
650	31	3,439	-14.4	-24.3	29	11.8
600	31	4,042	-17.7	-27.7	29	12.5
550	31	4,688	-21.4	-31.9	29	13.4
500	31	5,385	-25.8	-36.3	29	14.3
450	31	6,140	-30.4	-39.1	28	15.2
400	30	6,968	-36.0	-38.7	28	16.0
350	30	7,887	-42.1	-39.7	28	18.5
300	30	8,916	-46.8	-47.3	28	21.3
250	30	10,114	-50.5		28	22.5
200	30	11,565	-52.0		28	19.3
175	29	12,416	-52.3		28	17.5
150	29	13,414	-52.0		27	16.3
125	27	14,591	-53.5		27	13.5
100	26	16,013	-54.2		27	12.4
80	26	17,443	-54.4		27	10.1
70	26	18,299	-54.3		27	8.4
60	25	19,281	-54.7		27	7.3
50	24	20,444	-54.2		27	7.0
40	21	21,876	-54.1		26	7.3
30	16	23,741	-53.2		28	6.6
25	16	24,918	-52.6		27	6.8
20	13	26,391	-51.9		28	6.4
15	9	28,217	-51.5			

DAYTON, OHIO 983 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	299	10.0	8.3	25	.5
950	31	587	12.8	7.5	25	3.2
900	31	1,041	10.9	3.2	28	4.6
850	31	1,517	9.5	-2.4	28	5.4
800	31	2,018	7.1	-7.3	28	6.2
750	31	2,546	4.6	-11.4	28	7.4
700	31	3,105	1.6	-14.0	28	8.3
650	31	3,698	-1.6	-17.8	28	9.1
600	31	4,331	-5.0	-21.0	28	9.5
550	31	5,010	-9.2	-25.8	28	10.0
500	31	5,740	-14.0	-29.6	28	10.4
450	31	6,531	-20.1	-34.5	28	11.2
400	31	7,393	-26.5	-39.0	27	13.0
350	31	8,346	-33.6	-44.2	27	14.4
300	31	9,407	-41.6	-49.9	28	16.2
250	30	10,615	-50.5		28	19.9
200	30	12,047	-57.4		28	20.8
175	30	12,887	-59.1		28	20.2
150	29	13,850	-60.7		28	19.7
125	29	14,977	-63.0		28	17.7
100	29	16,347	-63.8		28	13.8
80	29	17,718	-62.8		28	9.9
70	29	18,543	-61.8		28	7.2
60	28	19,497	-61.4		28	5.8
50	28	20,633	-59.4		28	4.9
40	27	22,036	-57.4		28	4.7
30	27	23,864	-55.2		27	7.9
25	26	25,036	-53.6		27	9.0
20	25	26,477	-51.4		27	11.1
15	23	28,348	-49.4		27	15.8
10	13	31,034	-46.5		27	20.0

DEL RIO, TEXAS 979 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	314	17.6	16.1	10	2.1
950	31	573	18.5	15.1	14	4.5
900	31	1,036	17.0	11.9	16	5.1
850	31	1,523	15.0	6.8	17	3.5
800	31	2,036	13.6	.4	18	2.5
750	31	2,577	10.7	-3.3	19	1.3
700	31	3,149	7.3	-6.6	28	1.3
650	31	3,755	3.7	-11.1	29	1.8
600	31	4,400	-.3	-15.6	27	2.5
550	31	5,091	-4.0	-21.7	27	3.5
500	30	5,836	-8.8	-26.8	26	5.0
450	30	6,643	-14.4	-31.3	26	6.9
400	30	7,525	-20.5	-36.9	26	10.0
350	30	8,503	-27.5	-42.7	26	13.3
300	30	9,590	-35.9	-49.5	26	16.5
250	30	10,834	-44.8		27	21.3
200	30	12,296	-54.2		27	24.0
175	30	13,142	-59.5		27	23.8
150	30	14,094	-64.9		27	21.0
125	30	15,192	-70.2		27	17.0
100	30	16,505	-73.4		27	10.7
80	29	17,815	-71.4		28	3.8
70	29	18,611	-67.6		32	1.2
60	28	19,549	-63.9		29	.9
50	28	20,676	-60.6		22	.1
40	27	22,078	-56.9		03	1.4
30	25	23,918	-53.4		09	1.4
25	24	25,096	-51.2		34	.9
20	23	26,555	-48.4		29	1.1
15	20	28,454	-46.3		27	5.5
10	18	31,170	-43.3		27	11.5
7	8	33,587	-40.5			

DENVER, COLO. 839 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	1,611	6.0	-1.7	24	1.4
800	31	2,002	10.3	-4.8	27	3.1
750	31	2,537	7.6	-8.0	30	4.1
700	31	3,101	4.0	-11.5	30	4.2
650	31	3,700	.1	-14.9	29	5.4
600	31	4,335	-4.3	-20.1	29	7.5
550	31	5,015	-9.1	-25.6	28	8.6
500	31	5,746	-13.7	-29.2	27	8.7
450	31	6,538	-19.8	-34.3	27	9.6
400	31	7,400	-26.4	-39.5	27	11.3
350	31	8,354	-33.8	-45.3	27	12.4
300	31	9,412	-42.2	-50.7	27	13.0
250	31	10,622	-50.7		27	15.2
200	31	12,055	-56.9		27	17.5
175	31	12,896	-59.2		27	18.9
150	31	13,858	-60.9		27	18.7
125	30	14,997	-62.9		27	15.8
100	29	16,368	-64.3		27	10.8
80	29	17,731	-64.1		27	6.6
70	29	18,551	-63.6		28	5.4
60	29	19,501	-61.6		29	4.8
50	27	20,633	-60.2		30	3.6
40	26	22,033	-57.7		30	4.6
30	26	23,855	-56.1		29	6.6
25	25	25,019	-54.6		29	8.2
20	25	26,450	-53.8		28	9.4
15	22	28,306	-51.4		28	12.1
10	14	30,952	-48.6		28	17.1

DODGE CITY, KANS. 925 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	791	10.2	3.7	21	2.0
900	31	1,018	13.9	4.4	22	3.8
850	31	1,501	14.3	.4	24	5.1
800	31	2,011	11.8	-1.3	26	4.6
750	31	2,548	8.7	-7.0	27	4.8
700	31	3,115	4.9	-10.8	27	5.4
650	31	3,715	1.2	-15.3	28	6.8
600	31	4,353	-3.2	-19.3	27	7.9
550	31	5,036	-7.9	-24.4	27	8.9
500	31	5,770	-12.8	-29.6	27	9.8
450	31	6,564	-18.7	-34.1	27	11.6
400	31	7,431	-25.5	-39.9	26	13.0
350	31	8,388	-32.9	-46.3	26	15.3
300	31	9,451	-41.2	-52.4	26	16.3
250	31	10,667	-49.6		27	18.9
200	30	12,109	-56.6		27	22.8
175	30	12,951	-59.3		27	22.3
150	30	13,910	-61.8		27	21.3
125	30	15,032	-64.3		27	18.1
100	30	16,391	-65.8		27	11.7
80	30	17,743	-65.8		27	7.5
70	30	18,558	-64.1		28	5.7
60	29	19,508	-62.1		29	3.2
50	28	20,643	-59.8		29	3.3
40	28	22,044	-58.0		30	3.6
30	27	23,866	-55.0		29	5.3
25	26	25,035	-53.9		28	7.9
20	24	26,483	-51.9		28	9.3
15	21	28,362	-49.1		27	13.0
10	11	31,083	-45.6			

EL PASO, TEXAS 883 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	29	1,193	10.3	-2.4	22	.4
850	29	1,518	17.0	-1.6	21	1.4
800	29	2,033	14.7	-4.3	23	2.6
750	29	2,575	11.0	-7.5	25	2.7
700	29	3,146	6.6	-10.7	25	3.2
650	29	3,750	2.7	-14.2	25	3.3
600	29	4,392	-1.4	-18.0	26	4.2
550	29	5,080	-5.4	-23.6	27	5.7
500	29	5,821	-10.6	-29.1	28	7.6
450	29	6,622	-16.3	-34.1	28	8.0
400	29	7,498	-22.7	-38.9	27	9.4
350	29	8,466	-30.2	-45.2	27	11.8
300	29	9,541	-38.4	-52.3	27	13.0
250	29	10,771	-46.9		27	19.0
200	29	12,222	-55.4		27	24.8
175	29	13,065	-59.6		27	24.5
150	29	14,019	-64.0		26	23.0
125	29	15,124	-68.4		27	17.0
100	29	16,451	-71.1		27	12.1
80	29	17,774	-69.6		28	5.2
70	29	18,575	-67.1		29	2.4
60	29	19,513	-64.0		27	.8
50	28	20,641	-60.7		02	.5
40	28	22,039	-57.7		04	1.2
30	26	23,873	-53.8		01	1.4
25	26	25,049	-52.3		28	1.7
20	25	26,502	-50.1		29	3.6
15	20	28,388	-47.4		27	8.9
10	5	31,061	-47.7			

ELKO, NEV. 81[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	1,908	1.2	-5.6	20	3.1
800	30	2,016	6.2	-4.8	19	2.7
750	31	2,542	5.8	-7.4	20	1.9
700	31	3,103	2.2	-10.7	24	3.0
650	31	3,698	-.9	-14.7	26	5.3
600	31	4,333	-4.4	-19.1	27	7.1
550	31	5,013	-8.6	-23.4	27	7.9
500	31	5,744	-13.9	-28.5	28	9.2
450	31	6,536	-19.7	-33.4	28	10.0
400	31	7,399	-26.5	-39.1	28	10.5
350	31	8,352	-34.0	-45.0	27	11.3
300	31	9,410	-42.2	-50.3	28	13.0
250	31	10,621	-50.3		28	14.8
200	31	12,054	-57.[illegible]		28	18.3
175	31	12,895	-59.3		28	18.2
150	31	13,857	-60.7		27	19.0
125	31	14,987	-62.8		27	16.7
100	31	16,357	-63.4		27	11.8
80	31	17,725	-63.2		27	8.3
70	31	18,548	-61.4		27	7.2
60	31	19,504	-61.6		28	6.0
50	31	20,643	-59.3		29	4.7
40	31	22,046	-57.5		29	4.7
30	27	23,875	-55.8		29	6.9
25	25	25,042	-54.6		28	8.1
20	24	26,470	-53.5		28	10.7
15	[illegible]	28,324	-51.8		28	13.4
10	14	30,974	-48.5		28	14.3
7	4	33,341	-46.5			

EMPALME, MEXICO 1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	12	19.3	11.7	34	.5
1000	31	98	23.3	11.5	36	1.1
950	31	548	25.1	5.6	35	1.8
900	31	1,021	23.1	2.5	31	1.1
850	31	1,515	19.8	-.6	22	1.3
800	31	2,034	16.1	-3.1	21	2.1
750	31	2,578	12.5	-6.1	20	3.2
700	31	3,152	8.3	-8.9	21	3.9
650	31	3,760	4.6	-13.3	23	4.0
600	31	4,407	.5	-18.4	25	4.0
550	31	5,101	-3.3	-23.1	26	4.6
500	31	5,847	-8.4	-27.6	27	5.7
450	31	6,657	-13.9	-31.7	28	7.0
400	31	7,540	-20.3	-37.0	27	10.1
350	31	8,518	-27.6	-43.3	27	14.7
300	31	9,606	-35.7	-50.6	27	19.1
250	31	10,851	-44.4		27	23.4
200	31	12,312	-54.7		26	26.7
175	31	13,156	-60.0		26	25.5
150	29	14,108	-65.7		26	21.3
125	29	15,203	-70.4		26	16.9
100	[illegible]	16,518	-73.3		26	8.7
80	28	17,830	-71.1		27	2.4
70	24	18,626	-68.1		35	.7
60	24	19,563	-63.7		12	1.7
50	[illegible]	20,692	-60.4		11	1.6
40	[illegible]	22,094	-57.1		09	2.5
30	[illegible]	23,932	-53.3		[illegible]	2.9
25	[illegible]	25,111	-50.9		08	1.9
20	[illegible]	26,581	-48.4		06	3.5
15	21	28,502	-45.6		04	2.5
10	[illegible]	31,225	[illegible]			

* FAIRBANKS, ALASKA 988 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	135	-4.9	-8.3	36	.3
950	31	447	-4.3	-7.0	11	1.2
900	31	873	-5.2	-8.3	15	1.6
850	31	1,322	-6.3	-10.7	18	2.0
800	31	1,794	-8.7	-12.9	19	2.1
750	31	2,292	-11.2	-15.4	20	3.1
700	31	2,819	-14.4	-19.8	21	4.0
650	31	3,377	-17.7	-23.8	21	4.0
600	31	3,972	-21.2	-27.8	21	3.9
550	31	4,609	-25.3	-32.3	[illegible]	4.0
500	31	5,294	-29.9	-36.9	22	4.4
450	31	6,037	-34.9	-40.1	23	4.8
400	31	6,849	-40.6	-43.5	23	4.1
350	31	7,750	-46.5		24	3.4
300	31	8,756	-52.6		25	3.5
250	31	9,925	-54.9		27	6.3
200	31	11,361	-52.1		27	6.5
175	31	12,227	-51.4		27	6.6
150	31	13,229	-51.2		27	6.8
125	31	14,413	-51.6		27	7.4
100	31	15,860	-52.1		26	7.1
80	31	17,304	-52.7		26	7.5
70	31	18,165	-53.4		27	7.9
60	31	19,156	-53.8		27	8.1
50	31	20,325	-54.7		27	8.3
40	31	21,749	-55.9		27	8.4
30	31	23,576	-56.7		27	9.5
25	27	24,737	-56.9		28	10.2
20	24	26,151	-56.9		28	11.5
15	25	27,988	-56.3		28	12.3
10	14	30,654	-53.6		29	13.3

FLINT, MICH. 989 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	236	9.7	7.6	21	.9
950	31	569	11.3	5.3	24	3.4
900	31	1,020	9.4	1.6	26	3.9
850	31	1,493	7.4	-1.3	27	4.2
800	31	1,990	5.3	-5.7	28	5.7
750	31	2,515	2.4	-9.9	28	6.9
700	31	3,069	-1.1	-12.3	28	7.6
650	31	3,658	-4.0	-17.3	28	8.2
600	31	4,285	-7.0	-22.7	28	9.7
550	31	4,959	-10.8	-25.4	28	11.1
500	31	5,686	-15.4	-29.9	28	13.6
450	31	6,473	-20.8	-34.8	28	14.8
400	31	7,332	-27.4	-39.8	28	16.9
350	30	8,284	-34.6	-46.3	28	17.4
300	30	9,339	-43.0	-49.8	27	18.6
250	30	10,545	-51.6		27	21.2
200	30	11,971	-57.4		28	21.2
175	30	12,812	-58.7		28	18.0
150	30	13,778	-59.7		28	16.5
125	29	14,908	-60.8		28	15.5
100	29	16,293	-61.5		28	14.3
80	29	17,676	-61.1		28	9.9
70	29	18,508	-60.1		29	7.4
60	29	19,47[illegible]	-60.2		29	6.3
50	29	20,609	-59.7		28	4.5
40	27	22,007	-58.3		29	6.0
30	26	23,831	-56.2		28	5.7
25	26	24,943	-54.9		28	8.9
20	24	26,423	-52.8		28	10.1
15	23	28,284	-50.9		27	13.2
10	7	30,914	-48.6			

FORT WORTH, TEXAS 996 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	29	180	16.4	14.4	19	2.0
1000	7	190	11.6	8.6		
950	29	583	18.1	11.9	20	4.6
900	29	1,046	16.4	8.4	22	4.9
850	29	1,531	14.2	3.7	23	4.5
800	29	2,041	11.8	[illegible]	24	3.7
750	29	2,579	9.1	-6.3	26	2.6
700	29	3,146	5.1	-9.0	29	1.9
650	29	3,748	1.8	-12.3	27	2.3
600	29	4,389	-2.1	-16.3	26	3.7
550	29	5,075	-5.9	-21.2	26	5.4
500	29	5,815	-10.6	-26.1	26	6.2
450	29	6,618	-16.1	-30.3	26	8.0
400	29	7,494	-22.3	-36.1	26	10.5
350	29	8,464	-29.7	-42.4	26	13.4
300	29	9,541	-38.0	-49.4	26	14.8
250	29	10,771	-47.0		26	21.5
200	29	12,221	-55.4		26	25.5
175	29	13,064	-59.8		26	25.6
150	29	14,016	-64.6		27	24.0
125	28	15,119	-68.6		27	21.0
100	27	16,447	-71.0		28	11.7
80	26	17,771	-69.9		28	6.1
70	25	18,569	-66.5		27	3.2
60	25	19,509	-63.4		28	1.4
50	24	20,639	-60.9		30	1.6
40	24	22,138	-57.4		31	1.5
30	22	23,869	-53.4		27	2.7
25	21	25,048	-51.5		27	4.3
20	21	26,506	-49.4		27	5.0
15	15	28,401	-47.3		27	11.1
10	9	31,085	-44.5			

RAWINSONDE DATA

Average monthly values

OCTOBER 1973

GLASGOW, MONT. 932 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	696	4.6	-.4	02	.7
1000						
950						
900	31	966	8.8	-1.4	30	3.9
850	31	1,459	7.6	-4.5	30	6.4
800	31	1,956	4.5	-6.5	29	7.0
750	31	2,478	1.1	-9.0	28	8.4
700	31	3,030	-1.9	-13.3	28	9.9
650	31	3,615	-5.5	-16.2	27	11.0
600	31	4,238	-9.6	-19.4	28	12.7
550	31	4,905	-14.1	-24.4	28	14.2
500	31	5,622	-18.9	-27.9	28	15.9
450	31	6,399	-23.9	-33.1	28	18.2
400	31	7,248	-30.2	-38.0	28	19.8
350	31	8,188	-37.2	-44.3	28	21.6
300	31	9,231	-45.5		28	22.9
250	31	10,425	-53.5		27	24.5
200	31	11,845	-57.1		27	24.9
175	31	12,691	-56.8		27	22.8
150	31	13,667	-57.1		27	21.2
125	31	14,818	-58.1		27	19.0
100	31	16,222	-58.4		27	14.9
80	31	17,625	-58.5		27	11.3
70	31	18,465	-58.4		27	10.0
60	29	19,438	-58.5		27	9.1
50	27	20,588	-58.8		27	7.6
40	27	21,992	-58.4		27	6.3
30	26	23,807	-57.9		28	6.3
25	26	24,958	-57.2		28	6.5
20	25	26,379	-55.3		29	5.9
15	23	28,222	-54.1		28	8.0
10	13	30,854	-50.8		27	11.8
7						

GRAND JUNCTION, COLO. 854 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,472	7.9	-5.1	12	3.1
1000						
950						
900						
850	26	1,524	9.6	-6.0	12	3.8
800	31	2,015	10.2	-5.7	15	4.1
750	31	2,548	7.0	-8.1	21	2.5
700	31	3,111	3.1	-10.6	25	4.5
650	31	3,708	-1.1	-13.5	26	5.9
600	31	4,341	-5.2	-18.3	26	7.1
550	31	5,019	-9.3	-23.8	26	9.4
500	31	5,749	-14.2	-29.4	27	9.7
450	31	6,540	-19.9	-33.7	27	11.0
400	31	7,402	-26.6	-39.8	27	11.2
350	31	8,356	-33.8	-45.5	27	13.5
300	31	9,415	-42.1	-50.4	27	13.5
250	31	10,627	-49.9		27	17.6
200	31	12,064	-56.4		28	18.4
175	30	12,912	-58.6		27	19.1
150	30	13,875	-60.9		27	18.6
125	30	15,002	-63.4		27	17.4
100	29	16,370	-64.3		27	12.4
80	29	17,735	-64.2		27	8.1
70	29	18,555	-63.1		28	5.6
60	29	19,506	-62.0		28	4.2
50	29	20,640	-59.7		31	4.0
40	28	22,039	-58.1		31	4.2
30	27	23,862	-56.0		29	6.2
25	27	25,025	-54.8		29	8.2
20	27	26,457	-53.4		28	10.2
15	21	28,342	-51.1		28	11.3
10	5	31,009	-47.9			
7						

*** GREAT FALLS, MONT. 887 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,118	6.1	-2.0	23	4.3
1000						
950						
900						
850	31	1,468	7.7	-4.3	25	7.7
800	31	1,966	4.7	-6.2	26	8.4
750	31	2,488	1.1	-8.6	27	8.7
700	31	3,040	-2.5	-11.9	27	10.1
650	31	3,624	-5.8	-14.4	27	11.7
600	31	4,247	-9.6	-19.0	27	13.2
550	31	4,914	-13.8	-23.3	27	14.4
500	31	5,632	-18.3	-29.1	26	16.5
450	31	6,411	-23.7	-33.2	26	18.3
400	31	7,260	-30.2	-37.0	27	20.4
350	30	8,197	-37.6	-43.6	27	21.8
300	30	9,241	-45.4		27	24.3
250	30	10,436	-53.2		27	24.6
200	30	11,855	-57.7		27	25.0
175	30	12,697	-57.7		27	24.3
150	29	13,667	-57.6		27	21.8
125	29	14,816	-58.7		27	19.1
100	29	16,217	-58.5		26	16.3
80	28	17,621	-58.6		26	12.8
70	28	18,460	-58.4		26	11.6
60	27	19,433	-57.9		27	8.4
50	26	20,582	-58.4		26	8.3
40	23	21,986	-58.2		27	7.5
30	20	23,812	-56.9		28	7.0
25	19	24,973	-56.8		28	6.6
20	18	26,396	-55.9		29	7.3
15	16	28,257	-52.4		28	6.8
10	12	30,890	-50.7		27	13.2
7	5	33,314	-44.9			

GREEN BAY, WIS. 990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	210	8.8	6.1	26	.5
1000						
950	31	554	10.9	5.1	24	3.4
900	31	1,004	8.9	3.1	26	4.1
850	31	1,476	6.9	-.7	25	4.4
800	31	1,973	4.6	-4.7	26	5.6
750	30	2,495	2.0	-9.1	25	7.5
700	30	3,050	-.7	-13.8	26	7.6
650	30	3,638	-4.1	-16.7	26	8.2
600	30	4,265	-7.7	-20.2	27	9.6
550	30	4,937	-11.8	-25.4	27	10.8
500	30	5,660	-16.2	-30.3	27	13.0
450	30	6,445	-21.7	-35.3	27	14.4
400	30	7,301	-28.2	-40.5	27	15.3
350	30	8,248	-35.5	-46.3	27	16.1
300	30	9,300	-43.7	-48.2	27	18.7
250	30	10,502	-52.1		26	22.6
200	30	11,924	-58.0		28	21.8
175	29	12,767	-58.4		28	18.4
150	29	13,735	-59.1		28	16.7
125	29	14,874	-60.6		27	13.9
100	28	16,260	-61.0		27	11.4
80	28	17,645	-60.7		28	8.7
70	27	18,474	-60.5		28	7.1
60	25	19,436	-60.2		28	5.6
50	25	20,574	-59.8		29	4.1
40	23	21,967	-59.1		28	4.8
30	20	23,787	-57.3		29	5.5
25	20	24,945	-55.8		29	6.9
20	20	26,371	-53.9		28	9.8
15	18	28,211	-52.9		28	11.5
10	15	30,822	-49.9		27	18.8
7						

GREENSBORO, N. C. 987 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	275	9.9	7.4	31	.3
1000						
950	31	599	14.5	6.4	34	.8
900	31	1,056	12.9	3.8	31	2.5
850	31	1,534	10.2	2.6	30	3.9
800	31	2,037	8.2	-3.1	30	4.7
750	31	2,568	6.3	-8.1	30	4.7
700	31	3,131	3.4	-12.1	28	5.2
650	31	3,729	.1	-15.3	28	5.9
600	31	4,366	-3.3	-19.9	28	7.6
550	31	5,049	-7.4	-24.2	29	8.7
500	31	5,784	-12.6	-28.7	29	9.8
450	31	6,579	-18.2	-33.6	28	10.6
400	31	7,447	-24.8	-38.0	29	12.1
350	31	8,408	-31.7	-44.1	29	13.9
300	31	9,478	-39.6	-48.3	29	15.4
250	31	10,703	-47.9		28	19.7
200	31	12,147	-55.8		28	22.3
175	31	12,992	-58.6		28	23.1
150	31	13,954	-61.9		28	21.8
125	31	15,073	-65.2		28	19.0
100	31	16,426	-66.6		28	14.3
80	31	17,780	-65.1		29	8.3
70	31	18,596	-63.6		29	6.3
60	31	19,548	-61.4		28	4.9
50	31	20,685	-59.0		29	4.1
40	31	22,093	-56.4		28	4.6
30	31	23,934	-53.0		27	8.0
25	28	25,107	-51.1		27	9.4
20	25	26,561	-49.3		27	13.9
15	20	28,440	-47.7		27	20.1
10	8	31,121	-45.9			
7						

GUADALUPE IS., MEXICO 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	23	16.8	14.1	34	6.3
1000	31	128	16.4	12.8	33	6.4
950	31	565	16.8	5.1	33	3.3
900	31	1,026	16.9	-1.7	32	2.0
850	31	1,511	16.2	-5.2	29	1.3
800	31	2,024	13.9	-6.8	27	1.6
750	31	2,565	11.3	-8.7	26	2.4
700	31	3,138	8.4	-12.6	26	2.9
650	31	3,746	5.2	-15.7	26	2.9
600	31	4,395	1.4	-19.3	25	3.8
550	31	5,089	-3.1	-23.1	26	4.8
500	31	5,836	-8.6	-27.7	26	5.7
450	30	6,643	-14.7	-32.4	26	7.1
400	29	7,525	-21.5	-38.8	27	8.8
350	29	8,499	-28.6	-44.6	27	10.7
300	29	9,582	-36.9	-51.2	26	12.2
250	29	10,819	-46.0		26	13.5
200	29	12,273	-55.2		25	17.0
175	29	13,116	-60.0		25	13.8
150	29	14,067	-64.8		26	11.5
125	29	15,167	-69.6		26	10.7
100	29	16,488	-71.7		26	5.8
80	29	17,807	-70.1		24	2.6
70	28	18,608	-66.8		20	.5
60	27	19,544	-64.1		06	1.8
50	27	20,671	-60.5		07	3.0
40	27	22,071	-57.5		07	3.5
30	25	23,909	-53.8		05	3.0
25	23	25,088	-51.6		07	2.2
20	22	26,551	-48.2		02	1.3
15	12	28,456	-46.3			
10						
7						

*** GUAM, MARIANA IS. 996 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	111	24.7	23.1	10	2.9
1000						
950	31	545	23.4	21.3	10	8.2
900	31	1,017	20.8	18.1	10	7.6
850	31	1,510	17.9	14.3	10	6.6
800	31	2,029	15.4	11.3	10	6.3
750	31	2,575	12.6	7.7	10	6.3
700	31	3,152	9.5	4.0	11	6.0
650	31	3,764	6.1	-.2	11	5.7
600	31	4,416	2.4	-4.5	11	5.1
550	31	5,115	-1.4	-9.8	11	4.5
500	31	5,869	-5.6	-14.9	11	4.0
450	31	6,689	-10.5	-21.4	11	3.3
400	31	7,586	-16.2	-27.5	11	2.3
350	31	8,581	-23.1	-33.5	13	1.4
300	31	9,688	-31.6	-41.5	20	1.2
250	30	10,953	-41.8		24	3.3
200	30	12,425	-54.0		26	5.4
175	30	13,269	-60.7		27	5.6
150	30	14,211	-68.0		30	3.9
125	30	15,288	-74.9		36	2.6
100	26	16,569	-79.0		07	4.7
80	22	17,842	-75.7		07	5.7
70	21	18,626	-69.8		09	5.2
60	20	19,551	-67.3		09	5.2
50	19	20,663	-63.6		09	6.3
40	19	22,045	-59.5		09	8.4
30	18	23,863	-55.2		09	11.6
25	17	25,032	-53.4		09	14.2
20	17	26,478	-50.3		09	18.2
15	10	28,374	-45.3		09	24.1
10	5	31,131	-39.1			
7						

HILO, HAWAII 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	21.6	20.0	25	1.6
1000	31	143	22.3	18.7	25	1.1
950	31	589	19.1	17.3	09	2.1
900	31	1,052	15.9	14.5	09	3.6
850	31	1,536	12.9	11.3	08	2.9
800	31	2,045	10.4	6.5	09	2.8
750	31	2,582	9.4	-2.8	09	2.7
700	31	3,154	8.0	-8.3	09	2.7
650	31	3,763	5.4	-13.8	09	2.4
600	31	4,412	1.6	-17.1	10	1.2
550	31	5,107	-2.8	-22.0	10	.5
500	31	5,855	-7.7	-26.8	33	.9
450	31	6,666	-13.4	-30.9	31	1.2
400	31	7,551	-19.8	-36.0	29	2.9
350	31	8,530	-27.2	-41.3	28	6.2
300	31	9,619	-35.5	-48.5	28	9.7
250	31	10,862	-45.6		27	14.6
200	31	12,312	-57.0		26	17.4
175	31	13,146	-62.8		27	17.1
150	31	14,084	-67.6		26	13.7
125	31	15,174	-70.3		26	9.6
100	31	16,492	-72.4		25	5.7
80	31	17,803	-72.2		19	1.3
70	31	18,594	-69.7		11	2.9
60	31	19,521	-66.1		10	5.3
50	31	20,638	-62.5		10	7.1
40	31	22,028	-58.9		09	8.8
30	28	23,851	-54.8		09	11.6
25	28	25,024	-52.2		09	13.6
20	26	26,483	-48.4		09	15.7
15	25	28,388	-45.5		09	15.3
10	15	31,097	-42.5		10	13.2
7						

HUNTINGTON W. VA. 989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	12.0	9.8	21	.8
1000						
950	30	584	14.7	9.0	24	3.6
900	30	1,040	12.3	5.5	28	5.0
850	30	1,517	9.8	1.0	29	6.3
800	30	2,019	7.5	-2.9	29	6.9
750	30	2,549	5.1	-7.3	29	7.7
700	30	3,109	2.1	-11.0	29	8.0
650	30	3,704	-.8	-15.7	29	9.0
600	30	4,340	-4.2	-19.4	29	10.0
550	30	5,021	-8.2	-25.1	29	10.3
500	30	5,753	-13.6	-29.6	29	11.0
450	30	6,545	-19.4	-35.1	29	11.4
400	30	7,410	-25.6	-40.4	28	13.4
350	30	8,367	-32.5	-45.2	28	14.9
300	30	9,433	-40.5	-50.6	28	17.1
250	30	10,652	-49.2		28	19.3
200	30	12,088	-57.1		28	21.8
175	30	12,930	-58.7		28	22.5
150	30	13,892	-61.3		28	22.0
125	29	15,017	-63.4		28	20.0
100	29	16,381	-65.0		28	14.6
80	27	17,746	-64.1		28	9.1
70	27	18,567	-62.4		28	6.5
60	26	19,522	-61.0		28	5.8
50	26	20,661	-58.8		28	5.7
40	25	22,067	-57.0		27	4.7
30	22	23,897	-54.1		27	8.3
25	22	25,072	-52.3		27	9.8
20	20	26,524	-50.7		26	14.0
15	17	28,401	-48.5		26	17.1
10	10	31,059	-46.6			
7						

*** INTERNATIONAL FALLS, MINN. 970 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	359	6.1	2.6	19	2.0
1000						
950	31	531	7.2	4.8	22	3.1
900	31	977	6.2	1.8	25	4.9
850	31	1,445	5.5	-3.2	25	5.9
800	31	1,940	3.8	-7.1	26	7.3
750	31	2,462	1.1	-11.6	27	8.3
700	31	3,013	-2.1	-15.6	27	9.6
650	31	3,598	-5.4	-19.4	27	10.4
600	31	4,222	-9.3	-21.7	27	11.2
550	31	4,889	-13.7	-25.8	27	12.2
500	31	5,607	-18.6	-30.7	27	14.5
450	31	6,385	-23.8	-34.8	27	16.1
400	30	7,231	-30.2	-40.1	28	18.0
350	30	8,171	-37.1	-44.5	28	19.0
300	29	9,215	-45.2		28	19.6
250	29	10,413	-52.3		28	20.8
200	28	11,837	-56.9		27	20.7
175	28	12,682	-57.2		27	19.6
150	28	13,657	-57.3		28	17.2
125	27	14,812	-58.5		27	14.8
100	26	16,210	-59.0		28	12.0
80	26	17,609	-59.0		28	9.7
70	26	18,448	-59.1		28	8.9
60	26	19,414	-59.1		28	7.4
50	26	20,559	-58.6		29	5.9
40	26	21,961	-58.5		29	5.7
30	23	23,770	-57.6		30	4.9
25	22	24,921	-56.5		30	5.7
20	21	26,349	-54.5		29	6.6
15	18	28,200	-53.4		28	8.7
10	17	30,815	-49.4		27	14.7
7	8	33,013	-49.1			

JACKSON, MISS. 1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	100	15.5	13.2	11	.6
1000	30	157	18.2	14.2	14	.8
950	31	594	18.8	11.4	15	2.3
900	31	1,057	16.3	8.1	18	2.9
850	31	1,542	13.7	3.0	19	2.4
800	31	2,050	10.8	-.2	23	1.8
750	31	2,586	7.6	-3.0	27	1.9
700	31	3,151	4.8	-7.4	28	2.6
650	31	3,753	1.7	-11.2	28	3.6
600	31	4,394	-1.8	-17.1	28	5.5
550	31	5,081	-5.5	-22.0	27	6.8
500	31	5,822	-10.3	-26.3	27	8.3
450	31	6,626	-15.6	-29.9	27	10.7
400	31	7,503	-22.2	-35.7	27	12.2
350	31	8,474	-29.4	-41.4	27	15.4
300	31	9,553	-37.4	-48.2	27	17.5
250	31	10,788	-46.5		27	22.5
200	31	12,239	-55.4		28	25.4
175	30	13,079	-60.0		28	27.6
150	30	14,032	-64.3		28	22.9
125	30	15,134	-68.9		28	17.9
100	30	16,460	-71.3		28	12.4
80	29	17,781	-69.3		29	5.8
70	29	18,583	-66.9		30	2.4
60	28	19,523	-63.6		22	1.9
50	26	20,651	-60.1		28	3.2
40	26	22,053	-57.5		28	1.4
30	24	23,884	-53.3		27	3.6
25	24	25,064	-51.4		27	4.3
20	24	26,520	-49.3		26	6.1
15	20	28,425	-47.4		26	10.1
10	13	31,131	-44.2		27	10.1

JOHN F. KENNEDY INT. AP NY 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	12.7	7.2	29	1.7
1000	28	164	12.7	7.0	31	1.6
950	30	583	11.0	4.5	29	3.0
900	30	1,033	9.1	-.3	29	3.2
850	30	1,505	7.2	-3.1	30	4.7
800	30	2,002	5.1	-7.2	29	5.2
750	30	2,526	2.4	-9.9	29	7.0
700	30	3,082	-.1	-14.3	29	9.0
650	30	3,672	-3.2	-16.9	29	10.7
600	30	4,301	-6.8	-20.5	28	11.6
550	30	4,976	-10.6	-26.0	29	13.0
500	30	5,702	-15.3	-30.5	29	14.4
450	30	6,490	-20.4	-35.2	29	13.7
400	30	7,352	-26.7	-40.7	29	15.1
350	29	8,305	-33.9	-46.2	29	18.3
300	29	9,363	-42.1	-48.7	28	20.2
250	29	10,574	-50.4		28	21.1
200	29	12,008	-57.0		29	21.2
175	29	12,850	-58.3		29	20.8
150	29	13,816	-60.1		28	20.8
125	29	14,951	-61.6		29	18.2
100	29	16,330	-62.5		29	14.6
80	29	17,710	-61.0		29	9.9
70	29	18,543	-59.7		29	7.9
60	29	19,507	-59.5		29	6.0
50	28	20,655	-58.3		29	5.1
40	26	22,060	-57.0		28	5.5
30	25	23,891	-54.6		28	6.9
25	22	25,064	-52.9		27	9.0
20	21	26,501	-51.6		27	12.0
15	18	28,377	-49.2			
10						

JOHNSTON IS., PACIFIC AREA 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	26.4	22.3	09	5.6
1000	31	118	25.0	22.1	09	6.5
950	31	568	21.5	20.0	09	7.7
900	31	1,036	18.6	15.7	09	7.6
850	31	1,525	15.7	12.3	09	6.8
800	31	2,039	13.6	7.2	09	5.9
750	31	2,581	11.2	.8	10	4.5
700	31	3,155	8.5	-2.9	11	3.7
650	31	3,765	5.3	-8.7	11	3.5
600	31	4,414	1.5	-12.3	12	2.9
550	31	5,109	-2.8	-17.9	12	2.1
500	31	5,858	-7.6	-21.3	14	1.2
450	31	6,670	-13.0	-25.8	20	1.0
400	31	7,557	-19.5	-31.2	25	2.8
350	31	8,538	-26.4	-35.6	27	6.6
300	31	9,630	-34.9	-44.9	26	9.3
250	31	10,876	-45.1		26	13.7
200	31	12,330	-56.1		26	18.6
175	31	13,167	-62.3		26	20.1
150	30	14,105	-68.5		27	19.4
125	29	15,185	-73.3		27	14.8
100	29	16,491	-73.0		25	7.8
80	29	17,803	-71.6		23	2.0
70	29	18,594	-69.7		11	2.3
60	29	19,519	-66.8		10	4.7
50	29	20,631	-63.0		10	6.5
40	27	22,017	-59.6		09	9.1
30	26	23,839	-54.7		09	12.8
25	25	25,015	-52.3		09	14.7
20	25	26,471	-48.5		09	18.3
15	24	28,376	-45.4		09	21.1
10	17	31,122	-40.3		09	20.0

KEY WEST, FLA. 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	24.9	21.5	05	4.3
1000	31	110	24.7	21.3	05	4.9
950	31	559	21.4	18.5	06	5.7
900	31	1,027	18.7	14.5	07	4.4
850	31	1,516	15.9	10.6	06	3.1
800	31	2,030	13.4	6.7	06	2.5
750	31	2,571	10.8	2.0	05	1.7
700	31	3,145	8.9	-5.3	03	1.4
650	31	3,756	5.7	-9.4	01	1.4
600	31	4,406	2.4	-15.4	34	1.6
550	31	5,104	-1.8	-19.5	32	2.3
500	31	5,855	-6.4	-24.1	31	3.4
450	31	6,671	-11.8	-28.0	30	4.4
400	31	7,561	-18.4	-33.0	29	5.4
350	31	8,547	-25.5	-39.8	28	7.0
300	31	9,643	-33.9	-48.4	28	9.8
250	31	10,895	-43.6		28	12.1
200	30	12,358	-54.9		28	12.4
175	30	13,199	-61.2		29	12.8
150	30	14,141	-67.8		29	11.7
125	30	15,222	-73.4		28	8.6
100	30	16,519	-75.1		31	5.4
80	30	17,825	-71.1		02	1.4
70	30	18,622	-67.5		06	.8
60	30	19,559	-64.3		08	1.5
50	30	20,686	-59.7		09	4.4
40	30	22,091	-56.6		09	6.0
30	29	23,936	-52.1		09	7.7
25	27	25,123	-49.5		09	8.7
20	26	26,595	-46.1		09	8.6
15	24	28,519	-42.9		09	7.7
10	16	31,274	-39.8			

\+ KOROR, CAROLINE IS. 1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	27.7	24.4	19	.6
1000	31	81	26.7	24.2	18	.7
950	31	535	23.7	21.8	19	.9
900	31	1,007	21.1	17.8	18	.6
850	31	1,501	18.1	14.4	23	.6
800	31	2,020	15.5	11.6	21	.6
750	31	2,566	12.7	8.3	19	.7
700	31	3,143	9.4	5.2	15	.8
650	31	3,756	6.3	2.0	14	.9
600	31	4,409	2.6	-.9	13	2.0
550	31	5,109	-1.1	-5.3	14	2.1
500	31	5,865	-5.3	-10.2	13	1.8
450	31	6,686	-9.9	-15.9	12	2.5
400	31	7,586	-15.3	-23.1	11	2.2
350	31	8,585	-22.0	-30.3	10	2.7
300	31	9,698	-30.4	-39.1	09	2.1
250	31	10,968	-40.6	-47.6	05	2.8
200	29	12,447	-53.0		02	4.5
175	29	13,295	-59.8		36	6.2
150	29	14,241	-67.2		01	6.2
125	29	15,321	-74.7		03	4.6
100	29	16,596	-80.2		06	6.1
80	29	17,870	-74.4		07	3.8
70	29	18,659	-69.0		07	1.7
60	29	19,589	-66.0		12	.5
50	28	20,703	-62.9		31	.8
40	27	22,088	-59.3		29	.2
30	27	23,907	-55.4		09	4.3
25	27	25,076	-53.1		10	9.0
20	24	26,528	-49.6		09	13.8
15	22	28,433	-44.9		10	22.1
10	13	31,194	-38.3		09	28.8

RAWINSONDE DATA

Average monthly values

KWAJALEIN, MARSHALL IS.
1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	4	26.9	23.8	09	4.8
1000	31	91	26.3	23.4	09	4.9
950	31	544	23.[illegible]	21.4	09	7.2
900	31	1,015	21.1	[illegible]	09	8.4
850	31	1,508	17.6	14.0	09	8.7
800	31	2,025	15.1	10.9	09	8.0
750	31	2,571	12.5	7.3	09	7.7
700	31	3,148	9.4	3.9	09	7.2
650	31	3,760	6.1	.0	09	6.9
600	31	4,412	2.1	-4.8	09	6.1
550	31	5,110	-2.0	-7.5	09	5.3
500	31	5,863	-6.1	-13.8	09	4.6
450	31	6,681	-10.9	-19.8	09	3.2
400	31	7,577	-16.7	-25.1	09	1.5
350	31	8,567	-23.7	-33.2	07	.5
300	31	9,675	-32.3	-41.[illegible]	27	2.5
250	31	10,934	-41.7	-51.3	29	5.4
200	31	12,398	-55.5	-63.[illegible]	27	9.9
175	31	13,235	-62.6		27	11.8
150	31	14,173	-69.7		27	13.4
125	31	15,239	-75.[illegible]		27	14.6
100	27	16,518	-79.3		27	7.0
80	25	17,798	-74.0		26	1.9
70	24	18,584	-70.5		27	1.7
60	23	19,585	-67.6		31	1.4
50	22	20,613	-64.3		33	1.2
40	22	21,994	-60.3		08	2.8
30	22	23,800	-57.1		09	7.2
25	22	24,960	-55.1		09	10.5
20	21	26,393	-51.5		09	17.6
15	19	28,288	-45.9		09	23.1
10	11	31,021	-40.7		09	29.9
7	7	33,476	-37.3			
5						

LAKE CHARLES, LA.
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	5	18.3	16.9	06	1.9
1000	31	142	21.2	16.5	08	2.6
950	31	586	19.1	13.0	14	2.9
900	31	1,050	16.9	8.5	16	2.8
850	31	1,536	14.3	3.3	17	1.8
800	31	2,046	11.9	-.[illegible]	11	.2
750	31	2,584	8.9	-3.2	27	.9
700	31	3,151	5.5	-6.9	28	1.6
650	31	3,755	2.8	-11.2	27	2.6
600	31	4,398	-.9	-15.1	27	3.2
550	31	5,088	-4.9	-19.6	27	5.6
500	31	5,832	-9.2	-25.0	27	7.4
450	31	6,639	-14.6	-30.6	27	9.9
400	31	7,520	-20.9	-34.9	26	12.3
350	31	8,496	-28.0	-41.0	26	15.1
300	31	9,581	-36.5	-49.0	27	18.4
250	31	10,821	-45.4		27	21.8
200	31	12,277	-55.1		27	26.0
175	31	13,121	-60.1		27	25.9
150	31	14,070	-65.4		27	22.4
125	30	15,165	-69.3		27	16.8
100	29	16,468	-73.0		28	10.0
80	28	17,800	-69.7		29	4.6
70	28	18,602	-66.7		36	1.5
60	27	19,545	-63.6		19	.8
50	27	20,675	-59.8		28	.9
40	27	22,079	-56.9		03	1.2
30	24	23,919	-52.7		33	.2
25	23	25,103	-50.3		32	.4
20	21	26,567	-47.7		27	1.4
15	20	28,477	-45.7		26	4.8
10	11	31,191	-42.4			

LANDER, WYO.
83[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	1,697	4.5	-4.4	23	1.1
800	31	1,995	8.2	-6.8	24	1.3
750	31	2,526	5.8	-9.6	28	2.8
700	31	3,087	2.[illegible]	-11.[illegible]	28	5.0
650	31	3,681	-2.1	-14.3	28	7.8
600	31	4,311	-6.[illegible]	-17.7	27	9.2
550	31	4,987	-10.4	-22.7	27	9.4
500	31	5,714	-15.4	-28.4	27	10.4
450	31	6,501	-21.3	-33.4	27	11.4
400	31	7,358	-28.1	-39.0	27	12.5
350	31	8,305	-35.2	-45.7	27	13.0
300	31	9,359	-43.4		27	14.5
250	31	10,563	-52.0		27	17.5
200	30	11,988	-57.8		27	19.2
175	30	12,829	-58.9		26	19.6
150	30	13,794	-59.4		26	19.0
125	30	14,932	-61.1		26	17.2
100	29	16,320	-62.3		26	13.0
80	29	17,696	-62.0		26	10.2
70	29	18,524	-61.2		27	7.2
60	28	19,480	-60.7		27	6.5
50	28	20,617	-59.4		27	5.3
40	26	22,018	-59.1		29	5.2
30	24	23,843	-56.9		29	6.5
25	22	24,996	-55.9		28	7.1
20	21	26,427	-54.0		28	7.7
15	18	28,292	-52.2		27	11.0
10	10	30,971	-48.2			

* LIHUE KAUAI, HAWAII
1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	36	24.3	20.4	06	4.7
1000	31	150	23.8	19.8	07	5.5
950	31	598	[illegible]	17.9	07	6.7
900	31	1,063	16.6	14.1	08	6.4
850	31	1,548	13.3	10.6	09	6.2
800	31	2,057	11.3	1.3	09	5.3
750	31	2,596	10.8	-7.0	09	3.8
700	31	3,169	8.6	-10.8	10	2.7
650	31	3,778	5.2	-12.5	11	2.6
600	31	4,427	1.6	-17.6	12	2.1
550	31	5,123	-2.4	-21.7	10	.7
500	31	5,872	-7.6	-26.5	29	.6
450	31	6,683	-13.4	-31.[illegible]	28	2.1
400	31	7,567	-20.3	-36.2	27	3.4
350	31	8,544	-27.9	-41.6	27	5.3
300	31	9,630	-36.1	-48.2	27	7.2
250	31	10,870	-46.2		27	11.3
200	31	12,315	-57.7		26	14.3
175	31	13,148	-62.6		26	14.8
150	31	14,088	-66.8		26	11.5
125	31	15,182	-69.8		25	8.4
100	31	16,505	-71.4		24	4.8
80	30	17,824	-70.8		22	1.6
70	30	18,621	-68.2		11	1.9
60	28	19,554	-65.1		10	4.1
50	27	20,675	-62.0		09	5.7
40	27	22,065	-59.0		09	7.6
30	24	23,889	-53.9		09	10.0
25	23	25,068	-51.6		09	11.1
20	21	26,528	-48.0		09	12.6
15	18	28,441	-44.7		10	12.5
10	15	31,171	-42.2		09	9.0
7	15	33,592	-40.3		12	3.1
5	11	35,882	-37.2			

LITTLE ROCK, ARK.
1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	79	15.0	13.[illegible]	29	.4
1000	30	155	17.3	13.2	25	.3
950	31	589	17.6	11.4	22	3.0
900	31	1,050	15.[illegible]	.8	23	3.9
850	31	1,534	13.2	3.4	24	4.4
800	31	2,042	10.4	.7	25	4.3
750	31	2,576	7.2	-3.5	25	4.6
700	31	3,141	3.7	-6.3	26	4.4
650	31	3,738	.0	-11.3	25	5.5
600	31	4,376	-3.1	-18.2	27	6.0
550	31	5,060	-7.2	-21.9	27	6.5
500	31	5,797	-11.8	-28.6	27	8.2
450	31	6,596	-17.0	-33.[illegible]	27	9.4
400	31	7,468	-23.7	-38.5	28	11.9
350	31	8,434	-30.4	-44.[illegible]	27	15.1
300	30	9,508	-39.4	-49.1	27	19.4
250	30	10,738	-47.3		27	22.2
200	29	12,180	-55.2		28	25.7
175	29	13,026	-58.8		28	25.9
150	29	13,985	-62.4		28	24.7
125	29	15,099	-66.4		28	19.7
100	29	16,443	-68.6		28	12.4
80	29	17,781	-67.4		28	7.5
70	29	18,591	-65.4		28	4.5
60	29	19,535	-62.7		28	3.5
50	29	20,668	-59.9		28	2.8
40	29	22,071	-57.3		28	2.4
30	28	23,908	-53.5		28	4.9
25	28	25,085	-51.8		27	6.5
20	27	26,542	-49.5		27	9.6
15	22	28,432	-47.8		27	13.5
10	14	31,124	-44.0		28	13.4

MCGRATH, ALASKA
992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	103	-4.5	-6.2	28	.2
1000	4	157	-6.1	-9.9		
950	30	445	-5.0	-6.5	05	.9
900	30	870	-5.5	-5.9	17	.6
850	30	1,317	-7.0	-9.9	22	1.2
800	30	1,789	-8.8	-13.4	21	1.9
750	30	2,287	-11.[illegible]	-16.[illegible]	21	2.6
700	30	2,814	-14.0	-20.5	23	2.5
650	30	3,374	-17.3	-23.7	23	2.8
600	30	3,969	-20.8	-28.0	23	2.9
550	30	4,608	-24.5	-32.2	23	3.6
500	30	5,296	-28.8	-36.8	24	3.8
450	30	6,043	-33.6	-40.[illegible]	25	4.3
400	30	6,860	-39.2	-41.8	25	4.3
350	30	7,765	-45.3		22	4.1
300	16	8,760	-51.2		26	5.4
250	16	9,962	-52.3		28	10.3
200	16	11,407	-51.5		29	11.9
175	16	12,276	-51.3		28	10.1
150	16	13,278	-51.3		28	9.8
125	16	14,463	-51.5		28	8.5
100	16	15,9[illegible]9	-52.4		28	7.9
80	15	17,343	-52.4		27	7.8
70	15	18,207	-52.6		27	8.1
60	15	19,201	-53.4		27	7.5
50	15	20,373	-53.9		26	7.8
40	14	21,800	-54.4		26	8.4
30	13	23,630	-54.9		26	9.0
25	13	24,796	-55.0		26	10.4
20	12	26,222	-55.0		26	11.7
15	7	28,007	-54.7			
10						
7						

* MAJURO, MARSHALL IS.
1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	3	28.0	23.9	09	3.3
1000	31	92	26.9	23.3	10	4.3
950	31	545	23.3	21.4	10	6.1
900	31	1,017	20.4	18.0	10	7.0
850	31	1,510	17.7	14.0	10	7.4
800	31	2,028	15.4	10.1	09	7.3
750	31	2,574	12.9	6.[illegible]	09	7.0
700	31	3,152	9.8	2.1	09	6.9
650	31	3,765	6.6	-1.0	09	6.5
600	31	4,418	2.9	-5.8	10	6.0
550	31	5,118	-1.0	-8.7	10	5.1
500	31	5,874	-4.9	-13.6	08	4.0
450	31	6,696	-9.5	-20.4	07	3.2
400	31	7,596	-15.2	-25.7	07	1.5
350	31	8,596	-22.0	-32.8	31	.5
300	31	9,708	-30.4	-41.4	28	1.9
250	31	10,976	-40.9	-49.1	28	4.9
200	30	12,455	-53.4		28	8.6
175	30	13,301	-60.1		27	11.1
150	30	14,246	-67.4		27	14.3
125	30	15,326	-74.1		27	15.2
100	29	16,610	-77.1		27	6.9
80	29	17,902	-72.1		29	2.1
70	29	18,696	-68.6		27	1.7
60	28	19,625	-66.1		27	2.8
50	28	20,740	-62.5		27	3.0
40	27	22,126	-60.0		27	1.7
30	25	23,942	-55.4		09	4.4
25	25	25,114	-52.3		09	7.8
20	23	26,570	-48.7		09	13.0
15	22	28,483	-44.3		09	21.0
10	12	31,236	-38.6			

* MEDFORD, OREG.
971 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	401	6.5	2.4	20	.2
1000						
950	31	562	8.6	4.1	26	.3
900	31	1,030	8.9	1.5	17	1.1
850	31	1,502	7.6	-2.0	19	2.4
800	31	2,000	5.4	-4.9	23	3.0
750	31	2,525	2.7	-9.5	25	5.8
700	31	3,081	.2	-11.8	26	6.7
650	31	3,672	-2.6	-14.9	26	7.6
600	31	4,303	-6.2	-18.6	26	9.5
550	31	4,979	-10.4	-23.1	26	11.4
500	31	5,705	-15.5	-27.2	27	13.0
450	31	6,492	-20.9	-32.3	27	14.0
400	31	7,351	-27.4	-38.9	27	15.2
350	30	8,300	-34.8	-45.0	27	17.0
300	30	9,355	-42.8		28	18.3
250	30	10,562	-51.1		28	20.7
200	28	11,988	-57.4		28	21.2
175	28	12,828	-59.3		27	21.5
150	28	13,792	-59.9		27	20.5
125	27	14,925	-61.6		27	19.2
100	27	16,304	-62.4		27	15.3
80	27	17,686	-61.4		26	12.3
70	26	18,520	-60.7		26	10.7
60	26	19,483	-59.3		27	8.9
50	26	20,627	-59.0		26	7.3
40	24	22,028	-58.0		27	7.6
30	23	23,845	-56.7		28	8.0
25	22	25,009	-55.5		27	8.4
20	21	26,432	-54.5		28	10.0
15	19	28,284	-52.3		28	10.6
10	15	30,924	-49.7		27	14.6
7	13	33,270	-46.3		27	15.7

MERIDA, MEXICO
1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	11	21.5	21.1	07	.5
1000	31	110	24.3	22.2	08	2.5
950	31	560	22.6	19.4	09	5.4
900	31	1,030	19.9	15.2	09	4.9
850	31	1,521	16.9	11.6	09	4.5
800	31	2,037	14.4	6.7	08	3.7
750	31	2,581	12.2	2.8	07	3.2
700	31	3,157	9.6	-2.2	07	2.7
650	31	3,769	6.2	-5.3	07	2.7
600	31	4,421	2.7	-10.0	07	2.0
550	31	5,120	-1.3	-14.8	06	2.5
500	31	5,873	-5.9	-19.5	06	2.0
450	31	6,691	-10.9	-24.9	05	1.9
400	31	7,586	-16.7	-30.0	02	1.1
350	28	8,579	-23.7	-36.8	31	2.0
300	27	9,685	-31.7	-45.9	28	4.1
250	27	10,946	-42.2		27	5.2
200	26	12,414	-54.6		25	5.9
175	26	13,256	-61.3		25	6.7
150	24	14,193	-68.7		25	8.7
125	23	15,268	-74.5		24	9.0
100	20	16,548	-77.9		25	7.0
80	20	17,840	-72.6		28	4.4
70	20	18,632	-68.4		30	1.6
60	20	19,563	-65.5		09	2.4
50	19	20,682	-61.7		09	4.5
40	18	22,081	-56.9		09	5.9
30	15	23,917	-52.6		08	6.5
25	14	25,103	-50.4		08	7.8
20	14	26,570	-46.8		09	7.0
15	11	28,495	-43.1		08	8.6

MIAMI, FLA.
1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	4	22.5	19.9	02	1.9
1000	31	119	23.4	19.8	03	2.9
950	31	566	20.8	17.6	05	5.3
900	31	1,033	18.0	13.8	06	4.9
850	31	1,521	15.4	9.2	05	3.8
800	31	2,034	13.0	5.0	04	2.5
750	31	2,575	10.5	-.5	02	2.0
700	31	3,148	8.3	-5.9	36	2.0
650	31	3,757	5.4	-10.6	35	2.2
600	31	4,406	2.0	-14.3	32	2.7
550	31	5,103	-2.1	-19.0	31	3.2
500	31	5,853	-7.0	-22.7	30	4.3
450	31	6,667	-12.2	-26.9	29	5.7
400	31	7,557	-18.7	-33.3	29	7.2
350	31	8,540	-26.0	-40.4	28	8.5
300	31	9,635	-34.2	-47.8	28	11.5
250	30	10,887	-43.8		28	13.4
200	29	12,350	-54.6		27	15.7
175	29	13,193	-60.6		27	14.7
150	29	14,138	-67.1		27	13.8
125	29	15,224	-72.3		28	10.8
100	28	16,524	-74.4		30	6.1
80	28	17,833	-70.8		36	1.2
70	28	18,632	-67.2		01	.3
60	28	19,569	-64.3		05	.6
50	28	20,697	-59.7		09	3.2
40	27	22,102	-57.0		09	5.0
30	25	23,946	-51.9		09	6.9
25	24	25,137	-50.4		09	7.6
20	23	26,603	-47.3		09	8.6
15	19	28,525	-43.3		09	7.1
10	7	31,242	-41.8			

MIDLAND, TEXAS
917 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	874	12.2	9.9	14	.8
1000						
950						
900	31	1,030	15.3	10.7	18	3.0
850	31	1,516	16.2	7.6	21	4.4
800	31	2,030	14.1	-2.0	23	3.4
750	31	2,571	10.9	-7.2	26	3.0
700	31	3,142	6.9	-10.5	26	2.9
650	31	3,746	2.7	-13.4	27	3.5
600	31	4,389	-1.5	-17.5	26	3.5
550	31	5,076	-5.6	-23.5	27	5.1
500	30	5,817	-10.6	-27.4	27	6.5
450	29	6,622	-16.0	-32.4	26	9.5
400	29	7,498	-22.4	-37.9	26	11.3
350	29	8,468	-29.4	-43.7	26	13.6
300	29	9,547	-37.9	-50.2	26	16.9
250	27	10,779	-46.6		26	22.4
200	26	12,234	-55.0		26	26.6
175	27	13,076	-59.3		26	26.5
150	27	14,030	-64.0		26	23.4
125	27	15,136	-68.3		26	18.7
100	26	16,462	-71.5		27	12.5
80	26	17,787	-69.6		28	4.9
70	26	18,588	-66.5		29	2.2
60	25	19,529	-63.6		26	1.4
50	24	20,659	-60.[illegible]		33	1.1
40	24	22,000	-57.2		35	1.[illegible]
30	23	23,898	-53.2		32	.5
25	23	25,077	-51.7		30	2.0
20	2[illegible]	26,53[illegible]	-50.2		29	3.1
15	2[illegible]	28,427	-47.5		27	7.2
10	14	31,092	-45.8		27	15.8

MONTERREY, MEXICO
964 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	423	17.9	16.9		
1000						
950	30	579	19.0	16.7		
900	30	1,044	17.3	14.2		
850	30	1,532	15.4	8.8		
800	30	2,046	14.4	2.0		
750	30	2,589	11.7	-1.0		
700	30	3,162	8.1	-4.3		
650	30	3,771	4.4	-6.3		
600	30	4,418	.7	-11.8		
550	30	5,112	-3.1	-16.8		
500	30	5,860	-7.7	-22.7		
450	30	6,673	-12.6	-27.7		
400	30	7,562	-18.7	-34.3		
350	30	8,546	-25.8	-41.7		
300	30	9,641	-34.2	-48.9		
250	30	10,892	-43.6			
200	30	12,356	-54.4			
175	30	13,200	-60.6			
150	30	14,144	-67.1			
125	30	15,229	-72.6			
100	29	16,525	-75.7			
80	26	17,821	-72.9			
70	2[illegible]	18,618	-68.5			
60	2[illegible]	19,552	-64.4			
50	2[illegible]	20,675	-61.8			
40	2[illegible]	22,068	-58.1			
30	2[illegible]	23,896	-54.3			
25	21	25,072	-51.5			
20	21	26,534	-47.6			
15	1[illegible]	28,442	-44.9			
10	[illegible]	31,159	-40.8			

MONETT, MO.
967 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	438	13.1	10.6	17	1.6
1000						
950	31	583	15.4	9.9	21	2.6
900	31	1,041	14.0	5.9	24	5.6
850	31	1,523	12.2	3.[illegible]	24	6.0
800	31	2,029	10.1	-3.1	25	5.7
750	31	2,563	7.2	-6.6	26	5.7
700	31	3,127	3.7	-9.9	27	6.2
650	31	3,725	-.1	-14.0	27	7.2
600	31	4,361	-3.7	-18.5	28	8.3
550	31	5,043	-7.9	-24.0	27	8.6
500	31	5,777	-12.7	-29.2	27	9.4
450	31	6,573	-18.3	-33.5	27	11.0
400	31	7,440	-25.0	-39.3	27	12.7
350	31	8,400	-32.0	-45.0	27	14.8
300	31	9,468	-40.0	-50.6	27	16.9
250	31	10,690	-48.6		27	20.5
200	31	12,130	-56.6		27	23.3
175	31	12,971	-59.7		27	25.2
150	31	13,928	-62.3		27	22.2
125	31	15,046	-65.4		27	20.0
100	31	16,397	-67.7		27	13.2
80	31	17,742	-66.7		28	8.1
70	30	18,554	-64.2		28	5.7
60	30	19,501	-62.8		27	4.0
50	28	20,630	-60.2		29	3.8
40	26	22,026	-57.6		29	4.5
30	24	23,858	-54.5		29	5.3
25	24	25,030	-53.4		28	8.2
20	24	26,473	-51.4		27	10.8
15	22	28,352	-49.2		27	15.2
10	14	30,980	-46.9		27	21.6

MONTGOMERY, ALA.
1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	57	13.8	11.5	06	.7
1000	31	159	16.6	12.3	09	1.3
950	31	599	17.7	9.5	12	2.2
900	31	1,059	15.2	6.7	11	.8
850	31	1,542	12.4	2.4	35	.4
800	31	2,048	9.7	-2.3	35	.9
750	31	2,582	6.8	-6.8	34	1.3
700	31	3,145	3.9	-11.7	31	2.3
650	31	3,745	1.5	-15.[illegible]	30	3.2
600	31	4,386	-1.9	-18.3	28	4.7
550	31	5,073	-5.9	-21.6	28	5.8
500	31	5,813	-10.7	-25.9	28	7.5
450	31	6,615	-16.0	-31.4	28	10.3
400	31	7,491	-22.4	-36.2	28	12.9
350	30	8,462	-29.5	-42.8	28	15.3
300	30	9,542	-37.5	-49.3	28	18.6
250	30	10,776	-46.3		28	21.9
200	30	12,229	-55.[illegible]		28	25.9
175	30	13,074	-59.4		28	26.9
150	29	14,025	-64.0		28	23.2
125	28	15,133	-68.4		28	18.6
100	28	16,461	-70.4		29	13.2
80	28	17,7[illegible]	-68.5		29	6.2
70	28	18,595	-66.[illegible]		29	2.4
60	28	19,537	-63.2		26	2.3
50	28	20,668	-59.7		29	3.4
40	27	22,078	-56.4		29	1.4
30	26	23,918	-52.3		28	2.[illegible]
25	25	25,104	-50.2		26	2.7
20	2[illegible]	26,570	-47.7		27	4.8
15	23	28,478	-46.0		26	7.5
10	13	31,180	-43.2			

NASHVILLE, TENN.
998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	180	12.7	11.1	07	.2
1000	1[illegible]	190	11.3	7.9		
950	31	597	15.6	8.3	23	2.7
900	31	1,054	13.7	4.8	25	3.9
850	31	1,534	11.3	.6	27	4.5
800	31	2,039	8.7	-3.0	28	4.6
750	31	2,570	5.6	-6.2	28	5.2
700	31	3,131	2.8	-11.1	28	5.3
650	31	3,727	-.4	-14.6	28	5.9
600	31	4,364	-3.7	-19.5	27	6.1
550	31	5,046	-7.6	-24.3	27	6.9
500	31	5,781	-12.9	-29.1	27	8.[illegible]
450	30	6,574	-18.4	-34.2	27	9.7
400	30	7,442	-24.8	-39.5	27	11.9
350	30	8,413	-31.8	-44.4	27	13.9
300	30	9,471	-39.9	-49.1	27	16.5
250	30	10,694	-48.5		27	20.9
200	30	12,136	-56.2		28	24.1
175	30	12,979	-59.[illegible]		28	24.7
150	30	13,938	-62.3		28	23.4
125	30	15,055	-65.5		28	20.2
100	30	16,405	-67.4		28	14.7
80	30	17,753	-66.3		28	8.3
70	30	18,566	-64.4		28	5.5
60	30	19,514	-62.2		27	3.4
50	30	20,646	-60.1		29	3.7
40	3[illegible]	22,049	-56.9		27	4.[illegible]
30	2[illegible]	23,878	-53.9		27	7.[illegible]
25	29	25,054	-51.8		27	9.2
20	27	26,509	-49.9		26	11.2
15	24	28,396	-48.4		27	16.5
10	2[illegible]	31,079	-44.9		27	22.4

RAWINSONDE DATA

Average monthly values

• NOME, ALASKA 1003 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	5	-3.6	-5.8	01	1.0
1000	19	94	-3.0	-8.0	35	2.1
950	31	437	-4.1	-6.8	35	1.0
900	31	861	-6.6	-8.9	32	1.2
850	31	1,306	-8.5	-12.9	33	2.5
800	31	1,775	-10.2	-15.6	32	2.7
750	31	2,271	-12.5	-18.4	31	2.9
700	31	2,795	-15.1	-22.3	31	3.1
650	31	3,352	-17.9	-25.6	29	3.3
600	31	3,947	-21.3	-28.3	29	3.8
550	31	4,584	-25.1	-32.2	30	4.1
500	31	5,270	-29.6	-36.4	28	4.7
450	31	6,014	-34.5	-41.0	29	5.2
400	30	6,828	-40.0	-42.4	27	5.1
350	30	7,731	-45.9		26	7.1
300	30	8,741	-51.2		27	8.8
250	30	9,922	-52.2		27	11.4
200	30	11,367	-51.4		28	11.5
175	30	12,236	-51.1		28	10.2
150	30	13,239	-51.1		28	10.1
125	30	14,424	-51.3		27	9.4
100	30	15,872	-51.7		27	8.8
80	30	17,316	-52.6		26	9.2
70	29	18,182	-53.0		27	9.0
60	29	19,173	-54.1		26	8.4
50	29	20,342	-54.7		26	8.5
40	27	21,779	-54.9		26	9.0
30	27	23,616	-55.1		27	7.9
25	25	24,778	-55.0		27	9.0
20	25	26,205	-54.8		27	10.4
15	21	28,062	-53.6		27	11.8
10	[illegible]	30,575	-52.6			

NORTH PLATTE, NEBR. 918 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	847	5.4	2.3	32	.8
1000						
950						
900	31	1,010	9.9	2.2	29	1.7
850	31	1,488	11.2	-.7	28	3.4
800	31	1,993	9.8	-5.1	27	3.7
750	31	2,526	6.9	-8.3	28	4.6
700	31	3,089	3.2	-11.9	28	5.9
650	31	3,686	-.5	-14.4	28	6.5
600	31	4,321	-4.8	-18.9	28	7.6
550	31	4,999	-9.4	-23.7	28	9.1
500	31	5,728	-14.6	-29.5	28	10.4
450	31	6,518	-20.2	-34.7	28	12.6
400	31	7,379	-26.8	-41.4	28	14.7
350	30	8,336	-34.4	-46.5	28	16.4
300	30	9,393	-42.7	-53.6	28	18.0
250	30	10,601	-50.9		29	19.6
200	30	12,031	-57.3		28	22.0
175	30	12,873	-58.5		28	21.5
150	30	13,839	-60.1		28	20.3
125	29	14,976	-62.4		28	17.6
100	28	16,347	-63.9		28	13.0
80	28	17,715	-63.3		28	8.8
70	28	18,538	-62.1		28	6.9
60	28	19,493	-61.1		29	5.2
50	28	20,629	-60.2		30	3.7
40	28	22,026	-58.8		30	4.3
30	27	23,842	-56.3		30	5.8
25	25	25,002	-55.1		28	7.2
20	23	26,422	-53.7		28	9.9
15	23	28,282	-51.4		28	12.1
10	14	30,938	-48.7		27	20.9

OAKLAND, CALIF. 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	6	12.4	9.7	22	.3
1000	31	136	13.9	9.2	23	.4
950	31	569	14.9	2.8	29	.8
900	31	1,027	14.6	-2.5	31	1.3
850	31	1,508	12.3	-4.9	28	2.0
800	31	2,014	9.8	-8.5	27	2.8
750	31	2,547	6.9	-10.8	28	3.7
700	31	3,110	3.6	-13.1	27	4.1
650	31	3,708	.6	-17.0	27	5.2
600	31	4,346	-2.8	-21.4	27	7.0
550	31	5,030	-7.3	-23.7	27	8.8
500	31	5,765	-12.4	-28.0	27	10.5
450	31	6,562	-18.0	-32.9	27	11.7
400	30	7,432	-25.0	-39.4	27	11.9
350	30	8,391	-32.6	-45.5	28	12.1
300	27	9,455	-41.2	-50.7	29	14.7
250	29	10,669	-50.3		29	15.3
200	29	12,100	-57.7		28	18.4
175	29	12,939	-59.7		28	18.5
150	29	13,898	-61.9		28	16.5
125	29	15,019	-64.2		27	16.1
100	29	16,381	-65.1		27	12.7
80	29	17,741	-64.3		27	8.3
70	29	18,561	-62.7		27	6.1
60	29	19,516	-60.9		28	5.1
50	29	20,654	-59.2		29	4.0
40	27	22,058	-57.5		29	3.9
30	25	23,883	-55.4		29	5.5
25	23	25,053	-54.3		29	6.6
20	23	26,488	-53.1		29	9.6
15	22	28,351	-51.5		28	13.0
10	6	31,080	-46.9			

OMAHA, NEBR. 968 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	403	9.8	7.5	19	1.3
1000						
950	31	558	12.8	6.6	24	2.3
900	31	1,013	12.7	2.0	26	5.1
850	31	1,492	11.3	-1.9	27	5.4
800	31	1,997	9.0	-4.9	27	5.6
750	31	2,528	5.9	-8.6	27	6.0
700	31	3,089	2.1	-11.8	27	7.5
650	31	3,683	-1.6	-15.2	27	8.2
600	31	4,316	-5.4	-19.2	28	9.1
550	31	4,994	-9.6	-24.7	27	10.1
500	31	5,723	-14.6	-28.9	27	10.5
450	31	6,512	-20.5	-33.8	27	11.8
400	31	7,372	-27.0	-39.6	27	13.0
350	30	8,323	-34.0	-45.2	27	15.9
300	30	9,383	-41.8	-47.5	27	17.8
250	29	10,594	-49.9		27	20.2
200	28	12,025	-57.1		27	23.1
175	28	12,867	-58.7		27	22.8
150	28	13,831	-60.2		27	21.4
125	28	14,965	-61.9		28	17.3
100	27	16,337	-63.2		27	12.9
80	27	17,710	-62.9		28	8.6
70	27	18,535	-62.0		29	6.6
60	27	19,491	-60.9		29	4.6
50	27	20,628	-59.7		29	4.6
40	26	22,026	-58.1		29	4.4
30	25	23,850	-55.9		29	6.3
25	24	25,015	-54.3		28	7.8
20	24	26,452	-52.4		27	9.5
15	22	28,321	-50.0		28	13.6
10	10	31,019	-47.8			

+ PAGO PAGO, AMERICAN SAMOA 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	5	27.4	23.7	10	4.3
1000	31	109	25.6	21.1	10	5.2
950	31	559	22.2	19.7	10	7.0
900	31	1,028	19.0	16.6	09	6.4
850	31	1,519	16.5	13.0	09	6.1
800	31	2,035	14.4	9.3	08	4.8
750	31	2,580	12.1	5.1	06	3.0
700	31	3,155	8.8	1.8	05	2.6
650	30	3,765	5.6	-3.5	06	1.2
600	30	4,416	2.2	-8.1	03	1.4
550	30	5,115	-1.6	-11.7	32	1.1
500	30	5,868	-5.8	-15.5	31	1.3
450	30	6,687	-10.8	-22.5	29	2.4
400	30	7,582	-16.6	-28.9	28	3.6
350	30	8,575	-23.6	-35.5	25	4.2
300	30	9,681	-32.0	-43.3	25	5.5
250	30	10,942	-42.1		26	9.4
200	30	12,412	-54.2		26	12.7
175	30	13,255	-61.1		26	14.2
150	29	14,195	-68.2		25	14.2
125	29	15,275	-73.6		25	9.7
100	29	16,567	-76.9		27	5.7
80	29	17,861	-73.2		25	3.4
70	29	18,652	-69.0		26	1.9
60	29	19,581	-65.6		25	1.0
50	29	20,698	-62.3		08	2.2
40	29	22,087	-59.1		08	3.9
30	29	23,909	-54.5		09	7.5
25	29	25,084	-51.6		09	8.9
20	27	26,542	-48.6		09	9.7
15	24	28,457	-43.5		09	11.6
10	12	31,231	-37.6			

• PEORIA, ILL. 993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	200	10.9	8.3	20	.8
1000						
950	31	573	13.7	7.1	25	3.6
900	31	1,028	12.1	3.4	26	5.2
850	31	1,506	10.3	-.7	26	6.0
800	31	2,009	7.9	-4.3	26	7.0
750	31	2,539	5.1	-7.6	26	8.1
700	31	3,098	1.8	-10.4	27	8.8
650	31	3,692	-2.1	-13.7	27	8.9
600	31	4,324	-5.5	-19.5	27	9.6
550	31	5,002	-9.4	-23.1	27	9.7
500	31	5,732	-14.1	-28.4	27	11.5
450	31	6,522	-20.1	-33.9	27	12.2
400	31	7,384	-26.5	-39.3	27	14.4
350	31	8,337	-33.9	-45.0	27	15.7
300	31	9,397	-41.8	-48.0	27	16.8
250	31	10,611	-49.9		27	19.4
200	31	12,044	-57.4		28	24.7
175	30	12,882	-58.9		28	23.9
150	30	13,844	-60.8		28	21.3
125	30	14,973	-62.6		28	17.2
100	30	16,346	-63.6		28	13.7
80	29	17,719	-62.7		28	8.3
70	29	18,544	-62.0		28	6.5
60	29	19,499	-61.3		28	5.4
50	27	20,637	-59.8		28	3.6
40	27	22,036	-58.4		28	4.1
30	26	23,859	-55.6		28	6.2
25	24	25,027	-54.1		27	7.5
20	23	26,462	-52.3		27	11.1
15	23	28,330	-50.7		27	13.8
10	22	30,998	-47.2		27	18.9
7	13	33,299	-45.5		27	28.3
5	6	35,448	-44.7			

* PITTSBURGH, PA. 975 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	359	10.4	8.0	21	.9
1000						
950	31	580	12.2	7.2	25	2.8
900	31	1,033	10.5	4.4	27	4.5
850	31	1,507	8.0	-.6	27	5.0
800	31	2,005	5.6	-5.2	28	6.2
750	31	2,531	3.3	-9.9	28	7.9
700	31	3,087	.3	-12.7	28	9.3
650	31	3,679	-2.3	-17.0	28	10.3
600	31	4,310	-5.7	-21.2	28	11.5
550	31	4,987	-9.7	-25.6	29	12.3
500	31	5,717	-14.5	-29.3	29	13.8
450	31	6,507	-20.1	-34.2	29	15.1
400	31	7,369	-26.5	-40.4	28	15.6
350	31	8,322	-33.7	-46.1	28	17.3
300	30	9,383	-42.0	-50.0	28	19.4
250	30	10,594	-50.7		28	20.7
200	28	12,026	-56.8		28	21.9
175	28	12,868	-59.1		28	21.7
150	27	13,838	-60.8		28	20.6
125	27	14,968	-62.4		28	19.7
100	27	16,341	-63.1		28	15.3
80	25	17,722	-62.2		29	9.6
70	24	18,548	-61.6		29	7.1
60	24	19,505	-60.7		29	5.8
50	21	20,644	-58.9		29	5.1
40	19	22,046	-57.7		29	5.9
30	19	23,874	-55.2		27	7.2
25	18	25,049	-53.4		28	9.2
20	17	26,495	-51.4		27	11.2
15	16	28,387	-48.6		27	14.6
10	14	31,059	-46.5		28	18.5
7	9	33,435	-42.4			
5						

+ PONAPE, CAROLINE IS. 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	39	28.6	24.1	08	2.0
1000	31	80	27.0	23.0	09	2.2
950	31	533	23.6	20.7	11	4.5
900	31	1,004	20.4	17.8	10	5.4
850	31	1,497	17.6	13.6	10	5.6
800	31	2,015	15.4	9.2	10	5.3
750	31	2,561	12.6	5.2	10	5.4
700	31	3,137	9.3	1.7	10	6.0
650	31	3,749	6.0	-1.2	10	6.1
600	31	4,401	2.5	-5.7	10	5.6
550	31	5,100	-1.3	-8.3	09	4.7
500	31	5,854	-5.3	-12.3	09	4.2
450	31	6,675	-10.0	-18.7	08	3.7
400	31	7,575	-15.6	-25.8	08	3.0
350	31	8,572	-22.2	-33.1	07	2.1
300	31	9,684	-30.4	-41.8	04	1.4
250	31	10,953	-40.8	-50.3	34	2.8
200	31	12,431	-53.5		30	6.3
175	31	13,276	-60.4		29	7.7
150	31	14,219	-67.9		29	10.7
125	31	15,297	-74.8		28	10.4
100	30	16,578	-78.8		29	3.6
80	30	17,862	-72.5		30	1.1
70	30	18,654	-69.2		27	1.9
60	30	19,583	-66.2		28	2.1
50	29	20,695	-63.3		27	2.2
40	29	22,079	-59.8		28	.8
30	27	23,897	-55.6		09	4.2
25	27	25,068	-52.5		09	7.7
20	25	26,519	-50.2		09	13.5
15	21	28,422	-44.9		09	20.9
10	10	31,176	-39.8			
7						
5						

PORTLAND, MAINE 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	20	5.9	4.3	33	.3
1000	29	160	9.1	2.9	33	.8
950	31	574	8.0	.8	31	1.6
900	31	1,019	6.4	-3.9	30	2.8
850	31	1,487	5.0	-7.5	30	4.6
800	31	1,980	2.4	-8.6	30	6.4
750	31	2,499	-.3	-10.5	29	7.3
700	31	3,048	-3.3	-14.0	29	10.0
650	30	3,633	-6.0	-18.1	29	10.9
600	30	4,256	-9.4	-21.7	29	12.6
550	30	4,923	-13.6	-25.7	29	14.5
500	30	5,641	-18.4	-30.8	29	15.4
450	30	6,419	-23.6	-36.2	29	17.2
400	30	7,270	-29.6	-40.7	28	19.0
350	30	8,212	-36.2	-45.6	29	19.9
300	30	9,263	-43.2	-49.6	29	21.0
250	30	10,471	-50.3		29	22.4
200	30	11,907	-56.0		28	23.8
175	30	12,755	-56.6		28	23.3
150	30	13,730	-57.6		28	19.8
125	29	14,879	-59.0		28	18.1
100	29	16,274	-59.8		28	14.4
80	29	17,670	-59.4		29	9.6
70	29	18,506	-59.1		28	7.5
60	28	19,476	-58.8		29	6.7
50	27	20,620	-58.1		29	7.1
40	26	22,027	-57.0		28	6.0
30	26	23,855	-55.6		28	8.5
25	25	25,022	-54.0		28	8.4
20	24	26,456	-52.2		27	10.6
15	20	28,355	-49.4		27	12.5
10	16	31,025	-46.1		27	13.1
7						
5						

* QUILLAYUTE, WASH. 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	58	7.3	6.4	11	.8
1000	28	148	8.4	7.4	15	.7
950	31	560	7.4	5.1	21	3.1
900	31	1,003	5.0	1.8	23	4.5
850	31	1,468	2.2	-3.4	23	5.6
800	31	1,956	.3	-6.8	24	6.8
750	31	2,472	-1.9	-12.1	25	9.1
700	31	3,018	-5.0	-14.5	25	11.3
650	31	3,597	-8.1	-17.2	25	13.0
600	31	4,215	-11.4	-19.3	25	15.0
550	31	4,878	-15.1	-22.8	26	16.9
500	31	5,593	-19.7	-27.4	26	19.1
450	31	6,367	-24.9	-32.7	26	21.6
400	31	7,214	-30.8	-38.4	26	23.6
350	31	8,151	-37.9	-42.5	26	26.1
300	31	9,192	-45.7		26	27.8
250	31	10,386	-53.3		26	25.7
200	30	11,807	-57.1		27	25.7
175	30	12,652	-57.1		27	23.2
150	30	13,627	-57.8		26	21.0
125	30	14,776	-58.2		26	17.8
100	28	16,181	-59.0		26	14.7
80	28	17,582	-58.5		26	11.8
70	27	18,424	-58.5		26	11.5
60	26	19,392	-58.5		25	10.2
50	26	20,541	-57.8		25	9.3
40	26	21,949	-58.0		26	7.5
30	24	23,775	-56.7		27	7.3
25	22	24,937	-56.1		27	7.1
20	20	26,364	-54.9		28	6.8
15	14	28,207	-54.9		28	9.0
10	9	30,810	-51.6			
7	5	33,242	-45.7			
5						

RAPID CITY, S. DAK. 904 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	966	6.3	-1.3	32	2.6
1000						
950						
900	20	1,037	7.5	-1.3	30	2.0
850	31	1,477	11.0	-4.1	29	5.5
800	31	1,981	8.4	-5.7	29	5.3
750	31	2,511	5.2	-8.6	29	5.3
700	31	3,070	1.7	-11.0	28	7.3
650	31	3,664	-2.1	-14.2	28	9.1
600	31	4,295	-6.5	-18.1	28	10.3
550	31	4,969	-11.2	-22.4	28	11.3
500	31	5,693	-16.2	-28.9	27	12.5
450	31	6,478	-21.8	-34.0	28	13.5
400	31	7,334	-28.4	-39.7	28	14.8
350	31	8,280	-35.7	-45.3	27	15.8
300	31	9,331	-43.9		27	17.7
250	31	10,535	-51.7		27	19.5
200	30	11,966	-57.7		27	21.3
175	30	12,807	-58.3		27	21.6
150	30	13,775	-59.6		27	20.1
125	30	14,912	-60.8		27	17.6
100	29	16,296	-61.7		27	13.4
80	29	17,677	-61.7		27	9.8
70	28	18,505	-61.0		28	7.9
60	28	19,464	-60.8		28	5.9
50	27	20,598	-60.2		29	4.9
40	26	21,995	-59.0		29	4.9
30	23	23,814	-56.6		29	6.5
25	22	24,975	-55.5		28	7.3
20	20	26,393	-53.9		28	7.9
15	14	28,253	-52.3		28	10.1
10						
7						

ST CLOUD, MINN. 978 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	316	6.9	5.2	25	.3
1000						
950	31	555	9.6	5.2	24	2.3
900	31	1,004	8.8	2.0	25	4.4
850	31	1,477	7.6	-2.8	25	5.4
800	31	1,975	5.7	-6.8	26	5.9
750	31	2,500	2.9	-9.6	27	6.8
700	31	3,056	-.1	-13.5	27	8.2
650	31	3,645	-3.8	-16.8	27	9.2
600	31	4,273	-7.6	-20.7	27	10.0
550	31	4,945	-11.9	-24.7	27	10.7
500	31	5,667	-16.7	-30.0	27	11.9
450	31	6,450	-22.4	-35.7	27	13.3
400	31	7,304	-28.8	-40.3	27	14.5
350	31	8,249	-36.2	-45.3	27	15.1
300	31	9,297	-44.4		27	15.4
250	31	10,497	-52.1		27	16.8
200	31	11,923	-57.5		27	18.9
175	31	12,763	-58.8		28	19.6
150	31	13,731	-59.3		28	18.3
125	31	14,871	-60.2		28	14.7
100	31	16,260	-61.1		27	11.9
80	31	17,646	-60.8		28	9.3
70	31	18,477	-60.9		28	7.6
60	30	19,435	-60.6		29	6.7
50	30	20,572	-59.8		28	5.7
40	29	21,969	-59.1		29	5.3
30	29	23,779	-57.7		29	5.5
25	27	24,934	-56.6		29	7.1
20	26	26,350	-54.9		28	6.9
15	25	28,191	-52.6		28	10.7
10	19	30,849	-49.7		28	13.5
7						

• ST PAUL IS., ALASKA 1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	10	3.0	.3	29	4.3
1000	22	137	3.3	.2	30	4.8
950	31	483	.1	-1.6	29	5.9
900	31	914	-2.8	-4.7	29	6.6
850	31	1,365	-5.3	-8.6	30	7.4
800	31	1,840	-7.3	-13.2	30	8.3
750	31	2,341	-9.2	-18.3	30	9.0
700	31	2,872	-12.0	-21.1	29	9.0
650	31	3,436	-15.1	-24.8	29	10.0
600	31	4,037	-18.5	-26.6	29	10.1
550	31	4,681	-22.3	-29.6	28	10.3
500	31	5,375	-26.9	-34.1	28	10.7
450	31	6,128	-31.8	-35.9	28	11.0
400	31	6,952	-37.0	-38.2	29	12.4
350	31	7,867	-42.5	-39.5	27	12.0
300	31	8,894	-47.5		27	13.7
250	31	10,090	-50.7		27	16.5
200	31	11,538	-52.4		28	16.8
175	31	12,401	-52.4		27	14.9
150	31	13,397	-52.8		27	14.2
125	31	14,572	-53.7		27	12.5
100	31	16,004	-54.2		26	11.1
80	31	17,436	-54.4		26	9.9
70	31	18,291	-54.4		26	9.4
60	31	19,278	-54.8		26	9.2
50	31	20,443	-55.2		26	9.2
40	29	21,869	-54.6		26	9.1
30	27	23,712	-54.1		27	8.6
25	26	24,885	-53.5		27	9.1
20	25	26,318	-52.7		27	8.6
15	21	28,172	-51.5		27	11.1
10	16	30,833	-50.2		28	13.8
7	5	33,343	-46.6			

SALEM, ILL. 997 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	174	11.8	10.2	19	1.0
1000	9	190	9.7	5.4		
950	31	582	14.8	7.0	25	3.8
900	31	1,038	13.0	2.1	26	5.5
850	31	1,518	11.4	-.8	26	6.3
800	31	2,022	8.7	-4.8	27	6.5
750	31	2,553	5.6	-8.7	27	6.9
700	31	3,114	2.3	-10.3	27	7.4
650	31	3,709	-1.1	-15.1	27	8.0
600	31	4,343	-4.4	-19.5	27	8.7
550	31	5,023	-8.7	-24.1	27	10.2
500	31	5,755	-13.4	-29.4	27	10.9
450	31	6,548	-19.3	-33.9	27	11.5
400	31	7,412	-25.8	-40.1	27	13.1
350	31	8,368	-33.1	-45.2	27	14.3
300	31	9,431	-41.2	-48.3	27	16.2
250	30	10,649	-49.3		27	19.3
200	30	12,085	-56.9		28	23.3
175	30	12,926	-59.3		28	25.0
150	30	13,887	-61.4		28	23.0
125	29	15,006	-63.9		28	18.7
100	29	16,370	-65.3		28	13.8
80	27	17,722	-64.6		29	8.7
70	27	18,541	-63.1		29	6.1
60	26	19,495	-61.4		29	4.3
50	26	20,631	-60.0		29	3.8
40	26	22,031	-57.8		29	4.1
30	26	23,858	-55.3		28	7.4
25	24	25,018	-53.8		28	9.3
20	22	26,455	-51.9		27	10.9
15	20	28,335	-49.4		27	16.4
10	13	31,000	-46.4		27	23.6
7						

SALEM, OREG. 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind	
					Direction	Speed M.p.s.
SURFACE	31	61	8.1	6.4	19	1.1
1000	27	164	9.4	7.4	19	1.2
950	31	573	9.0	5.6	21	2.2
900	31	1,021	7.5	2.7	23	3.6
850	31	1,490	5.3	.0	24	5.6
800	31	1,984	3.6	-5.5	25	6.9
750	31	2,506	1.0	-9.7	25	7.9
700	31	3,058	-1.9	-12.7	26	9.1
650	31	3,644	-4.8	-15.1	26	10.9
600	31	4,270	-8.4	-17.6	27	12.7
550	31	4,941	-12.1	-21.9	26	14.7
500	31	5,663	-16.9	-27.2	27	16.8
450	31	6,446	-22.1	-32.3	27	17.9
400	31	7,301	-28.7	-37.8	27	18.2
350	31	8,246	-35.9	-44.3	26	20.3
300	31	9,295	-44.3		27	21.7
250	31	10,495	-52.5		27	24.0
200	31	11,917	-57.6		27	23.7
175	31	12,758	-58.6		27	22.1
150	31	13,726	-59.1		27	20.9
125	31	14,866	-60.4		27	19.3
100	27	16,254	-60.9		27	15.6
80	27	17,647	-59.4		26	11.4
70	27	18,493	-59.5		26	11.1
60	27	19,450	-58.8		26	10.4
50	26	20,599	-58.2		27	8.6
40	26	22,004	-58.2		26	9.2
30	25	23,819	-57.1		27	8.2
25	24	24,978	-56.1		27	8.7
20	23	26,406	-55.1		28	8.1
15	19	28,251	-53.0		28	8.7
10	10	30,872	-50.5			
7						

RAWINSONDE DATA

Average monthly values

SALT LAKE CITY, UTAH
873 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	1,288	8.4	[illegible]	15	2.3
1000						
950						
900						
850	31	[illegible]	11.2	-3.4	18	3.6
800	31	2,013	9.2	[illegible]	[illegible]	4.7
750	31	2,544	5.6	-8.7	23	4.3
700	31	[illegible]	1.4	[illegible]	25	5.4
650	31	3,696	-2.6	[illegible]	26	6.4
600	31	4,326	-6.4	-17.8	26	7.2
550	31	5,001	-10.4	-23.9	26	8.0
500	31	5,728	-15.3	-28.1	26	10.3
450	31	6,516	-20.9	-33.5	27	11.0
400	31	7,375	-27.6	-39.9	27	12.3
350	31	[illegible]	-34.8	-44.9	27	12.8
300	30	9,380	-43.4		27	14.0
250	30	10,584	-51.3		27	15.9
200	30	12,014	-57.1		27	18.0
175	30	12,856	-58.5		27	18.4
150	30	13,821	-60.4		27	17.2
125	29	14,949	-61.7		26	16.3
100	29	16,327	-63.1		27	12.6
80	28	17,695	-63.2		28	8.7
70	28	18,519	-61.7		27	7.7
60	26	19,477	-60.7		27	5.5
50	26	20,614	-59.9		28	5.5
40	27	22,014	-57.9		29	6.1
30	25	23,835	-56.5		29	6.5
25	25	24,993	-56.2		28	8.4
20	24	26,415	-54.3		28	10.1
15	22	28,274	-52.1		28	12.5
10	13	30,895	-49.3			
7						
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4						

SAN DIEGO, CALIF.
999 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	124	14.0	8.6	32	.7
1000	15	131	15.4	7.6	01	1.0
950	31	557	18.1	5.2	36	.8
900	31	1,019	17.5	[illegible]	34	1.1
850	31	1,505	15.6	-3.4	28	1.5
800	31	2,017	13.2	-6.6	28	1.9
750	31	2,557	[illegible]	[illegible]	25	3.4
700	31	3,127	7.3	-13.[illegible]	26	4.5
650	31	3,733	4.2	-16.9	26	4.4
600	31	4,380	.4	[illegible]	27	5.1
550	31	5,071	-4.6	-24.2	28	6.3
500	31	5,814	-9.9	-28.2	29	7.6
450	29	6,622	-15.6	-33.4	29	9.0
400	29	7,498	[illegible]	-39.[illegible]	28	9.5
350	27	8,471	[illegible]	-44.9	28	13.0
300	27	9,545	[illegible]	[illegible]	28	14.7
250	27	10,771	-43.0		28	16.8
200	27	[illegible]	-56.6		27	19.8
175	27	[illegible]	-59.7		26	[illegible]
150	27	14,010	-63.2		26	21.1
125	27	15,123	-66.6		26	17.3
100	27	16,464	-69.1		26	12.0
80	26	17,798	-67.8		27	6.0
70	[illegible]	[illegible]	-65.4		17	3.0
60	26	19,552	[illegible]		35	1.4
50	26	20,685	[illegible]		04	1.7
40	25	22,088	[illegible]		06	2.4
30	25	23,924	-53.6		04	2.2
25	25	25,101	-52.2		36	1.8
20	24	26,553	-49.9		10	3.8
15	2[illegible]	28,438	-48.4		29	7.8
10	13	31,150	-46.2		27	15.8

SAN JUAN, P. R.
1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	[illegible]	25.7	[illegible]	15	1.9
1000	31	119	25.3	[illegible]	12	3.2
950	31	570	22.5	[illegible]	11	6.5
900	31	1,040	[illegible]	15.8	11	6.7
850	31	1,531	16.7	[illegible]	11	5.9
800	31	2,047	[illegible]	[illegible]	11	5.[illegible]
750	31	2,589	11.3	3.8	11	3.9
700	31	3,164	8.6	-2.8	10	3.1
650	31	3,773	5.4	-6.5	10	2.2
600	31	4,423	1.9	-11.5	10	1.4
550	31	5,120	[illegible]	-17.1	10	1.1
500	31	5,872	-6.[illegible]	-21.6	06	.8
450	31	6,689	[illegible]	-26.4	34	1.0
400	31	7,583	[illegible]	[illegible]	33	2.5
350	31	8,574	[illegible]	-36.5	32	3.5
300	31	9,677	-32.8	-45.7	32	4.2
250	31	[illegible]	[illegible]		32	6.0
200	31	12,398	[illegible]		33	9.0
175	31	13,240	[illegible]		32	8.9
150	31	14,182	-67.9		31	7.3
125	[illegible]	15,262	-73.7		29	6.4
100	29	16,552	-76.0		29	4.1
80	[illegible]	17,852	[illegible]		04	1.0
70	[illegible]	18,647	-68.3		07	3.0
60	29	19,579	[illegible]		09	5.6
50	[illegible]	[illegible]	[illegible]		09	5.7
40	[illegible]	22,093	[illegible]		08	8.4
30	[illegible]	23,927	[illegible]		09	[illegible]
25	26	25,106	[illegible]		10	12.7
20	23	26,577	-46.8		09	15.5
15	[illegible]	28,498	-43.5		09	16.8
10	7	31,234	-40.3			

• SAULT STE MARIE, MICH.
98[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	3[illegible]	221	7.1	5.0	[illegible]	.7
1000						
950	31	556	8.4	5.6	22	1.9
900	31	1,002	7.4	[illegible]	26	4.0
850	31	1,472	5.4	-1.1	26	4.7
800	31	1,966	3.0	-3.9	26	6.1
750	31	2,487	.7	-4.3	27	6.8
700	31	3,039	-1.8	[illegible]	27	8.1
650	31	3,625	-5.0	[illegible]	27	8.7
600	31	4,250	-8.6	-20.8	27	9.5
550	31	4,919	-12.7	-25.4	27	10.7
500	31	5,640	-17.6	-30.5	27	11.9
450	31	6,420	-23.3	-34.7	27	13.4
400	31	7,271	-29.4	-40.8	28	14.8
350	31	8,214	-36.6	-45.3	28	16.7
300	31	9,261	-44.6		28	17.7
250	31	10,460	-52.1		28	20.6
200	31	11,887	-57.0		28	20.9
175	31	12,729	-58.2		28	17.6
150	31	13,699	-58.6		28	16.1
125	31	14,843	-59.5		28	15.5
100	31	16,239	-59.8		28	11.5
80	31	17,639	-59.3		29	8.7
70	29	18,461	-59.1		29	7.7
60	28	19,448	-59.2		29	6.6
50	[illegible]	20,590	-59.4		29	5.5
40	27	21,986	-58.8		29	4.9
30	25	23,800	-56.6		29	5.8
25	25	24,960	-55.5		29	5.9
20	24	26,390	-53.8		28	7.6
15	23	28,243	-51.3		28	10.9
10	21	30,907	-47.6		27	15.1
7	11	33,270	-43.9			

• SHREVEPORT, LA.
1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	79	15.6	14.6	0[illegible]	.1
1000	30	153	18.2	14.4	[illegible]	.6
950	31	587	18.4	11.6	[illegible]	3.3
900	31	1,049	15.4	[illegible]	21	4.0
850	31	1,534	[illegible]	2.8	22	3.4
800	31	2,044	[illegible]	-.5	24	3.1
750	31	2,580	7.9	-4.0	24	2.7
700	31	3,145	4.7	-9.7	25	2.6
650	31	3,746	1.3	-12.5	27	3.0
600	31	4,386	[illegible]	-16.4	28	5.4
550	31	5,073	[illegible]	-21.8	27	6.6
500	31	5,813	-10.7	-27.0	27	8.4
450	31	6,615	-15.9	-31.9	27	10.0
400	31	7,492	[illegible]	-37.4	27	12.0
350	31	8,463	[illegible]	-43.4	27	13.8
300	31	9,543	[illegible]	[illegible]	27	17.1
250	31	10,776	-46.7		27	23.2
200	31	12,227	-55.3		27	27.3
175	31	13,071	-59.7		27	26.5
150	31	14,023	-64.6		27	26.1
125	31	15,125	-69.0		27	19.7
100	31	16,450	-71.6		28	12.5
80	31	17,770	[illegible]		28	6.9
70	31	18,571	-66.8		29	3.0
60	31	19,510	-63.5		[illegible]	[illegible]
50	31	20,639	-60.4		28	1.8
40	31	22,039	-57.4		29	2.2
30	31	23,874	-53.3		27	3.2
25	31	25,050	-51.5		28	4.3
20	28	26,503	-49.2		27	5.9
15	27	28,397	-47.7		27	9.1
10	26	31,101	-43.9		27	16.0
7	23	33,514	-40.7		26	21.8
5	14	35,797	-39.7		26	31.8
4	5	37,307	-38.1			

SPOKANE, WASH.
932 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	720	4.9	1.0	18	3.1
1000						
950						
900	31	1,007	7.5	.4	21	4.5
850	31	1,476	5.7	-3.0	23	6.0
800	31	1,970	2.6	-4.9	24	6.7
750	31	2,489	-.7	-8.4	25	7.8
700	31	3,037	-3.9	-12.6	26	9.7
650	31	3,619	-7.2	-16.6	26	11.4
600	31	4,239	-10.6	-19.3	26	13.1
550	31	4,904	-14.2	-24.3	26	15.3
500	31	5,622	-18.4	-29.0	26	17.2
450	31	6,400	-23.8	-33.8	26	19.3
400	31	7,250	-29.6	-39.8	27	22.0
350	31	8,192	-36.5	-44.3	27	24.5
300	31	9,240	-44.7		27	26.6
250	31	10,436	-53.3		27	28.4
200	30	11,860	-57.6		27	27.8
175	30	12,704	-57.2		27	24.9
150	30	13,679	-57.7		27	21.3
125	30	14,827	-58.4		26	19.9
100	30	16,229	-59.1		26	15.9
80	29	17,628	-58.3		26	13.0
70	29	18,469	-58.1		26	11.4
60	29	19,440	-58.4		26	9.7
50	29	20,588	-58.2		26	10.0
40	28	21,994	-57.8		26	8.1
30	28	23,813	-56.9		27	6.7
25	27	24,973	-56.5		28	6.7
20	27	26,395	-54.9		28	7.6
15	24	28,243	-53.7		28	8.3
10	10	30,863	-51.3			
7						

• SWAN ISLAND, W. I.
1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	10	26.4	23.6	06	2.0
1000	31	89	26.6	23.5	06	2.5
950	31	542	23.2	20.9	06	3.4
900	31	1,013	20.3	16.8	07	3.1
850	31	1,505	17.3	13.5	08	2.9
800	31	2,022	14.7	10.0	08	2.7
750	31	2,566	12.0	6.4	09	2.6
700	31	3,142	9.2	.5	09	2.2
650	31	3,754	5.9	-3.5	09	2.1
600	31	4,405	2.2	-7.6	08	2.3
550	31	5,103	-1.8	-11.3	08	2.3
500	31	5,856	-5.9	-16.0	07	1.6
450	31	6,675	-10.6	-21.5	06	1.5
400	30	7,571	-16.6	-28.3	05	1.3
350	30	8,565	-23.2	-35.4	36	1.1
300	30	9,672	-31.7	-42.7	27	1.8
250	30	10,934	-42.0		25	3.6
200	30	12,404	-54.5		26	5.2
175	30	13,246	-61.1		26	4.8
150	29	14,188	-68.1		28	4.2
125	29	15,265	-74.3		32	3.2
100	28	16,552	-76.8		01	2.3
80	24	17,845	-72.5		08	3.5
70	25	18,638	-68.0		08	3.8
60	25	19,572	-65.0		08	5.3
50	25	20,691	-62.5		09	7.0
40	25	22,079	-58.6		09	8.3
30	25	23,912	-53.6		09	11.3
25	24	25,092	-51.2		09	13.1
20	24	26,554	-48.2		09	15.8
15	24	28,468	-43.6		09	19.9
10	20	31,225	-39.7		10	17.6
7	16	33,672	-37.1		09	11.8

TAMPA, FLA.
1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	8	19.7	17.5	04	2.4
1000	31	137	21.2	17.8	06	4.1
950	31	582	19.7	15.1	07	6.4
900	31	1,046	17.0	11.1	07	5.0
850	31	1,532	14.6	5.6	06	3.5
800	31	2,043	12.1	1.7	04	2.7
750	31	2,582	9.8	-1.2	03	2.4
700	31	3,153	7.3	-7.1	01	1.3
650	31	3,760	4.3	-11.4	32	1.5
600	31	4,407	1.0	-17.2	30	3.0
550	31	5,101	-3.1	[illegible]	30	4.4
500	31	5,849	-8.1	[illegible]	29	6.1
450	31	6,659	-13.5	[illegible]	29	7.8
400	31	7,543	[illegible]	-34.8	28	9.2
350	31	8,522	-27.1	-41.3	28	11.9
300	31	9,611	-35.4	-47.5	28	14.8
250	31	10,856	-44.7		28	18.2
200	31	12,316	-54.4		28	20.2
175	31	13,159	-60.6		28	19.3
150	31	14,104	-66.7		28	15.6
125	31	15,192	-71.6		29	12.6
100	29	16,501	-73.6		30	8.3
80	29	17,814	-70.7		31	2.4
70	29	18,614	-67.0		27	.6
60	29	19,553	-63.6		25	1.0
50	29	20,683	-59.2		02	1.7
40	26	22,092	-56.6		10	2.8
30	25	23,936	-51.9		09	4.7
25	25	25,125	-49.6		09	4.9
20	24	26,597	-47.2		09	4.3
15	22	28,519	-43.8		09	2.3
10	11	31,258	-41.5		28	2.3

TOPEKA, KANS.
985 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	268	11.5	9.6	18	1.5
1000						
950	31	571	14.0	7.3	21	4.0
900	31	1,027	13.5	2.6	23	5.5
850	31	1,508	11.8	-.4	25	5.5
800	31	2,013	9.5	-3.7	26	5.5
750	31	2,546	6.2	-6.3	26	5.5
700	31	3,108	2.8	-10.2	26	7.0
650	31	3,704	-.9	-14.3	26	8.3
600	31	4,338	-4.6	-19.1	27	9.4
550	31	5,018	-8.8	-24.7	27	10.0
500	31	5,749	-13.9	-29.4	27	11.4
450	31	6,540	-19.8	-35.0	27	12.4
400	31	7,404	-25.8	-40.4	27	14.2
350	31	8,361	-32.8	-45.3	27	16.4
300	31	9,425	-40.8	-50.2	27	17.7
250	31	10,642	-49.3		27	20.8
200	31	12,080	-56.7		27	21.8
175	30	12,919	-59.3		27	23.3
150	30	13,881	-61.2		27	22.0
125	29	15,007	-62.9		28	17.7
100	29	16,372	-64.8		28	12.4
80	29	17,735	-64.0		28	7.9
70	27	18,552	-63.0		28	5.6
60	26	19,504	-61.5		28	3.8
50	26	20,638	-59.7		29	3.6
40	25	22,037	-57.7		29	3.8
30	25	23,863	-55.2		28	6.6
25	24	25,034	-53.5		28	8.5
20	24	26,476	-52.0		28	11.0
15	18	28,362	-49.6		27	13.2
10	16	31,026	-46.5		27	18.4
7	9	33,420	-43.9			

TRUK, CAROLINE IS.
+ 1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	2	28.3	24.6	12	1.8
1000	31	95	27.[illegible]	23.3	12	2.5
950	31	548	23.8	20.7	11	4.4
900	31	1,020	20.6	17.3	11	4.5
850	31	1,513	17.8	13.8	11	4.3
800	31	2,031	15.4	10.4	11	4.2
750	31	2,577	12.8	6.2	10	3.8
700	31	3,154	9.5	3.4	10	3.9
650	31	3,767	6.3	.1	09	4.3
600	31	4,420	2.7	-3.5	09	4.4
550	31	5,120	-.9	-6.9	10	4.1
500	31	5,876	-5.1	-11.7	09	3.7
450	31	6,698	-9.8	-17.4	08	3.7
400	31	7,598	-15.1	-24.9	07	3.9
350	31	8,598	-21.9	-32.1	08	3.5
300	31	9,710	-30.3	-40.8	09	1.9
250	31	10,980	-40.7	-51.4	02	1.6
200	31	12,456	-53.5		32	3.8
175	31	13,302	-60.5		30	6.1
150	31	14,246	-67.6		29	8.5
125	31	15,325	-74.5		28	7.6
100	31	16,603	-77.4		31	1.9
80	31	17,885	-73.0		05	.4
70	31	18,676	-69.6		28	.5
60	31	19,602	-66.4		29	.9
50	31	20,717	-63.2		29	1.3
40	29	22,102	-59.7		06	.7
30	26	23,919	-55.2		09	5.4
25	25	25,090	-52.3		10	9.4
20	25	26,544	-49.1		10	14.3
15	24	28,449	-45.0		09	21.4
10	16	31,186	-40.0		09	27.3

• TUCSON, ARIZ.
924 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	789	14.6	-3.0	14	3.0
1000						
950						
900	31	1,017	20.3	-1.2	14	3.3
850	31	1,508	18.2	-3.5	14	2.5
800	31	2,023	14.6	-5.6	18	2.4
750	31	2,565	10.9	-8.6	20	3.5
700	31	3,135	6.7	-12.5	22	4.5
650	31	3,739	3.0	-16.3	24	4.6
600	31	4,383	-.5	-20.5	25	5.2
550	31	5,073	-4.9	-24.4	26	6.6
500	31	5,815	-10.1	-28.6	26	8.1
450	31	6,617	-16.1	-33.3	27	8.9
400	31	7,493	-22.9	-38.5	27	11.3
350	31	8,459	-30.6	-44.4	27	13.5
300	31	9,532	-39.1	[illegible]	27	16.3
250	31	10,760	-47.5		27	19.9
200	31	12,208	-55.5		27	24.3
175	31	13,058	-59.4		27	24.0
150	31	14,014	-63.3		27	22.0
125	31	15,123	-67.4		27	17.6
100	29	16,453	-70.1		26	11.5
80	27	17,787	-68.3		27	5.4
70	26	18,593	-66.6		19	2.9
60	25	19,533	-63.3		31	1.1
50	26	20,662	-60.6		[illegible]	1.[illegible]
40	24	22,065	-57.6		14	1.9
30	[illegible]	23,892	-53.9		11	1.1
25	23	25,066	-52.4		19	1.3
20	21	26,516	-49.5		30	4.2
15	21	28,410	-47.4		27	6.5
10	19	31,115	-44.8		27	13.0
7	13	33,500	-41.3		28	17.9

• VANDENBERG AFB, CALIF.
1004 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	100	11.5	8.2	[illegible]	.7
1000	31	132	12.3	8.0	[illegible]	1.3
950	31	566	16.6	3.5	01	2.9
900	31	1,026	16.3	-.3	[illegible]	1.6
850	31	1,511	14.7	-5.3	33	.7
800	31	2,021	12.1	-7.5	26	1.3
750	31	2,558	9.4	-9.9	25	2.3
700	31	3,127	6.1	-13.5	28	3.7
650	31	3,731	3.4	-16.5	28	5.2
600	31	4,376	-.3	-20.0	28	6.7
550	31	5,065	-5.0	-23.7	28	7.1
500	31	5,807	-10.5	-28.1	27	9.0
450	31	6,608	-16.7	-32.0	27	10.6
400	31	7,481	-23.7	-37.7	28	11.4
350	31	8,445	-31.1	-44.0	28	13.3
300	31	9,515	-40.0	-51.8	28	14.7
250	31	10,737	-48.8		28	17.7
200	31	12,175	-56.7		27	19.5
175	31	13,015	-59.8		27	20.8
150	31	13,972	-62.7		27	18.5
125	31	15,088	-65.6		27	16.4
100	31	16,437	-67.1		27	12.9
80	31	17,787	-65.8		27	6.8
70	31	18,602	-64.1		27	4.1
60	31	19,551	-61.7		30	2.4
50	31	20,688	-59.3		30	1.6
40	31	22,093	-57.0		[illegible]	.7
30	30	23,929	-53.6		33	2.5
25	30	25,106	-57.2		32	2.5
20	29	26,551	-50.9		29	5.4
15	[illegible]	28,420	-49.7		28	11.2
10	[illegible]	[illegible]	-47.6		27	14.2
7	[illegible]	33,440	-45.3			

VICTORIA, TEXAS
1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	33	18.7	17.4	03	1.2
1000	31	131	22.1	18.4	09	1.5
950	31	577	20.3	14.8	15	4.5
900	31	1,042	17.7	[illegible]	17	5.2
850	31	1,529	15.0	6.7	18	4.6
800	31	2,041	12.4	4.3	19	3.2
750	31	2,581	9.9	-1.6	21	1.5
700	31	3,151	6.7	-6.1	25	1.5
650	31	3,756	3.4	-11.3	27	1.9
600	31	4,402	-.1	-14.4	28	3.3
550	31	5,093	-3.9	[illegible]	27	4.1
500	31	5,840	-8.4	-24.4	26	5.7
450	31	6,649	-13.6	-29.0	26	7.6
400	31	7,534	-20.2	-33.9	26	9.7
350	31	8,512	-27.4	[illegible]	26	12.5
300	31	9,599	-35.8	-48.6	26	15.7
250	31	10,842	-44.9		27	19.9
200	31	12,302	-54.8		27	23.0
175	31	13,145	-60.4		27	24.2
150	31	14,092	-66.3		27	20.6
125	31	15,183	-71.1		27	[illegible]
100	[illegible]	16,490	-74.9		28	9.8
80	[illegible]	17,793	-71.3		19	3.9
70	[illegible]	18,590	-67.7		32	1.1
60	[illegible]	[illegible]	-64.3		18	.9
50	[illegible]	20,652	[illegible]		22	.5
40	[illegible]	22,051	-57.3		[illegible]	2.7
30	[illegible]	[illegible]	[illegible]		[illegible]	2.3
25	[illegible]	25,067	[illegible]		[illegible]	[illegible]
20	[illegible]	26,530	[illegible]		[illegible]	.1
15	[illegible]	28,437	-44.4		[illegible]	3.[illegible]
10	[illegible]	31,152	-43.4			

• WAKE IS., PACIFIC AREA
1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	5	26.9	24.3	08	5.1
1000	31	124	26.2	22.9	08	5.6
950	31	575	22.6	20.4	09	7.1
900	31	1,045	19.5	16.7	09	6.6
850	31	1,536	16.4	12.5	09	5.9
800	31	2,051	13.9	9.9	09	6.0
750	31	2,594	11.2	4.6	09	5.0
700	31	3,168	8.3	-2.6	09	4.6
650	31	3,777	5.2	-8.9	08	4.4
600	31	4,426	1.4	-13.0	09	4.4
550	31	5,122	-3.0	-16.2	09	4.3
500	[illegible]	[illegible]	-7.5	-21.7	09	4.9
450	[illegible]	6,683	-12.5	-26.7	08	4.6
400	[illegible]	7,572	-18.5	-32.7	07	4.4
350	[illegible]	8,557	-25.8	-39.5	06	4.1
300	[illegible]	9,651	-34.7	-46.5	05	2.2
250	[illegible]	10,898	-44.9		29	1.8
200	[illegible]	12,354	-55.8		28	3.8
175	[illegible]	13,193	-61.4		30	3.8
150	[illegible]	14,135	-67.6		32	3.4
125	[illegible]	15,218	-73.0		36	3.9
100	[illegible]	16,514	-76.0		03	3.7
80	[illegible]	17,809	-72.9		[illegible]	3.2
70	[illegible]	18,602	-68.7		07	3.2
60	[illegible]	19,532	-65.7		08	5.1
50	[illegible]	20,648	-62.7		09	7.6
40	[illegible]	22,038	-58.6		09	[illegible]
30	[illegible]	23,867	-53.9		[illegible]	[illegible]
25	[illegible]	25,042	-51.5		[illegible]	[illegible]
20	[illegible]	26,505	-48.2		[illegible]	[illegible]
15	[illegible]	[illegible]	-44.6		[illegible]	17.4
10	[illegible]	31,154	-40.7			

• WALLOPS IS., VA. NASA
1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	4	13.7	[illegible]	34	1.1
1000	31	155	15.4	[illegible]	02	1.8
950	31	589	13.1	5.4	36	1.9
900	31	1,042	11.0	1.0	32	2.5
850	31	1,518	[illegible]	-2.1	30	3.8
800	31	2,018	6.8	-6.0	29	4.3
750	31	2,546	4.5	-9.7	28	4.6
700	31	3,105	1.7	-12.6	28	5.8
650	31	3,700	-1.2	-16.0	28	7.7
600	31	4,334	-4.6	-20.0	28	8.6
550	31	5,014	[illegible]	-24.5	29	[illegible]
500	31	5,745	[illegible]	-30.0	28	11.3
450	31	6,537	[illegible]	[illegible]	28	12.6
400	[illegible]	7,402	[illegible]	[illegible]	28	14.3
350	[illegible]	8,360	-32.6	-44.6	27	15.2
300	[illegible]	9,424	-40.8	[illegible]	27	[illegible]
250	[illegible]	10,641	-49.6		27	16.9
200	[illegible]	12,076	[illegible]		27	[illegible]
175	[illegible]	12,915	[illegible]		27	20.5
150	[illegible]	13,871	[illegible]		28	21.6
125	[illegible]	14,992	[illegible]		28	19.2
100	[illegible]	16,350	[illegible]		28	14.5
80	[illegible]	17,713	-64.2		29	11.6
70	[illegible]	18,533	-62.6		29	9.3
60	[illegible]	19,485	[illegible]		28	5.8
50	[illegible]	20,622	-59.3		29	[illegible]
40	[illegible]	22,026	-57.1		28	5.6
30	[illegible]	23,862	-53.8		27	8.2
25	[illegible]	25,036	[illegible]		27	9.4
20	[illegible]	26,482	[illegible]		27	[illegible]
15	[illegible]	[illegible]	-48.5		27	[illegible]
10	[illegible]	31,063	-45.5		27	[illegible]
7	[illegible]	33,445	-42.9			

RAWINSONDE DATA

Average monthly values

OCTOBER 1973

WASHINGTON DULLES INT. AP
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	85	8.2	6.7	11	.3
1000	29	172	11.9	9.0	27	.4
950	31	589	12.6	5.8	26	1.9
900	31	1,042	10.3	3.2	28	3.1
850	31	1,516	8.4	-2.1	28	4.6
800	31	2,016	6.6	-4.3	28	5.3
750	31	2,544	4.2	-7.7	28	6.1
700	31	3,102	1.3	-12.0	28	7.5
650	31	3,696	-1.6	-15.2	28	8.2
600	31	4,329	-4.9	-20.3	28	8.9
550	31	5,008	-9.2	-25.1	28	10.5
500	31	5,738	-14.0	-30.7	28	12.1
450	30	6,525	-19.6	-35.4	28	13.5
400	30	7,388	-26.1	-40.7	28	14.0
350	29	8,346	-33.1	-44.8	28	15.3
300	29	9,408	-41.2	-49.6	28	17.4
250	29	10,625	-49.4		28	20.6
200	29	12,062	-56.4		27	20.8
175	29	12,905	-58.6		27	22.0
150	29	13,869	-60.4		27	21.3
125	28	14,993	-62.6		28	19.0
100	29	16,363	-64.4		28	15.2
80	28	17,733	-62.6		28	9.8
70	28	18,559	-61.6		28	7.5
60	28	19,516	-60.7		29	5.0
50	28	20,655	-59.1		29	5.0
40	27	22,062	-56.8		28	5.2
30	26	23,898	-54.2		28	8.2
25	25	25,073	-52.8		27	9.3
20	24	26,528	-50.6		27	11.0
15	21	28,405	-48.7		27	14.9
10	8	30,988	-47.6			

WAYCROSS, GA.
1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	44	15.2	13.9	34	1.0
1000	31	146	18.0	13.7	03	2.0
950	31	587	18.1	10.7	05	4.2
900	31	1,049	15.5	7.6	05	2.8
850	31	1,531	12.8	3.5	02	2.1
800	31	2,039	10.9	-2.7	35	2.1
750	31	2,575	8.3	-7.5	32	1.4
700	31	3,142	5.4	-10.3	29	2.2
650	31	3,745	2.6	-13.8	28	3.3
600	31	4,368	-.7	-18.4	27	4.3
550	31	5,077	-4.9	-22.2	28	5.3
500	31	5,820	-9.7	-25.9	28	7.9
450	31	6,625	-15.1	-30.8	28	10.5
400	31	7,504	-21.7	-35.9	28	13.0
350	30	8,478	-28.6	-42.8	28	14.9
300	30	9,561	-36.9	-49.9	28	19.1
250	30	10,799	-45.6		28	21.6
200	30	12,257	-54.4		28	24.0
175	30	13,103	-59.1		28	23.9
150	30	14,058	-64.1		28	22.0
125	30	15,163	-68.2		28	17.3
100	30	16,492	-70.4		29	11.1
80	30	17,823	-68.1		30	4.8
70	30	18,630	-65.1		29	2.5
60	30	19,576	-62.4		26	2.4
50	29	20,713	-59.1		29	2.7
40	26	22,124	-55.7		22	.9
30	26	23,972	-51.8		25	.6
25	26	25,160	-49.7		23	.7
20	24	26,632	-47.4		24	1.8
15	23	28,546	-45.2		26	7.0
10	11	31,286	-42.4			

WINNEMUCCA, NEV.
872 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,312	1.1	-5.6	16	.8
1000						
950						
900						
850	31	1,523	9.6	-3.5	15	.8
800	31	2,025	7.8	-5.5	25	2.4
750	31	2,555	4.5	-8.5	25	4.7
700	31	3,113	1.1	-11.6	25	5.7
650	31	3,705	-2.3	-14.5	26	7.5
600	31	4,336	-5.9	-19.8	26	8.5
550	31	5,013	-9.9	-23.5	27	9.1
500	31	5,741	-14.6	-27.2	27	10.6
450	31	6,530	-20.7	-32.1	27	11.5
400	31	7,389	-27.4	-38.7	27	12.3
350	31	8,339	-35.0	-44.8	28	14.7
300	31	9,393	-43.0		28	16.2
250	31	10,600	-51.2		28	18.1
200	31	12,026	-58.2		28	21.1
175	31	12,865	-59.1		28	19.8
150	31	13,828	-61.0		27	18.8
125	31	14,957	-62.4		27	18.2
100	31	16,332	-63.1		27	14.0
80	30	17,709	-62.3		27	9.7
70	30	18,535	-61.1		27	7.1
60	30	19,495	-60.2		27	6.2
50	29	20,638	-59.2		28	5.8
40	27	22,041	-58.1		29	5.4
30	26	23,859	-56.7		29	6.9
25	25	25,017	-55.4		29	9.0
20	21	26,443	-54.3		29	9.3
15	16	28,310	-52.2		28	12.2
10						

WINSLOW, ARIZ.
853 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,487	4.0	-8.4	19	.7
1000						
950						
900						
850	26	1,532	7.6	-6.6	19	.7
800	31	2,026	12.1	-5.1	25	3.2
750	31	2,564	9.1	-7.5	24	4.8
700	31	3,131	5.2	-11.1	24	4.8
650	31	3,732	1.5	-15.2	25	5.3
600	31	4,371	-2.9	-19.5	25	6.4
550	31	5,055	-7.4	-25.1	26	7.2
500	31	5,789	-12.5	-29.6	27	8.5
450	31	6,586	-18.1	-34.2	28	10.4
400	31	7,454	-24.9	-40.1	28	11.4
350	30	8,411	-32.1	-45.4	27	13.8
300	30	9,478	-40.3	-52.2	27	17.0
250	30	10,699	-48.7		27	21.0
200	29	12,139	-56.1		27	21.6
175	29	12,983	-58.9		27	22.1
150	29	13,944	-61.8		27	21.1
125	29	15,064	-65.0		27	17.9
100	28	16,416	-67.6		27	12.5
80	26	17,761	-66.6		27	7.3
70	25	18,575	-64.4		28	4.2
60	25	19,522	-62.3		28	3.1
50	25	20,656	-59.7		31	2.6
40	25	22,059	-57.3		35	2.0
30	22	23,892	-54.2		30	2.4
25	22	25,065	-52.9		29	3.8
20	22	26,510	-51.4		28	6.3
15	18	28,390	-50.3		28	11.1
10	9	31,066	-46.2			

YAKUTAT, ALASKA
1002 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	3.3	1.7	09	2.8
1000	19	74	4.1	1.1	10	2.2
950	31	444	3.0	.2	12	7.1
900	31	880	.2	-1.9	14	7.7
850	31	1,336	-2.7	-4.8	15	7.5
800	31	1,815	-5.7	-7.5	16	6.3
750	31	2,318	-8.9	-11.6	17	5.4
700	31	2,849	-12.5	-16.5	18	5.0
650	31	3,411	-16.1	-21.3	19	5.0
600	31	4,009	-20.2	-26.5	20	4.8
550	31	4,648	-24.9	-32.2	20	5.0
500	31	5,335	-29.5	-36.1	21	4.8
450	31	6,078	-35.0	-39.7	22	4.2
400	31	6,869	-41.1	-43.0	25	4.5
350	31	7,788	-46.9		27	6.0
300	31	8,795	-51.7		28	5.7
250	31	9,976	-51.3		28	8.7
200	31	11,430	-50.3		27	7.4
175	31	12,302	-50.5		26	8.4
150	31	13,307	-50.6		27	8.9
125	31	14,494	-51.1		27	8.0
100	31	15,942	-52.0		27	7.7
80	28	17,397	-52.9		28	7.0
70	27	18,252	-53.5		28	5.3
60	27	19,242	-54.1		28	5.3
50	26	20,412	-54.6		29	5.2
40	25	21,838	-55.3		29	5.0
30	23	23,675	-55.9		29	6.5
25	21	24,834	-55.7		29	7.3
20	19	26,251	-55.7		30	8.4
15	14	28,097	-56.0		29	9.7
10						

YAP, CAROLINE IS.
1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	14	27.5	24.5	13	1.4
1000	31	81	26.6	24.1	13	1.7
950	31	534	23.6	21.5	13	2.3
900	31	1,006	20.6	17.9	15	2.3
850	31	1,499	17.6	14.8	16	2.2
800	31	2,017	15.4	11.8	16	1.8
750	31	2,563	12.6	8.7	13	2.2
700	31	3,140	9.4	5.0	13	2.9
650	31	3,753	6.2	.8	12	3.4
600	31	4,406	2.5	-2.6	12	3.5
550	31	5,105	-1.2	-5.7	13	3.0
500	31	5,861	-5.4	-10.8	14	2.7
450	31	6,682	-9.7	-16.8	14	1.6
400	31	7,582	-15.4	-23.3	13	1.4
350	31	8,581	-22.2	-31.0	16	.7
300	31	9,693	-30.5	-39.2	15	.2
250	31	10,961	-40.8	-48.0	30	1.3
200	30	12,440	-53.1		32	4.2
175	30	13,287	-60.0		33	6.2
150	30	14,232	-67.5		34	7.7
125	30	15,311	-74.5		01	5.6
100	30	16,591	-79.0		05	5.3
80	30	17,869	-74.8		07	4.8
70	30	18,656	-70.0		07	3.0
60	29	19,580	-66.3		07	2.7
50	29	20,693	-63.4		09	2.4
40	29	22,078	-59.2		08	2.8
30	29	23,897	-55.4		09	8.4
25	29	25,067	-52.4		10	12.0
20	29	26,520	-49.0		09	17.2
15	25	28,428	-45.3		09	21.0
10	15	31,167	-39.4		09	28.3
7						

YUCCA FLAT, NEV.
882 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,198	5.5	-7.2	29	.4
1000						
950						
900						
850	31	1,506	13.8	-5.6	36	1.8
800	31	2,015	11.4	-7.4	16	.4
750	31	2,550	8.1	-10.0	19	1.9
700	31	3,115	4.4	-13.5	22	3.2
650	31	3,715	1.3	-16.6	25	4.2
600	31	4,355	-2.8	-20.3	26	5.6
550	31	5,038	-7.1	-24.7	27	6.7
500	31	5,774	-12.3	-29.0	27	7.8
450	31	6,570	-18.2	-34.0	27	9.4
400	31	7,438	-25.0	-39.8	27	11.6
350	29	8,414	-32.1	-45.4	28	12.6
300	29	9,481	-40.6	-50.1	28	14.1
250	29	10,699	-49.5		28	16.1
200	27	12,141	-56.5		28	16.2
175	27	12,982	-59.4		28	17.4
150	27	13,942	-61.8		27	17.6
125	27	15,064	-64.3		27	[illegible]
100	27	16,422	-66.4		27	12.3
80	26	17,776	-65.6		27	7.8
70	26	18,593	-63.2		27	5.6
60	25	19,543	-62.0		28	3.7
50	24	20,679	-60.1		29	2.9
40	24	22,080	-57.8		30	2.1
30	23	23,905	-55.5		30	4.6
25	22	25,070	-54.7		29	6.1
20	22	26,501	-53.7		29	3.3
15	20	28,357	-52.3		28	13.6
10	16	30,993	-50.6		28	18.3
7	8	33,346	-47.9			

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun.

ALBUQUERQUE, N. MEX.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
	Air mass 4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	1.19
Oct.									
19	----	----	----	----	(1.39)	(1.28)	(1.11)	(0.95)	(0.79)
20	----	----	----	1.28	1.38	1.27	.95	.73	.55
21	0.86	1.01	1.13	1.29	1.42	1.21	.87	.68	.51
22	.91	1.03	1.14	1.31	1.39	1.24	.92	.70	.34
23	(.91)	1.05	1.15	----	1.44	1.33	1.08	.88	.71
24	.97	1.08	1.20	1.36	1.47	1.38	1.26	1.18	1.04
25	.93	1.06	1.21	1.31	1.46	(1.34)	(1.22)	(1.09)	(.94)
26	.94	1.06	1.20	1.30	1.41	(1.28)	(1.11)	----	----
27	.97	1.08	1.20	1.35	1.42	(1.35)	(1.21)	1.11	.99
28	1.03	1.15	1.26	(1.40)	(1.44)	1.36	1.23	1.12	1.01
29	.98	1.10	1.23	1.35	1.44	----	----	----	----
30	----	----	----	----	1.37	1.32	1.11	.99	.92
31	1.06	1.15	1.27	1.39	1.47	1.38	1.26	1.12	1.02
Averages	0.96	1.08	1.20	1.33	1.42	1.31	1.09	0.95	0.78

TUCSON, ARIZ.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
	Air mass 4.56	[illegible]	2.71	[illegible]	*	[illegible]	2.74	[illegible]	[illegible]
Oct.									
1	----	1.02	1.07	1.25	1.37	1.19	1.06	0.94	0.84
2	0.95	1.05	1.15	1.32	1.41	1.31	1.16	1.05	[illegible]
3	.96	----	----	----	1.42	1.32	1.16	1.05	[illegible]
4	.92	.99	1.12	1.26	1.40	1.26	1.10	.97	[illegible]
5	.93	1.01	1.14	1.29	1.42	1.26	1.11	.97	[illegible]
6	.88	.97	----	1.26	1.38	1.26	1.06	.93	[illegible]
7	1.04	1.10	1.21	1.36	1.43	1.32	1.17	1.06	[illegible]
8	1.01	1.10	1.22	1.35	1.48	1.32	1.14	1.02	.88
9	.80	.89	1.00	1.18	1.39	---	1.07	.96	[illegible]
10	----	----	.99	1.22	1.47	1.32	1.14	1.03	[illegible]
11	.96	1.01	1.13	1.31	1.44	1.24	1.10	----	----
12	.86	.96	1.10	1.30	1.45	1.29	1.14	1.02	[illegible]
13	.91	1.01	1.12	1.28	1.42	1.24	1.06	.89	[illegible]
14	.98	1.06	1.17	1.29	1.44	1.28	1.09	.97	.84
15	.93	1.03	1.14	1.30	1.44	1.27	1.06	.91	.81
16	.98	1.06	1.16	1.31	1.41	----	1.10	.96	[illegible]
17	----	----	1.14	----	1.39	1.20	.99	.84	[illegible]
18	.88	.98	1.10	1.27	1.40	1.22	1.00	.84	[illegible]
19	.95	1.04	1.13	1.30	1.45	1.30	1.16	1.03	.92
20	.93	1.02	1.14	1.29	1.39	1.19	1.00	.86	[illegible]
21	.87	.97	1.09	1.25	1.38	1.20	1.03	.88	[illegible]
22	.76	.87	.98	1.17	1.36	1.24	1.08	.96	.87
23	.85	.97	1.11	1.30	1.40	1.32	1.07	.98	.88
24	.88	.99	1.14	1.32	1.40	1.25	1.14	.98	.86
25	.94	1.03	1.16	1.31	1.39	1.32	1.16	.97	.81
26	.91	1.00	1.12	1.31	1.39	1.23	1.06	.92	.80
27	.89	.99	1.12	1.26	1.32	1.18	1.02	.84	[illegible]
28	.98	1.08	1.21	1.36	1.44	1.38	1.22	1.07	.98
29	----	----	----	----	----	1.23	1.06	1.00	.92
30	.83	.98	1.09	1.25	1.40	1.31	1.11	.98	.87
31	.95	1.05	1.09	1.30	1.43	1.31	1.16	1.06	.97
Averages	0.92	1.01	1.12	1.28	1.41	1.27	1.10	0.96	0.86

OMAHA, NEBR.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
	Air mass 4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78

NO DATA RECEIVED

MADISON, WISC.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
	Air mass 4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69

NO DATA RECEIVED

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska. OCTOBER 1975

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	21	2	38	28	55	25	11	12	-34	15	22	- 8	-53	-71	-45	4	- 24	-17	-19	-42	-34	-73	-73	- 9	- 6	-32	-19	-24	-26	-21	-63	-15

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (3900 A) at Ames, Iowa.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	4.87	7.92	4.87	11.82	11.09	2.80	6.21	5.11	6.09	3.90	4.63	8.53	10.23	9.75	9.50	9.02	8.41	9.02	9.14	8.89	8.16	7.80	7.31	7.92	8.28	7.55	6.94	1.70	7.31	7.31	7.31	7.39

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code IsQQQ defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units Milli-atmo-cms.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O3

NO DATA RECEIVED

REFERENCE NOTES

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES   Dates in the table apply to the period 24 hours ending at time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

+	And also on an earlier date or dates.
D	Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch of water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA - METRIC UNITS: Data from airport unless otherwise specified.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile data can be evaluated.

B	Number of days maximum 21.1°C. or above for Alaskan Stations.
Y	Peak Gust.
+	And also on an earlier date or dates.
U	Indicates Urban site.
R	Indicates Rural site.
Ø	Station pressures apply to elevations shown in the "Elevations" table of the annual issue of this publication.

Conversion formulae to English Units are as follows:

1 foot = 0.3048 meters
°F. = $\frac{9}{5}$ x °C + 32
1 inch = 25.4 millimeters
1 mile per hour = 0.447 meters per second

HEATING DEGREE DAYS: Data from airport unless otherwise specified.

U	Indicates Urban site.
R	Indicates Rural site.

COOLING DEGREE DAYS: Data from airport unless otherwise specified.

U	Indicates Urban site.
R	Indicates Rural site.

STORM SUMMARY:

°	Includes crop damage.
C	Crop damage.
*	No occurrence of storms or unusual weather phenomena reported.
@	Includes heavy sleet storm.
#	Freezing drizzle and freezing rain, commonly known as glaze.
Ø	For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
‡	No Storm Data Report received for this State.
<>	Report Incomplete.
†	Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5 Million
7	$5 Million to $50 Million
8	$50 Million to $500 Million
9	$500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS:

1/	Flooding continued at the end of the month.
NA	Not available.

FLOOD STAGE DATA:

#	Highest Stage Observed
1/	Continued at end of month
___	Highest Stage of Record
E	Estimated
P	Provisional (Flood Stage)
U	Unknown

RAWINSONDE DATA (Average Monthly Values):

All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon. The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors. These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

*	Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.
+	Observations for these stations are scheduled at 0000 G.C.T.
†	Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION INTENSITIES: Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

()	Clouds Present
*	Values corresponding to true solar noon
BD	Blowing Dust
BN	Blowing Sand
D	Dust
DI	Intense Dust
DM	Moderate Dust
DS	Slight Dust
F	Fog
GF	Ground Fog
H	Haze
HI	Intense Haze
HM	Moderate Haze
HS	Slight Haze
I	Intense Haze-indeterminable
K	Smoke
KI	Intense Smoke
KM	Moderate Smoke
KS	Slight Smoke
M	Moderate Haze-indeterminable
N	Sand
S	Slight Haze-indeterminable

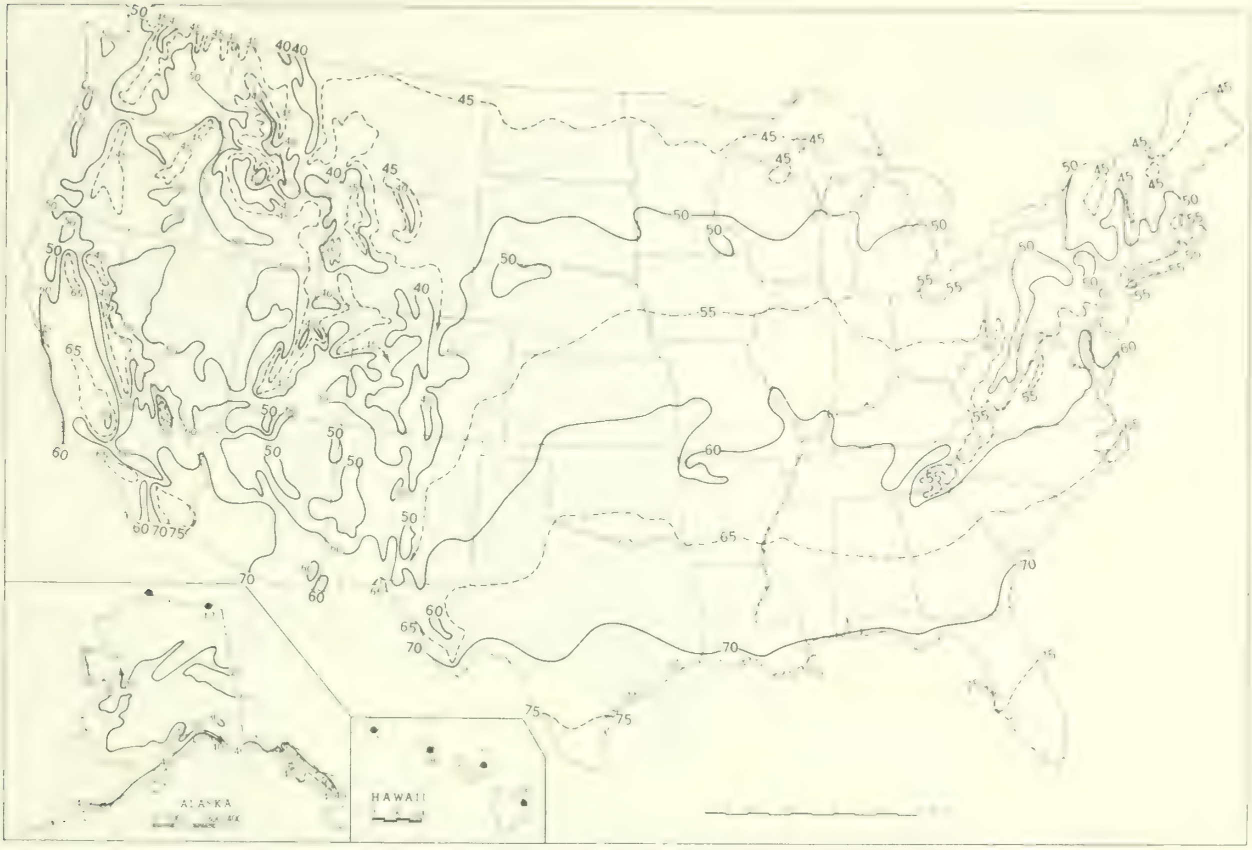
NET RADIATION: The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA: These data are from an U-V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder. This instrument has not been checked by the NOAA, National Weather Service.

TOTAL OZONE DATA: The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λ s designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), October


50
40
45
50
55
60
65
70
75
ALASKA
HAWAII

B. Temperature Departure from 30 - Year Mean (°F 1931-60), October 1973

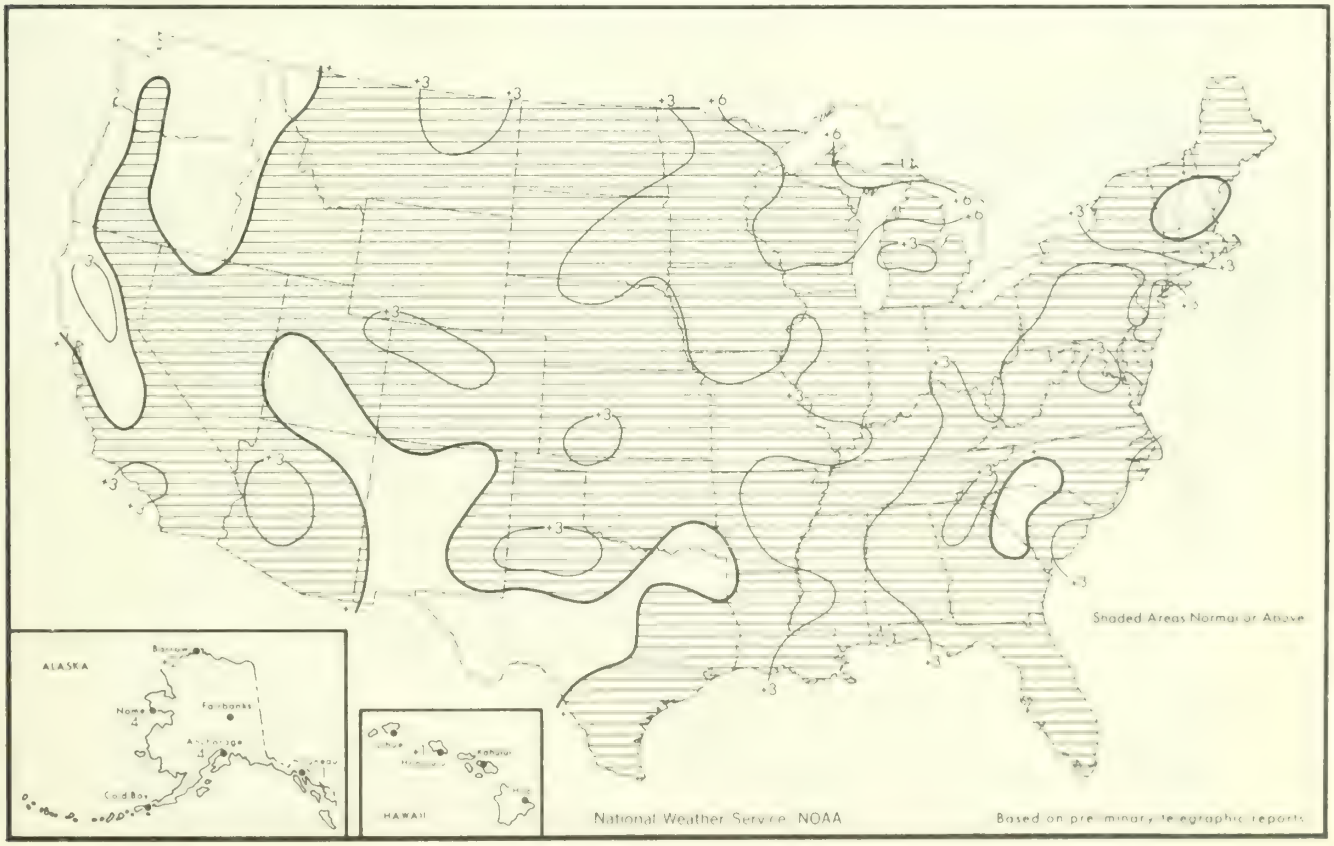
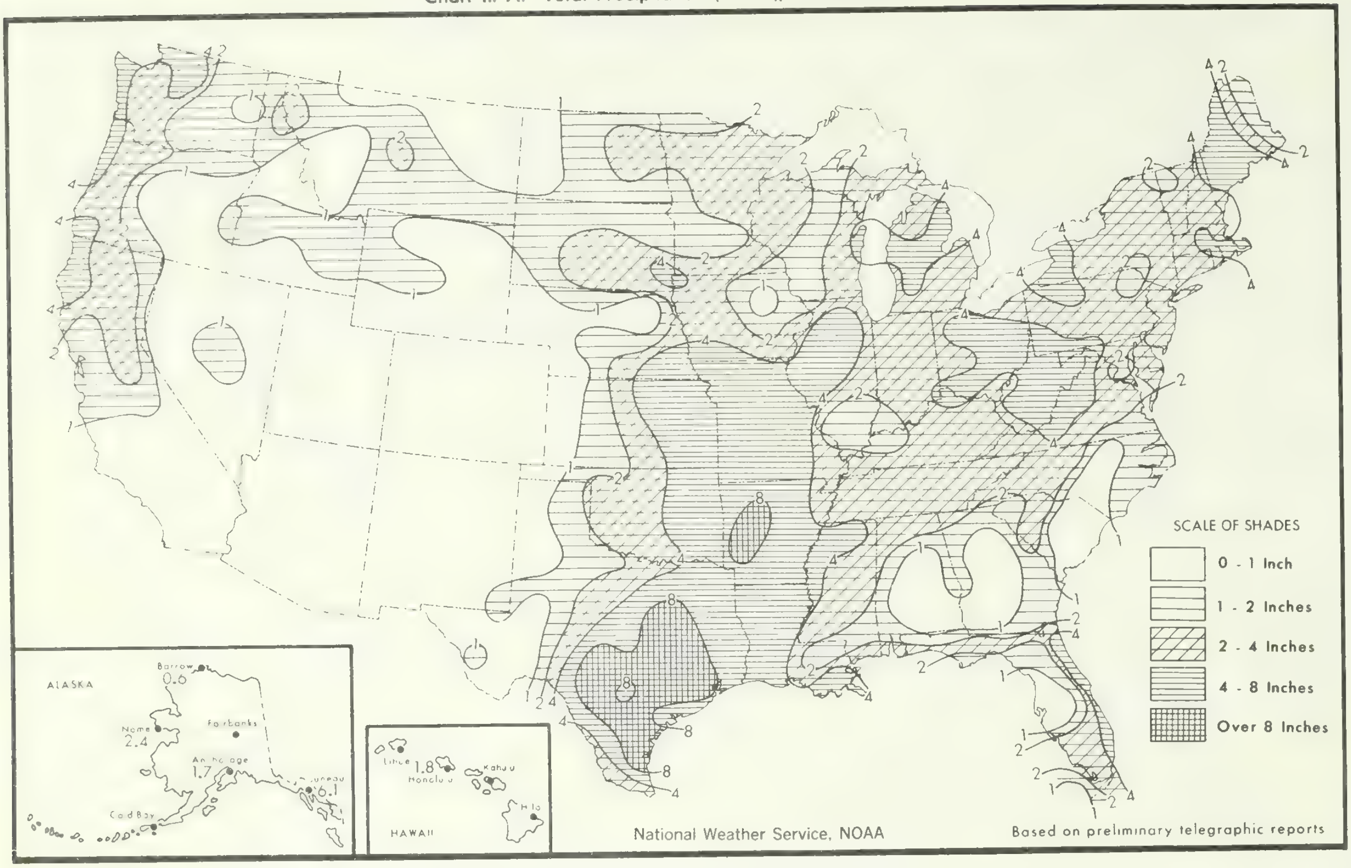

+3
+6
-3
Shaded Areas Normal or Above
ALASKA
Barrow
Fairbanks
Nome
Anchorage
Cold Bay
Juneau
HAWAII
Lihue
Honolulu
Kahului
Hilo
National Weather Service NOAA
Based on preliminary telegraphic reports

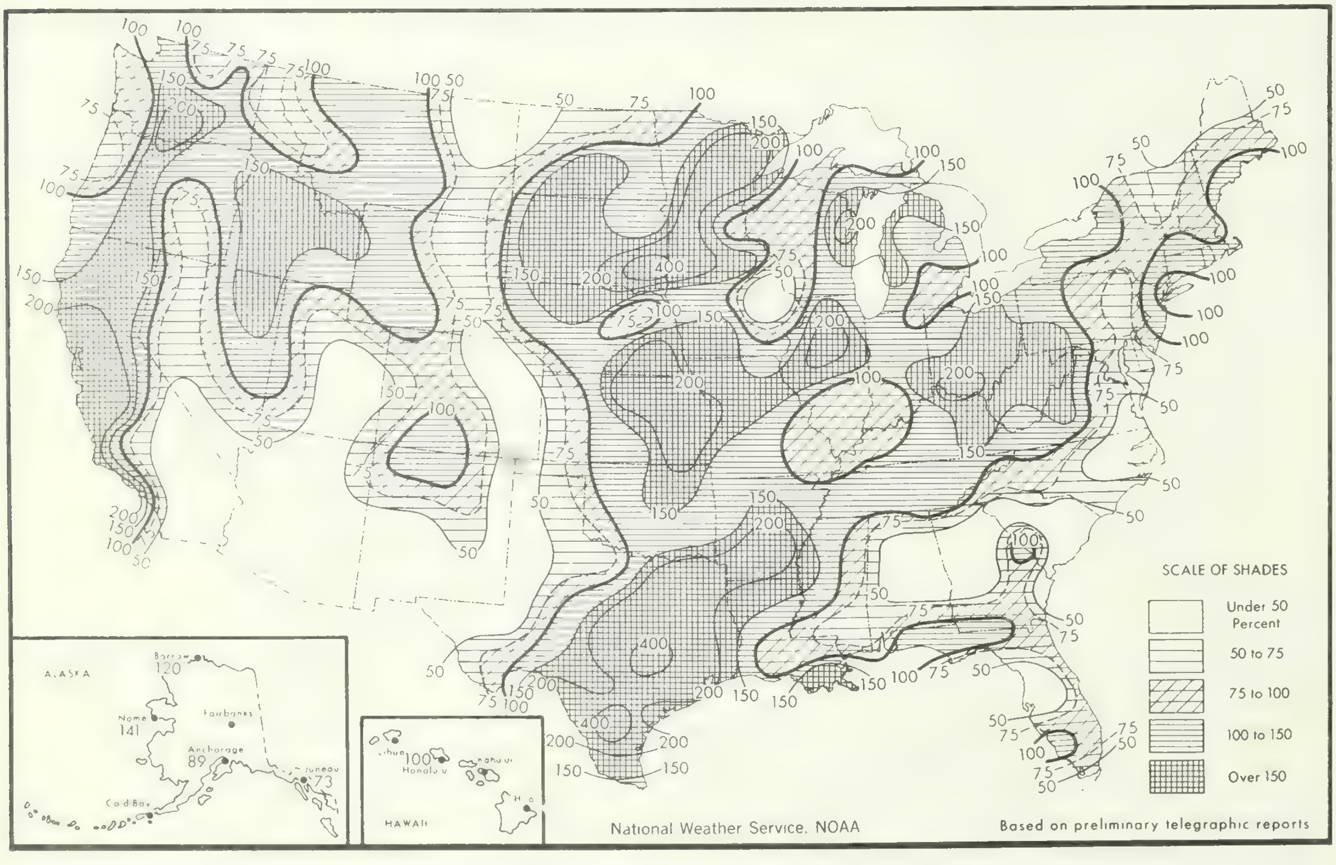
Chart II. A. Total Precipitation (Inches), October 1973


SCALE OF SHADES
0 - 1 Inch
1 - 2 Inches
2 - 4 Inches
4 - 8 Inches
Over 8 Inches
ALASKA
Barrow 0.6
Nome 2.4
Fairbanks
Anchorage 1.7
Juneau 6.1
Cold Bay
HAWAII
Lihue 1.8
Honolulu
Kahului
Hilo

National Weather Service, NOAA

Based on preliminary telegraphic reports

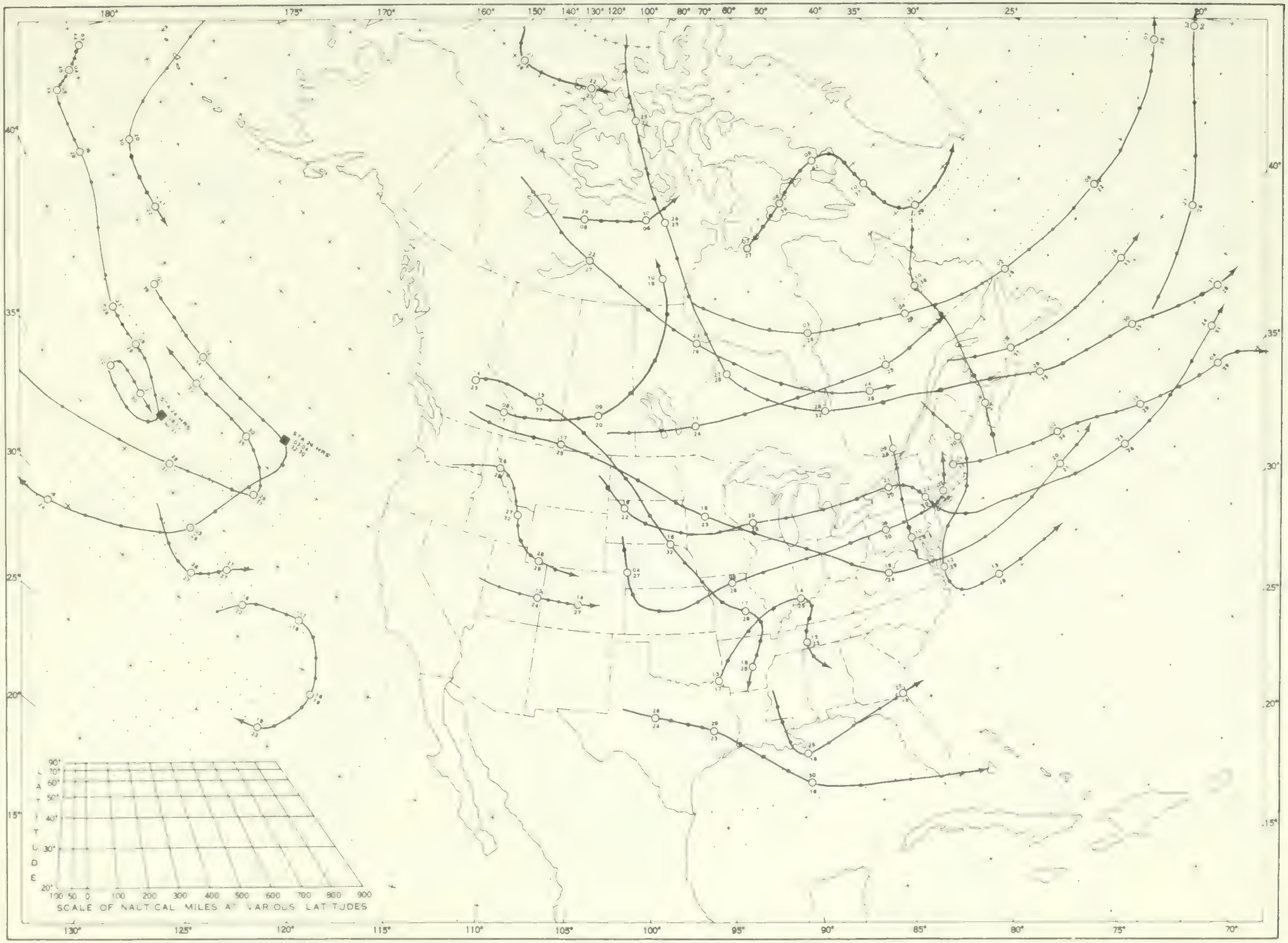
B. Percentage of Normal Precipitation, October 1973


SCALE OF SHADES
Under 50 Percent
50 to 75
75 to 100
100 to 150
Over 150
ALASKA
Barrow 120
Nome 141
Fairbanks
Anchorage 89
Juneau 73
Cold Bay
HAWAII
Lihue 100
Honolulu
Kahului
Hilo

National Weather Service, NOAA

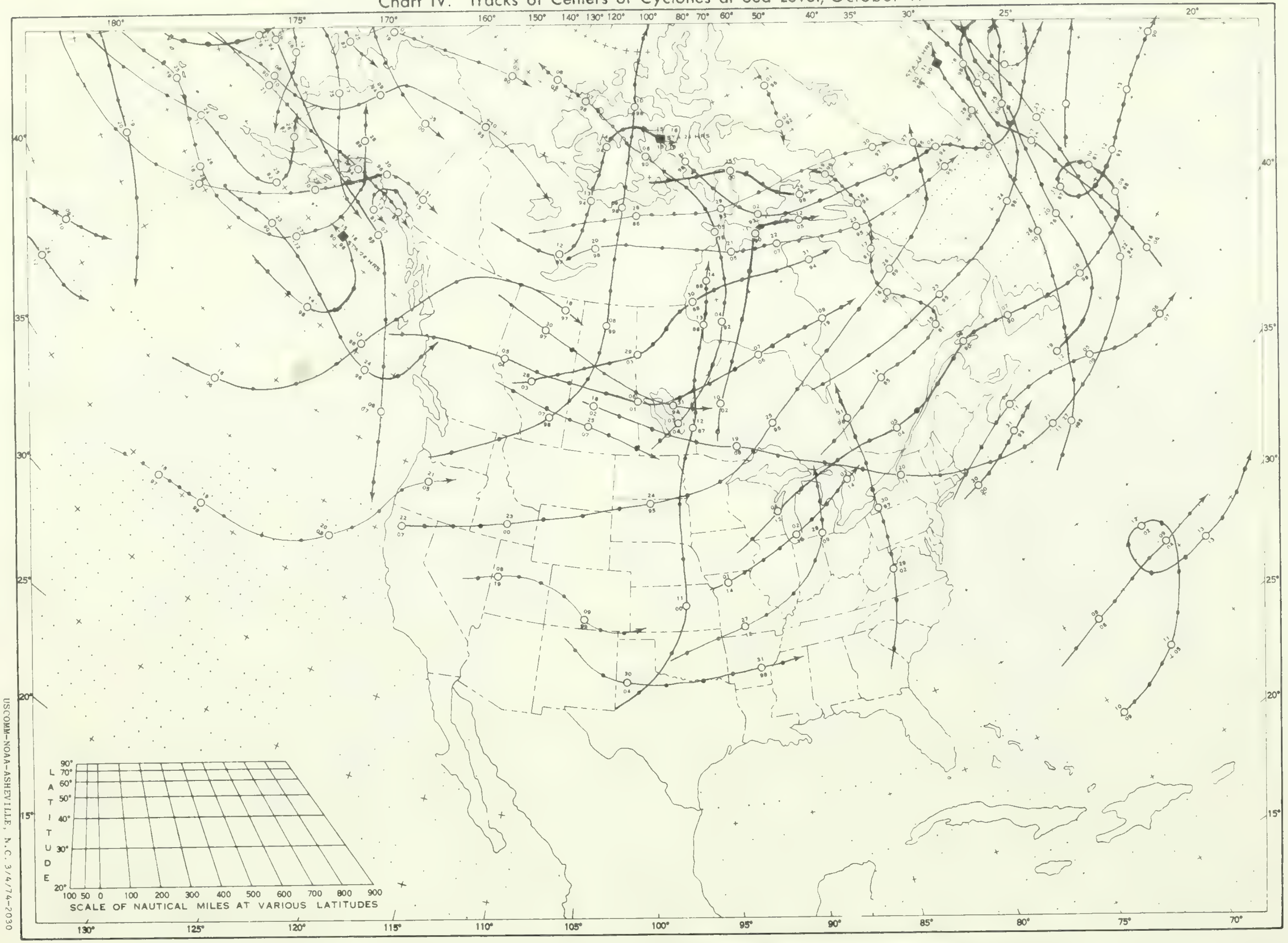
Based on preliminary telegraphic reports

Chart III. Tracks of Centers of Anticyclones at Sea Level, October 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
STA 24 HRS
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, October 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
40°
35°
30°
25°
20°
15°
STA 24 HRS
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

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1973

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No. 11

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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

SUBSCRIPTION PRICE: $5.50 a year including annual summary; $1.00 additional for foreign mailing; 40¢ single copy; $1.00 annual summary. Make checks payable to Department of Commerce, NOAA; send payments and orders to: National Climatic Center, Federal Building, Asheville, N. C. 28801. Attn: Publications.

I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina 28801.

William H. Haggard
Director, National Climatic Center

CLIMATOLOGICAL DATA

NATIONAL SUMMARY
NOVEMBER 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

DR. Richard E. Felch, Climatologist

HIGHLIGHTS:

1. The month was wet in the mid-South and most of the West, and dry in Texas, New Mexico, and along the Atlantic Coast.
2. It was another warm month over most of the Nation, except cold in the Northern Plains and Rockies, and along the Pacific Coast.

PRECIPITATION: Extremes were the rule for precipitation. The entire East Coast was well below normal, and virtually no rain fell over most of Texas and New Mexico. Meanwhile, much of the South, the Ohio River Valley, Arizona, and the entire Pacific Northwest received over twice the normal rainfall. Over 8 inches fell in Arkansas, western Tennessee, Kentucky, and southern Missouri. From 2 to 8 inches fell in the Pacific Northwest, helping to alleviate and break the drought in that area. The winter rainy season along the West Coast brought 2 to 25 inches from Santa Maria, California, northward.

The heaviest rains in most areas fell early and late in the month, while the rains along the Pacific coast were a daily nuisance. The first major snowstorm of the season occurred on the 2d, dumping 7 to 10 inches over Montana, Wyoming, and Colorado.

During the week ending on the 25th, a series of rapidly moving cold fronts brought heavy rainfall to the central tier of States: 9.92 inches at Fort Smith, Arkansas. Over 6 inches fell in parts of Oklahoma, Missouri, and Arkansas. The month ended with heavy rainfall from East Texas to western Pennsylvania. An area along the Tennessee-Kentucky border received over 5 inches of rain. Considerable violent weather erupted in Dixie at the same time. Twenty-seven tornadoes occurred on the 24th, 22 on the 27th.

TEMPERATURE: November began much colder than expected, ended unusually warm, and experienced very marked variations in between. Overall, the Nation was generally warmer than normal except for the northern Rockies and Great Plains, California, and parts of New England and Florida. It was the warmest November on record along the Texas-Louisiana coast, and one of the coldest in central Montana.

The first decade was generally below normal except in the South and Southwest, and the eastern tier of Atlantic States and New England early in the period. Many record lows occurred in Idaho and Montana where temperatures averaged 12° to 21° below normal for the period. A great contrast existed during the week ending the 11th. The entire southwest, northward to the Montana border, averaged 6° to 12° above normal while northern Montana averaged 21° below normal.

Midmonth found the entire Nation well above normal with many areas 6° to 12° above. Temperature records were shattered all through the northeast. The eastern half of the Nation continued very warm through Thanksgiving week, but the West turned very cold.

The month ended on a warm note over the entire Nation. On the 28th, record highs were recorded at several locations in the east: Norfolk, Virginia, 83°, Washington, D. C. 74°, Rochester, New York, 67°. Record means for the entire month included Corpus Christi, Texas, 72.9°, Mobile, Alabama, 65.3°.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

NOVEMBER 1973

STATE	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Whatley	87	26+	2 Stations	20	11+	Pickensville	9.93	Clayton	1.65
Alaska	3 Stations	51	23+	Allakaket	-55	15	Little Port Walter	9.74	Tonsina Lodge	10
Arizona	Sells	98	12	Hawley Lake	-11	28	Hawley Lake	D 3.35	2 Stations	00
Arkansas	Moro Bay Lock No 8	85	25	Gilbert	20	11	Fort Smith Water Plant	13.71	Nimrod Dam	4.12
California	Indio U S Date Garden	95	12	White Mountain 2	-14	26	Gasquet Ranger Station	45.96	2 Stations	.00
Colorado	Delhi	83	12	Hermit 7 ESE	-19	24	Hamilton	4.06	2 Stations	.00
Connecticut	Hartford WSO AP	74	14	Coventry	11	11	Norfolk 2 SW	3.10	Hartford-Brainard Field	1.77
Delaware	2 Stations	78	15	2 Stations	20	11	Bridgeville 1 NW	1.86	Wilmington WSO AP	.67
Florida	Bartow	93	8	Cross City 2 WNW	26	30	Fort Lauderdale	12.71	Belle Glade Exp Sta	01
Georgia	Louisville 3 S	90	3	Cornelia	18	10	Clayton 1 SSW	7.52	Savannah Beach	51
Hawaii	2 Stations	90	18+	Mauna Loa Slope Obs, Hawaii	32	25+	Mount Waialeale 1047, Kauai	53.20	Kona Village 93.8, Hawaii	.00
Idaho	Burley FAA AP	71	9	2 Stations	-11	3	Elk River 1 S	10.70	Strevell	86
Illinois	White Hall 1 E	77	14	2 Stations	12	10	Brookport Dam 52	10.53	Minonk 3 NE	86
Indiana	2 Stations	75	15+	2 Stations	11	10	Tell City Power Plant	9.50	Hobart	1.25
Iowa	5 Stations	72	14+	Elkader 5 SSW	7	10	Swea City 5 NW	5.25	Denison	1.03
Kansas	2 Stations	85	1	Syracuse 2 W	0	21	Mound Valley 3 WSW	5.56	Richfield 10 WSW	05
Kentucky	Pikeville	80	2	Blaine	10	10	Paradise Steam Plant	12.40	Vanceburg	4.15
Louisiana	Morgan City	91	5	Ashland 2 S	29	29	Franklinton 3 SW	11.91	Natchitoches	1.87
Maine	Saco	70	14	Houlton FAA AP	1	21	Machias	5.76	Dover-Foxcroft	1 04
Maryland	La Plata 1 W	81	2	Oakland 1 SE	6	12	McHenry 2 NW	4 15	Aberdeen Phillips Fld	74
Massachusetts	Chester 2	75	14	Birch Hill Dam	9	11	Adams	3.93	Buffumville Lake	1 51
Michigan	3 Stations	67	14	Herman	0	17	East Lansing 3 SE	5 44	Stambaugh 1 S	1.01
Minnesota	Redwood Falls FAA AP	68	13	Wannaska 8 SE	- 8	6	Blue Earth	4.67	Warroad	54
Mississippi	2 Stations	87	27+	Fulton 3 W	23	11	Charleston	14.01	Gulfport Naval Center	2.78
Missouri	Lakeside	81	15	Memphis	14	10	Kennett Radio KBOA	13.64	Milan	.69
Montana	Yellowtail Dam	73	12	Sun River 5 SW	-22	7	Hungry Horse Dam	10.84	2 Stations	00
Nebraska	Gothenburg	79	12	Chadron FAA AP	- 3	5	Osceola 9 W	3.30	Rushville	.16
Nevada	Sunrise Manr Las Vegas	86	1	Ruth	- 8	25	Virginia City	3.95	Pahrump U of N Lab	04
New Hampshire	Durham	70	14	Mount Washington	- 6	10	Mount Washington	11.87	Newport	1.72
New Jersey	7 Stations	78	16+	2 Stations	16	11	Pottersville 2 NNW	2.41	Chatsworth	44
New Mexico	Bitter Lakes Wl Ref	89	2	Tierra Amarilla 4 NNW	- 9	28	Sandia Crest	2.44	17 Stations	.00
New York	N Y Central Pk WSO CI	77	15	Salem	8	17	Hooker 4 N	8.06	Freehold 2 NW	1.02
North Carolina	3 Stations	85	28+	2 Stations	8	11+	Lake Toxaway 2 SW	10.72	Norwood	19
North Dakota	Medora	68	12	3 Stations	-14	21+	Hannah 2 N	1.50	Verona	02
Ohio	3 Stations	75	16+	Tom Jenkins Lake	10	11	Williamsburg	6.77	Youngstown WSO AP	1 71
Oklahoma	5 Stations	87	1	Goodwell	18	26	Mc Curtain 1 SE	14.15	Dacoma 2 NE	T
Oregon	2 Stations	70	9+	Wickiup	- 4	19	Port Orford 5 E	45.45	Burns Junction	1.15
Pennsylvania	6 Stations	78	16+	2 Stations	13	11	Creekside	6.40	Philadelphia WSO AP	64
Puerto Rico-V.I	2 Stations	93	19+	Adjuntas Substation, P. R.	51	27	Pico Del Este, P. R.	8.32	2 Stations	.00
Rhode Island	2 Stations	69	15+	Kingston	15	11	Kingston	2.87	Block Island WSO AP	1 23
South Carolina	Sandhill Exp Station	88	26	2 Stations	18	12	Caesars Head 1 NE	6.51	Wateree Dam	.19
South Dakota	Rapid City	76	12	Rapid City	-10	5	Mt Rushmore Natl Mem	D 2.10	Harding 3 SE	.20
Tennessee	Brownsville	81	24	Mountain City No 2	7	11	Union City	13.32	Mountain City No 2	4.13
Texas	3 Stations	94	25+	Walcott	12	28	New Boston 3 W	9.98	52 Stations	.00
Utah	Zion National Park	82	9	Scofield	-12	22	Alta	8.55	Aneth Plant	.15
Vermont	Vernon	71	15	Mount Mansfield	4	6	Mount Mansfield	D 6.53	Cornwall	1.93
Virginia	3 Stations	83	29+	Floyd 2 NE	6	11	Pennington Gap	7 26	Newport News Press Bld	27
Washington	Richland	67	29	4 Stations	1	26+	Cougar 6 E	32.12	Conconully	2.36
West Virginia	Martinsburg FAA AP	81	15	Canaan Valley	3	11	Dunlow 4 SE	8.69	Harpers Ferry Nat Park	.71
Wisconsin	2 Stations	65	13	Gordon	- 1	6	Madeline Island	3.48	Medford	.58
Wyoming	2 Stations	72	12+	4 Stations	-14	27+	Bondurant 3 NW	6 20	Lost Cabin	03

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ⓞ	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
ALABAMA	M	Mb	Mb	C	C	C	C	C		C.				C	%	Mm	Mm.	Mm			Mm	Mm	M.p.s.		M.p.s							%
BIRMINGHAM	189	998.0	1020.7	20.1	6.8	13.4	1.6	28.3	3	- 3.9	10	0	5	9.4	80	125	35	44	12	2	0	0	0.8	18	17.0	SW	27	10	7	13	5.4	55
HUNTSVILLE	190	997.3	1020.6	19.1	6.8	13.0	2.6	26.1	4+	- 2.2	11	0	4	7.8	74	172	80	85	9	3	0	0	0.8	17	13.0	14	21+	11	5	14	5.7	
MOBILE	64	1012.2	[illegible]	24.6	12.4	18.5	3.8	29.4	4+	2.8	11	0	0	12.2	[illegible]	115	30	53	7	3	0	0	1.8	13	11.2	19	27	12	5	13	4.9	
MONTGOMERY	56	1013.5	1020.8	22.3	8.4	15.4	3.1	28.3	26	- 0.6	12	0	1	10.0	74	109	33	56	11	3	0	0	[illegible]	17	13.4	NW	21	12	6	12	4.9	58
ALASKA												B																				
ANCHORAGE	35	1009.1	1014.3	- 5.8	-14.7	-10.2	4.8	- 0.6	1	-22.8	30	0	30	-12.8	81	20	- 6	9	7	0	269	[illegible]	1.2	1	9.8	34	11	12	5	13	6.5	59
ANNETTE	34	1003.7	1007.9	1.9	3.2	[illegible]	- 5.3	6.7	1	- 7.2	17+	0	26	[illegible]	64	136	-236	33	11	0	465	356	2.2	6	17.9	9	19	11	5	14	6.6	
BARROW	9	[illegible]	1018.4	-10.7	-16.1	-13.4	4.8	0.0	6+	-24.4	19	0	30	-15.6	86	9	3	3	11	0	104	203	[illegible]	12	18.3	30	11+					
BARTER ISLAND	12	1017.6	1019.6	-14.3	-19.4	-16.4	1.3	- 1.7	7	-28.9	19	0	30	[illegible]	82	3	- 7	1	4	[illegible]	28	152	2.4	24	[illegible]	26	11					
BETHEL	38	1010.[illegible]	1016.1	- 3.7	-10.1	- 6.4	1.8	6.1	4+	24.4	20	0	27	- 8.0	81	30	4	8	15	0	368	203	0.7	8	16.1	19	9	1	9	20	8.3	
BETTLES	196			-17.9	-27.3	[illegible]		- 4.4	[illegible]	-41.[illegible]	29+	0	30			23		12	10	0	429	584			13.[illegible]	[illegible]	11+	12	4	14	6.5	
BIG DELTA	386			[illegible]	[illegible]	-19.1		- 6.1	1	-37.8	14	0	30			25			12	0	320											
COLD BAY	29	1012.9	1016.5	1.5	[illegible]	3.1	1.7	[illegible]	28+	- 6.1	19	0	14	1.1	[illegible]	62	- 34	14	19	0	61	51	1.7	21	27.3	12	1	0	2	28	9.4	
FAIRBANKS	133	1002.4	[illegible]	-14.4	-21.9	-18.2	- 2.6	- 4.4	10	[illegible]	14	0	30	[illegible]	61	20	5	11	8	0	445	[illegible]	[illegible]	35	9.4	25	11	7	6	[illegible]	6.8	
HOMER	[illegible]			- 0.7	- 9.4	- 5.1		4.4	1+	-17.8	[illegible]	0	30			45	- 24	22	8		521	[illegible]			9.4	[illegible]	27+	15	7	8	[illegible]	
JUNEAU	4	1011.[illegible]	1011.8	- 0.8	[illegible]	[illegible]	- 6.3	7.8	1	-18.9	22	0	30	[illegible]	68	41	-113	18	8		472	254	1.6	8	14.3	12	24	11	6	[illegible]	5.7	55
KING SALMON	15	[illegible]	1015.4	[illegible]	[illegible]	- 4.1	1.5	8.3	[illegible]	-18.9	[illegible]	0	25	- 7.4	77	25	- 12	11	9		53	51	[illegible]	1	14.8	15	23	6	8	16	6.6	
KODIAK	4	1008.1	[illegible]	2.9	[illegible]	1.4	- 1.2	[illegible]	[illegible]	- 6.7	27+	0	23	[illegible]	64	17	-120	6	8		48	25	[illegible]	28	19.7	27	11	12	5	13	5.4	
KOTZEBUE	4	1016.6	1017.0	-11.6	-17.8	-14.7	[illegible]	1.7	[illegible]	-31.[illegible]	21+	0	30	-18.[illegible]	73	33	24	9	9		363	[illegible]	[illegible]	[illegible]	14.1	[illegible]	[illegible]	6	8	16	6.8	
MC GRATH	104	1005.8	1019.3	-14.[illegible]	-24.3	-19.2	4.3	2.2	[illegible]	-41.1	[illegible]	0	30	[illegible]	83	51	24	16	11	0	991	262	[illegible]	33	9.4	36	26	[illegible]	4	16	6.3	
NOME	4	1014.[illegible]	1014.9	- 4.9	[illegible]	[illegible]	0.6	2.2	[illegible]	[illegible]	[illegible]	0	30	[illegible]	82	48	19	11	18		394	152	[illegible]	9	19.7	26	[illegible]	6	6	[illegible]	7.6	[illegible]
ST. PAUL ISLAND	7	[illegible]	[illegible]	4.8	[illegible]	2.9	1.4	6.7	3+	- 3.3	11	0	9	1.1	87	82	19	14	23		69	51	[illegible]	21	11.9	14	[illegible]	7	4	16	9.1	
SUMMIT	732	[illegible]	[illegible]	[illegible]	[illegible]	-15.9		- 5.6	7+	-29.4	14	0	30	[illegible]	73	23		8	7		234	279	5.4	5	[illegible]	8	8	11	5	14	6.7	
TALKEETNA	105			- 6.7	[illegible]	[illegible]	[illegible]	3.6	1	[illegible]	12		30			15	- 30		7		348				[illegible]	[illegible]	27					
UNALAKLEET	5			- 8.1	-13.7	-10.9		2.2	[illegible]	-24.4	29	0	30			14			11	0	127				[illegible]	[illegible]	21	8	4	18	6.8	
YAKUTAT	9	1008.1	1009.2	0.9	- 8.6	- 3.8	- 4.8	6.7	[illegible]	-19.4	[illegible]	0	30	- 8.9	70	112	-295	41	11	0	[illegible]	635	1.4	8	8.9	[illegible]	6	11	5	14	[illegible]	
ARIZONA																																
FLAGSTAFF	[illegible]	[illegible]	[illegible]	11.1	- 5.4	[illegible]	[illegible]	13.3	8	[illegible]	[illegible]	0	28	- 6.[illegible]	62	48	23	29	7		526	[illegible]	2.5	21	12.5	SW	2	11	[illegible]	9	[illegible]	[illegible]
PHOENIX	[illegible]	975.6	1019.6	[illegible]	8.2	16.0	1.5	31.7	11	2.8	27	0	0	1.1	[illegible]	35	22	15	5	2	0	0	1.1	12	16.1	W	18	12	11	7	4.5	74
TUCSON	788	[illegible]	[illegible]	22.6	6.7	14.7	[illegible]	30.6	[illegible]	[illegible]	28+	0	3	- 3.3	36	12	- 4	5	4	0	0		[illegible]	17	14.3	W	18	16	11	3	[illegible]	[illegible]
WINSLOW	1492	851.7	1017.8	15.5	- 1.9	6.8	1.7	25.6	12	[illegible]	27	0	21	- 5.6	51	22	13	21	5		16	51	2.1	21	14.3	23	1	13	9	8	4.3	
YUMA	59	[illegible]	[illegible]	24.3	9.4	16.9	[illegible]	33.3	11	3.3	[illegible]	0	0	3.3	45	1	- 2	1	2				[illegible]	[illegible]	16.1	W	18	14	12	4	3.0	[illegible]
ARKANSAS																																
FORT SMITH	[illegible]	[illegible]	1017.2	18.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	- 1.7	19	0	4	6.7	[illegible]	277	197	176	9	7			[illegible]	10	17.0	NW	24	8	6	16	6.1	[illegible]
LITTLE ROCK	78	[illegible]	1018.3	19.1	8.2	13.7	3.3	26.7	24+	[illegible]	11	0	1	9.4	[illegible]	229	125	70	9	7			[illegible]	17	19.2	NW	[illegible]	[illegible]	[illegible]	[illegible]	6.8	[illegible]
CALIFORNIA																																
BAKERSFIELD	145	[illegible]	1018.7	19.9	7.4	13.7	0.4	31.1	[illegible]	2.2	[illegible]	0	0	[illegible]	60	16	4	10	4		0		[illegible]	[illegible]	13.0	17	[illegible]	9	8	13	[illegible]	
BISHOP	1252	[illegible]		15.2	- 3.6	6.3	- 1.3	25.6	[illegible]	- 8.9	4	0	23			49	36	30	3									9	14	[illegible]	[illegible]	
BLUE CANYON	1609	837.5		8.1	- 0.8	1.6	- 6.[illegible]	11.7	8	- 6.7	19	0	21			720	549	[illegible]	21		1735	[illegible]	3.2	19	14.3	18	11	1	5	24	8.8	
EUREKA	13			13.2	9.3	11.8	0.1	18.9	8	[illegible]	19	0	0			421	304	46	28						[illegible]	N	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FRESNO	100	1006.8	1018.4	17.3	5.9	11.6	- 0.5	26.1	[illegible]	- 1.1	4	0	1	6.7	78	35	11	15	12				[illegible]	9	9.8	[illegible]	11	[illegible]	[illegible]	24	[illegible]	54
LONG BEACH	8	1016.6	1018.1	19.7	9.2	14.4	- 1.8	27.8	1	3.3	[illegible]	0	0	7.2	67	52	26	24	6	0	0		[illegible]	24	11.6	26	18	11	11	8	4.6	
LOS ANGELES	30	1013.9	1017.5	19.5	11.1	15.3	- 0.9	25.0	28+	6.7	24	0	0	8.9	70	49	21	25	5	0	0	0	[illegible]	27	16.5	W	18	12	8	10	[illegible]	
[illegible]	82			20.2	10.8	15.6	- 1.5	27.8	11	6.7	[illegible]	0	0			43	15	22	4		0				6.5	NE	21	13	11	6	4.4	[illegible]
MT SHASTA	1080	889.6	[illegible]	[illegible]	[illegible]	[illegible]	- 2.4	11.7	10+	[illegible]	19	0	16			437	337	90	24		909	[illegible]										
OAKLAND	2	1018.3	1018.5	14.4	9.3	11.9	[illegible]	19.4	8	4.4	26	0	0	8.9	83	188	145	68	16				1.7	19	12.5	22	9+	4	8	18	7.4	
RED BLUFF	[illegible]	1003.4	1016.3	[illegible]	7.3	[illegible]	[illegible]	18.9	[illegible]	[illegible]	[illegible]	0	0	6.7	82	187	129	52	18				[illegible]	17	19.2	[illegible]	11	[illegible]	4	[illegible]	8.8	[illegible]
SACRAMENTO	5	1016.9	1017.7	[illegible]	6.8	11.1	[illegible]	[illegible]	[illegible]	[illegible]	26	0	1	6.7	76	159	122	27	15				1.7	16	11.2	NW	26+	[illegible]	[illegible]	[illegible]	7.8	[illegible]
SANDBERG	1377			11.1	2.4	6.8	[illegible]	23.3	8	- 4.4	[illegible]	0	12			34	11	21	7		58	51			16.5	21	[illegible]					
SAN DIEGO	4	1016.9	1017.9	19.6	12.2	15.9	[illegible]	27.8	11	7.8	[illegible]	0	0	9.4	66	41	19	17	7				1.1	[illegible]	[illegible]	W	18	[illegible]	13	[illegible]	5.6	[illegible]
SAN FRANCISCO	[illegible]	1017.3	1017.9	[illegible]	9.1	12.2	[illegible]	19.4	11+	4.4	19+	0	0	8.3	77	202	162	61	16		0		1.7	23	13.9	[illegible]	11	4	7	[illegible]	7.3	
SAN FRANCISCO [illegible]	16			[illegible]	[illegible]	12.9	- 1.[illegible]	19.4	8	7.8	23+	0	0			198	147	69	19													[illegible]
SANTA MARIA	[illegible]			17.4	5.1	11.3	[illegible]	28.3	[illegible]	[illegible]	25	0	0			55	29	21	8		0							13	8	9	[illegible]	
STOCKTON	7	1016.9	1018.0	16.3	7.2	11.8	[illegible]	22.8	7	[illegible]	21	0	0	6.7	73	93	63	35	15		0		1.6	17	13.4	18	[illegible]	7	[illegible]	19	7.6	
COLORADO																																
ALAMOSA	2297	[illegible]		10.7	- 9.[illegible]	0.8	[illegible]	19.4	8	-16.7	28	0	28			3	- 5	3	2		28	25						15	[illegible]	5	4.1	

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover tenths (sunrise to sunset)	Possible sunshine
												No of days							No. of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear 0-3	Partly cloudy 4-7	Cloudy 8-10		
	M.	Mb	Mb	C	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm	M.p.s.		M.p.s							%
COLORADO																																
COLORADO SPRINGS	1873	808.0	1015.0	11.7	- 3.3	4.2	1.2	23.3	10	- 9.4	25	0	25	-10.0	43	4	- 6	2	5	0	46	25	0.9	7	15.6	35	20	9	8	13	5.8	
DENVER	1610	833.1	1013.1	11.9	- 3.6	4.2	1.0	25.6	10	-10.0	4	0	25	- 5.6	58	21	4	10	7	0	236	102	0.2	28	13.4	SW	1	8	7	15	6.3	57
GRAND JUNCTION	1476	851.3	1016.2	11.4	- 1.2	5.1	1.3	21.7	1	-11.1	27	0	19	- 6.1	53	23	8	15	7	0	196	51	0.4	36	14.8	NW	1	5	9	16	6.9	47
PUEBLO	1428	852.7	1013.7	14.6	- 3.4	5.6	1.2	26.7	10	-11.1	21	0	25	- 5.6	55	1	- 12	1	2	0	43	25	0.6	34	22.4	NW	19	8	12	10	5.7	65
CONNECTICUT																																
BRIDGEPORT	2	1015.9	1016.3	13.1	4.7	8.9	1.9	21.7	15	- 2.8	11	0	5	0.0	55	47	- 55	15	9	0	T	0	4.0	27	19.7	27	1	8	10	12	6.0	
HARTFORD	52	1008.5	1014.9	11.4	1.4	6.4	1.3	23.3	14	- 7.2	11	0	15	- 0.6	62	54	- 43	15	9	1	T	T	2.6	28	15.2	NW	3	4	8	18	7.2	47
DELAWARE																																
WILMINGTON	23	1014.9	1017.8	14.6	4.3	9.5	2.1	25.6	15	- 4.4	11	0	5	2.2	63	17	- 73	5	11	1	0	0	2.5	28	18.8	30	1	8	9	13	6.0	
DIST.OF COLUMBIA																																
WASHINGTON DULLES	88	1006.4	1018.5	14.3	1.2	7.8		25.0	15	- 8.9	11	0	12	2.8	71	21		9	8	0	T	0	1.7	26	13.4	27	1	7	9	14	6.3	
WASHINGTON NATIONAL	3	1016.3	1018.5	16.5	5.2	10.9	2.2	26.1	25+	- 3.3	11	0	4	2.2	57	25	- 47	8	8	0	0	0	1.8	27	15.2	W	1	9	11	10	5.7	44
FLORIDA																																
APALACHICOLA J	4			23.1	14.6	18.8	2.6	27.2	9	3.9	11	0	0			57	- 9	36	5	1	0	0			11.6	W	28	12	6	12	4.9	85
DAYTONA BEACH	9	1019.6	1020.9	26.2	15.6	20.9	2.4	30.6	28+	7.2	30	0	0	15.6	76	19	- 40	9	6	2	0	0	0.5	10	10.3	21	28	12	14	4	4.5	
FORT MYERS	5	1019.3		29.2	16.9	23.1	2.4	31.7	26+	7.8	30+	0	0	17.2	75	3	- 28	3	1	1	0	0	1.7	8	10.3	5	11	18	11	1	3.2	
JACKSONVILLE	8	1020.3	1021.2	25.3	11.0	18.2	1.7	28.9	28+	1.1	30	0	0	12.8	77	11	- 32	6	3	0	0	0	0.3	1	13.0	SW	28	10	13	7	4.5	72
KEY WEST	1	1018.0	1018.5	27.8	23.4	25.7	2.3	30.0	2	17.8	30+	0	0	20.6	76	5	- 67	2	5	1	0	0	4.0	8	12.5	NE	11	16	12	2	3.8	89
LAKELAND U	65			26.5	16.1	21.3	1.9	30.0	22	6.7	30	0	0			54	13	48	4		0	0						19	10	1	3.3	83
MIAMI	2	1019.0	1019.1	27.4	21.6	24.6	2.1	30.6	3	13.3	30	0	0	17.8	67	12	- 60	7	5	1	0	0	2.8	8	10.7	36	6	8	19	3	4.5	
ORLANDO	33	1016.3	1020.5	27.5	15.7	21.6	2.8	30.6	28+	7.8	30	0	0	15.6	73	19	- 21	19	2	1	0	0	0.8	6	10.3	26	28	14	16	0	3.5	
PENSACOLA	34	1015.9	1020.3	24.3	13.6	18.9	3.7	29.4	26	3.3	30	0	0	13.9	74	50	- 32	12	9	4	0	0	1.2	10	9.8	21	27	12	9	9	4.8	
TALLAHASSEE	17	1018.6	1021.0	24.8	10.5	17.7	2.6	28.9	3	- 1.1	30	0	1	12.8	78	82	20	50	7	2	0	0	0.4	9	9.4	36	29	10	9	11	5.1	
TAMPA	6	1020.3	1020.4	27.1	16.0	21.6	2.2	29.4	20+	2.8	30	0	0	15.6	72	72	35	44	4	1	0	0	1.4	8	8.9	20	28	19	9	2	3.2	73
WEST PALM BEACH	5	1019.0	1019.5	28.1	19.7	23.9	1.4	31.7	1	12.8	30+	0	0	16.7	66	52	- 20	29	7	1	0	0	2.5	8	10.7	4	11+	5	19	6	5.3	
GEORGIA																																
ATHENS	244	991.9	1021.0	20.1	5.7	12.9	2.1	26.1	27+	- 3.3	12	0	6	7.2	72	45	- 29	22	8	2	0	0	1.3	25	13.0	26	21	15	7	8	4.5	
ATLANTA	308	983.4	1020.6	19.6	6.7	13.1	2.4	26.7	27+	- 2.8	10	0	3	7.2	71	59	- 17	36	10	0	0	0	1.0	25	13.9	NW	28	11	9	10	5.0	70
AUGUSTA	41	1015.6	1020.7	22.2	4.9	13.6	1.3	27.8	26	- 5.0	12	0	7	6.7	71	14	- 41	6	3	1	0	0	0.7	26	15.6	30	21	14	7	9	4.3	
COLUMBUS	117			21.7	8.3	15.1	2.8	27.2	27	- 0.6	12	0	2	10.6	80	86	20	33	9	4	0	0	0.2	5	16.5	31	21	12	5	13	5.0	
MACON	108	1008.1	1021.2	23.0	7.6	15.3	2.3	29.4	26	- 1.7	12	0	3	8.9	71	50	- 12	19	8	1	0	0	0.4	25	22.8	NW	21	14	6	10	4.5	67
ROME	194			19.4	4.4	11.9	2.3	26.1	27	- 4.4	11	0	8			82	- 5	43	10		0	0										
SAVANNAH	14	1019.6	1021.5	23.3	9.6	16.4	2.4	29.4	4	0.0	30+	0	2	10.6	72	17	- 35	14	2	1	0	0	0.5	28	11.2	NW	21	15	7	8	4.3	67
HAWAII																																
HILO	8	1014.2	1015.6	28.4	19.8	24.1	1.2	30.6	7+	17.8	17+	0	0	20.0	81	683	343	171	24	1	0	0	1.3	16	8.9	E	28+	0	10	20	8.1	24
HONOLULU	2	1014.6	1015.0	28.9	21.1	25.0	0.6	30.6	17+	18.3	14+	0	0	19.4	72	95	40	47	13	4	0	0	2.9	7	13.0	NE	24	4	9	17	7.5	38
KAHULUI	15	1012.5	1014.7	28.9	19.3	24.2	0.3	31.1	14+	16.7	5+	0	0			25	- 14	11	10	0	0	0	3.1	6	13.4	E	21	7	7	16	6.7	58
LIHUE	31	1010.5	1015.7	26.8	21.5	24.2	0.6	28.9	9	18.9	6	0	0	20.6	82	309	194	209	19	4	0	0	2.7	8	12.5	NE	24	2	6	22	8.1	39
IDAHO																																
BOISE	865	912.3	1013.6	8.9	1.9	5.4	1.7	17.8	10	- 7.2	24	0	13	- 0.6	66	62	31	16	19	0	224	127	3.4	13	14.8	SW	12	2	3	25	8.8	19
LEWISTON	431			7.6	1.1	4.3	0.0	16.7	12	- 3.3	3	0	13			71	40	24	19		81	25			18.3Y		12	2	2	26	9.0	
POCATELLO	1358	860.8	1015.4	6.7	- 1.4	2.6	0.9	20.0	9	-17.8	4	0	16	- 3.3	68	47	22	9	17	0	221	102	4.5	21	17.0	SW	1	0	5	25	9.0	20
ILLINOIS																																
CAIRO U	96			15.8	7.4	11.6	2.8	22.8	15+	- 3.9	10	0	3			198	100	75	10		0	0			22.4	SW	25					47
CHICAGO O HARE	201	992.2	1017.0	10.1	0.9	5.5	2.1	18.3	14	- 7.8	10	0	9	1.1	74	38	- 17	13	11	1	T	T	1.6	26	14.8	16	21	5	5	20	7.3	
CHICAGO MIDWAY	185	1003.4	1017.4	9.8	1.2	5.5	1.1	18.3	14	- 7.2	10	0	9	0.0	71	37	- 19	11	11	3	T	T	1.3	25	14.3	S	21	5	5	20	7.5	36
MOLINE	177	995.3	1017.4	9.4	- 0.1	4.7	0.7	16.7	13+	- 9.4	10	0	18	- 0.6	71	29	- 20	15	9	1	T	T	0.5	27	14.8	SE	20	6	5	19	7.3	37
PEORIA	199	993.2	1017.7	10.9	0.6	5.8	1.5	19.4	14	- 9.4	10	0	13	1.7	77	38	- 17	24	8	1	T	T	0.6	20	13.0	SE	20	5	3	22	7.6	37
ROCKFORD	221	989.8	1017.3	8.9	- 0.2	4.4	1.6	17.2	14	- 9.4	10	0	14	0.6	77	50	- 10	17	10	2	T	T	0.8	27	10.3	6	14	6	3	21	7.5	
SPRINGFIELD	179	995.3	1017.8	12.6	2.4	7.5	2.1	23.3	14	- 8.3	10	0	9	3.9	79	36	- 24	11	11	4	33	25	1.3	20	15.2	W	15	5	8	17	7.0	42
INDIANA																																
EVANSVILLE	116	1004.7	1019.1	14.9	4.6	9.8	2.7	22.8	14	- 7.8	10	0	7	4.4	71	153	73	52	10	4	0	0	1.1	20	18.3	SW	25+	6	7	17	7.2	42

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Ice pellets				Fastest mile (1 6 kilometers,							
		Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32 2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy 4-7	Cloudy 8-10		
INDIANA	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm.	Mm	Mm.			Mm	Mm	M.p.s.		M.p s							%
FORT WAYNE	241	987.5	1017.8	11.0	2.0	6.5	2.7	19.4	15+	- 5.6	6	0	10	1.7	73	86	21	33	10	1	T	T	2.6	25	14.3	SW	24	2	9	19	7.9	45
INDIANAPOLIS	241	988.8	1018.2	13.2	2.8	8.0	3.1	22.8	14	- 6.7	10	0	11	3.3	74	92	13	47	11	2	10	T	1.6	23	17.4	SW	15	2	14	14	7.3	32
SOUTH BEND	236	988.2	1016.7	10.7	3.0	6.9	2.9	20.6	15	- 2.2	6	0	8	2.2	74	37	- 30	18	14	0	25	25	1.9	24	11.6	34	28	1	4	25	8.8	
IOWA																																
BURLINGTON	211			10.7	0.5	5.6	1.5	19.4	14	- 8.3	10	0	12	1.7	76	54	7	45	7	1	5	T	0.5	24	11.2	34	27	5	8	17	7.0	
DES MOINES	286	981.7	1017.0	9.2	0.4	4.8	2.0	21.1	13	- 7.8	10	0	13	0.0	72	38	- 7	22	8	3	T	T	0.1	1	12.5	S	21	3	4	23	8.3	43
DUBUQUE	322	977.3		7.7	- 1.1	3.3	1.8	15.6	13	-10.0	10	0	16			53	- 13	20	9		T	T										
SIOUX CITY	334	976.3	1017.1	8.0	- 1.2	3.4	1.1	20.6	13	- 9.9	9	0	19	- 1.7	72	68	38	28	9	3	15	25	0.5	5	11.6	E	14+	5	4	21	7.9	34
WATERLOO	265	984.8	1017.3	7.7	- 2.0	2.9	1.4	18.9	13	-11.1	10	0	21	- 1.7	74	70	23	37	9	1	T		0.4	26	11.2	12	20	2	7	21	8.1	
KANSAS																																
CONCORDIA	448	962.1	1015.7	11.2	0.7	6.0	0.7	21.1	13	- 3.9	25+	0	15	1.7	77	32	7	22	4	3	T	T	0.5	16	13.4	N	20	7	8	15	6.4	57
DODGE CITY	787	923.1	1014.8	12.9	0.4	6.7	0.7	28.3	1	- 8.3	21	0	14	- 1.7	63	34	18	32	4	1	69	51	0.2	22	16.5	NW	19	6	6	18	6.8	47
GOODLAND	1114	885.9	1014.9	9.8	- 2.4	3.7	0.4	22.8	11+	- 7.8	21	0	24	- 2.2	74	17	4	13	6	0	175	102	0.9	23	17.9	36	19	5	9	16	6.8	
TOPEKA	267	984.1	1016.5	13.0	1.2	7.1	1.2	23.3	14	- 5.0	6	0	14	2.8	75	54	16	53	3	3	T	T	0.3	15	11.6	S	20+	8	5	17	6.7	47
WICHITA	403	967.2	1015.7	14.1	2.3	8.2	1.3	23.9	14	- 2.8	25	0	12	3.3	75	23	- 15	21	4	1	T	T	1.0	17	15.6	S	17	9	4	17	6.5	49
KENTUCKY																																
COVINGTON	265	986.8	1018.9	12.5	2.3	7.4	1.5	20.0	14	- 7.8	10	0	12	3.3	75	126	49	37	11	3	1	T	2.0	22	12.5	21	24	3	8	19	7.8	
LEXINGTON	294	983.7	1019.7	14.4	3.9	9.2	2.1	22.2	14	- 6.7	10	0	11	3.9	70	167	84	64	11	5	0	0	2.1	20	14.3	23	25	4	6	20	7.7	
LOUISVILLE	145	1001.0	1018.9	14.6	5.2	9.9	2.8	22.8	14	- 6.1	10	0	5	3.2	65	193	112	62	12	4	0	0	1.3	21	17.0	W	25	4	7	19	7.5	51
LOUISIANA																																
ALEXANDRIA	28	1014.2	1018.6	22.7	9.7	16.2	2.6	27.8	15+	0.6	29	0	0	12.2	82	170	58	58	13	7	0	0	1.1	16	12.1	25	27	13	6	11	4.9	
BATON ROUGE	20	1016.6	1019.2	25.1	12.8	19.0	4.1	29.4	26+	3.3	29	0	0	13.3	73	189	85	119	7	5	0	0	1.7	15	12.5	20	[illegible]	13	9	8	4.7	
LAKE CHARLES	3	1017.3	1018.3	25.1	13.4	19.3	3.9	29.4	3	4.4	29	0	0	15.0	81	76	- 31	53	8	4	0	0	2.0	13	11.6	16	20	12	8	10	4.7	
NEW ORLEANS	1	1018.3	1019.3	24.8	13.7	19.2	3.7	30.0	22	2.2	30	0	0	15.0	75	103	18	44	9	1	0	0	1.6	13	13.0	19	27	15	9	6	4.2	8
SHREVEPORT	77	1008.5	1017.7	22.7	10.0	16.4	3.2	28.9	24+	0.6	29	0	0	11.7	78	131	24	54	8	6			1.2	16	13.3	29	24	9	7	14	5.6	62
MAINE																																
CARIBOU	190	985.4		0.7	- 5.8	- 2.5	- 1.5	9.4	2	-14.4	17	0	27			67	- 10	14	13		368	178						0	5	25	8.8	
PORTLAND	13	1010.5	1012.9	7.5	- 1.2	3.2	- 0.2	20.6	14	-10.0	11	0	18	- 2.2	71	61	- 45	19	10	0	0	0	2.3	28	14.8	NW	3	11	6	13	5.9	54
MARYLAND																																
BALTIMORE	45	1012.9	1018.7	14.2	2.8	8.5	1.0	25.0	15	- 6.1	11	0	10	2.2	66	33	- 47	14	12	0	0	0	2.7	27	17.9	W	16	9	11	10	5.8	50
MASSACHUSETTS																																
BLUE HILL OBS R	192			9.3	1.3	5.3	0.2	20.0	14	- 6.1	11	0	15			53	- 62	17	10		0	0			28.6	W	1					55
BOSTON	5	1013.4	1014.1	11.1	4.2	7.7	0.5	21.7	14	- 1.1	11+	0	5	- 1.1	58	44	- 56	14	9	0	0	0	3.6	27	19.7	W	1	9	9	12	5.8	50
WORCESTER	301			8.7	- 0.1	4.3	0.3	18.9	14	- 7.2	11	0	19	- 1.7	68	51	- 57	17	10	0	T	T	3.8	27	16.1	30	4	6	12	12	6.3	
MICHIGAN																																
ALPENA	210	989.5	1015.3	5.4	- 0.9	2.3	0.8	13.3	14	- 7.2	9	0	20	- 1.7	75	43	- 17	9	15	0	107	76	1.6	28	12.1	NW	8	1	7	22	8.5	23
DETROIT	189			9.2	1.7	5.5	0.8	19.4	14	- 5.0	10	0	12	1.1	76	81	25	34	8	1	T		2.5	26	13.0	28	1					
DETROIT METRO	193	991.9	1016.5	9.5	0.9	5.2	1.2	18.9	14	- 6.7	7+	0	11	1.1	76	82	24	29	13	1	T	T	2.6	27	16.1	SW	21	2	9	19	7.8	37
FLINT	235	987.5	1015.7	8.4	0.8	4.6	1.2	16.7	24+	- 6.7	7	0	14	0.6	77	125	70	38	10	2	T	T	2.2	26	11.6	33	30	2	7	21	8.2	
GRAND RAPIDS	239	987.1	1016.7	7.9	0.8	4.4	1.4	15.6	14+	- 5.0	6	0	15	0.0	75	90	27	34	9	3	10	T	1.5	24	13.4	W	24+	2	2	26	8.7	29
HOUGHTON LAKE	350	972.9	1015.8	5.0	- 0.8	2.1	0.9	11.7	21	- 6.1	16	0	20	- 1.1	82	34	- 26	14	11	0	122	25	2.1	28	13.0	28	8	1	4	25	8.9	
LANSING	256	984.1	1016.4	8.6	0.2	4.4	1.1	17.8	14	- 7.8	7	0	17	1.1	82	107	51	40	8	2	T	T	2.0	26	14.8	SW	21	2	5	23	8.3	24
MARQUETTE	206			4.2	- 0.7	1.7	0.7	11.7	21	- 7.2	8	0	15			29	- 54	11	14		188	127			12.1	NW	30	1	4	25	8.8	16
MUSKEGON	191	993.2	1016.8	7.7	1.2	4.4	0.2	14.4	21	- 5.6	17	0	13	0.0	73	58	- 16	18	11	2	216	127	1.6	27	12.5	22	21	2	0	28	9.1	
SAULT STE MARIE	220	987.1	1014.4	3.2	- 1.9	0.6	- 0.1	10.0	21	- 7.8	9	0	20	- 1.7	86	100	15	26	21	0	620	254	1.4	30	13.4	NW	8	1	2	27	9.4	16
MINNESOTA																																
DULUTH	435	963.4	1016.6	1.0	- 5.6	- 2.3	0.3	7.2	13+	-13.9	8	0	27	- 5.0	82	41	- 4	24	10	0	193	127	1.3	28	15.2	NW	30+	3	9	18	7.6	33
INTERNATIONAL FALLS	359	971.9	1016.5	0.3	- 7.8	- 3.8	0.8	8.9	21	-15.0	8	0	30	- 8.3	70	28	- 9	12	9	0	155	51	1.3	25	12.5	24	21	2	7	21	8.2	
MINNEAPOLIS	254	986.1	1017.2	5.6	- 3.1	1.3	1.7	17.2	13	-10.0	9+	0	23	- 3.3	72	50	14	43	6	0	T	T	0.6	28	11.2	SW	21	4	8	18	7.4	45
ROCHESTER	396	968.5	1017.4	6.1	- 3.2	1.4	1.7	17.2	13	-11.1	9	0	23	- 2.2	80	86	46	40	7	2	8	T	1.2	25	13.0	13	20	3	5	22	7.9	
ST CLOUD	313	979.0		4.8	- 5.1	- 0.1	1.3	16.1	13	-13.9	6	0	25			42	8	31	7		41	T						6	9	15	7.0	

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear 0-3	Partly cloudy 4-7	Cloudy 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s							%
MISSISSIPPI																																
JACKSON	94	1007.5	1019.5	22.8	10.2	16.5	3.4	28.9	26+	0.6	11	0	0	11.7	76	156	57	56	10	5	0	0	1.9	16	18.8	NW	4	12	9	9	4.7	57
MERIDIAN	88	1009.1	1020.1	23.9	8.9	16.4	4.2	29.4	26+	0.6	11	0	0	10.0	73	92	13	33	7	4	0	0	0.8	18	10.3	18	27	12	5	13	5.1	
MISSOURI																																
COLUMBIA REGIONAL	270	984.8	1017.4	13.3	2.5	7.9	1.3	24.4	14	- 6.1	10	0	7	3.3	77	70	13	29	6	4	0	0	0.8	18	16.5	W	15	7	7	16	6.9	53
KANSAS CITY	309	978.7	1016.1	12.1	2.8	7.5	1.8	22.8	14	- 4.4	10	0	9	2.2	72	60	23	52	4	1	T	T	1.0	16	14.3	SW	13	6	7	17	6.7	59
ST JOSEPH	247			12.1	1.2	6.7	1.4	22.8	13	- 4.4	6+	0	12	1.1	72	50	7		3		0		0.1	14	9.4	18	17	7	6	17	6.9	
ST LOUIS	163	997.3	1018.0	14.0	2.6	8.3	1.6	24.4	14	- 7.8	10	0	8	4.4	79	93	27	53	8	4	0	0	1.0	18	16.5	W	15	7	8	15	6.6	56
SPRINGFIELD	386	971.2	1016.9	15.6	4.2	9.9	2.7	25.6	14	- 3.9	10	0	7	3.9	70	162	92	114	7	5	0	0	2.1	17	14.3	S	1	10	6	14	6.1	46
MONTANA																																
BILLINGS	1087	887.6	1014.7	2.5	- 5.3	- 1.4	- 3.1	18.3	12	-16.7	5	0	23	- 7.2	69	31	15	21	9	0	302	203	1.6	27	19.2	NW	12	2	5	23	8.3	23
GLASGOW	696	931.6	1016.3	- 0.8	-11.2	- 5.9	- 3.8	11.7	13	-23.9	8	0	30	- 9.4	78	12	0	4	9	0	130	51	1.7	9	12.5	12	5	4	4	22	7.7	
GREAT FALLS	1116	883.8	1015.5	0.3	- 7.9	- 3.8	- 5.1	16.7	11	-22.8	7	0	23	- 8.3	74	35	15	14	12	0	310	178	3.6	23	17.0	SW	28	0	7	23	8.7	29
HAVRE	788	919.7	1015.1	- 0.4	-12.9	- 6.7	- 5.3	15.0	16	-26.7	7	0	29	-10.0	77	26	14	7	7	0	264	127	0.7	21	15.2	SW	28	3	8	19	7.7	41
HELENA	1167	876.4	1015.7	0.1	- 8.4	- 4.2	- 3.9	12.2	16	-19.4	4	0	29	- 8.3	72	26	12	13	8	0	318	305	1.7	26	13.9	SW	28	0	5	25	9.2	26
KALISPELL	904	906.9	1013.5	1.6	- 4.9	- 1.7	- 1.1	10.0	28	-16.1	26	0	22	- 5.0	78	71	35	16	24	0	462	102	0.5	10	15.6	24	16	0	4	26	9.3	
MILES CITY	801	919.4	1014.9	4.2	- 6.9	- 1.3	- 1.7	18.3	12	-15.0	8	0	28	- 6.1	71	4	- 7		4	0	43		0.2	8								
MISSOULA	972	899.8	1014.2	2.6	- 4.6	- 1.0	- 0.2	13.9	16	-13.9	4	0	27	- 3.3	86	64	41	21	18	0	340	229	0.7	13	14.8	NW	16	0	2	28	9.3	09
NEBRASKA																																
GRAND ISLAND	561	948.9	1016.5	7.6	- 2.5	2.6	- 0.3	21.1	13	-12.2	25+	0	22	- 2.8	71	60	41	48	3	1	168	127	0.3	29	11.6	36	20	5	6	19	7.5	
LINCOLN	360	972.9	1016.5	9.2	- 1.4	3.9	- 0.1	21.1	13	- 6.7	5	0	19	0.0	81	45	23	36	5	2	T	T	0.6	36	13.4	NW	20	4	7	19	7.8	37
NORFOLK	471			6.8	- 2.1	2.3	0.2	20.6	12	- 9.4	22	0	22			49	26	38	9		79	51						4	4	22	7.8	
NORTH PLATTE	846	916.4	1016.5	8.2	- 4.8	1.7	- 0.3	23.9	12	-10.0	25	0	29			14	1	10	6	0	109	76	0.2	35	17.0	N	19	5	5	20	7.5	36
OMAHA	298	980.7	1016.7	9.6	- 0.9	4.3	0.5	21.7	13	-10.0	9	0	16	0.6	77	36	4	21	6	1	104	102	0.3	6	10.7	S	20	5	4	21	7.7	41
SCOTTSBLUFF	1206	877.1	1015.6	8.1	- 4.4	1.8	- 0.3	21.1	11	-12.8	5+	0	27	- 5.0	66	35	23	14	5	0	310	254	1.0	33	15.6	28	12	6	7	17	7.2	
VALENTINE	789			7.0	- 3.9	1.6	0.7	22.2	12	- 8.9	28+	0	26			28	16	9	6		338	178			16.1	NW	13	8	3	19	7.1	40
NEVADA																																
ELKO	1539	841.9	1014.6	7.8	- 2.5	2.7	1.4	19.4	10	-15.6	25+	0	20			36	13	9	11	0	173	127	1.4	24	13.0	14	30	1	7	22	8.4	
ELY	1906	806.0	1015.0	8.1	- 7.4	0.3	- 0.6	19.4	10	-20.0	25	0	27	- 6.1	65	28	13	13	9	0	290	127	3.0	21	22.4	SW	12	1	7	22	8.1	40
LAS VEGAS	659	938.4	1015.5	18.6	5.1	11.9	0.5	29.4	11	- 2.8	27	0	5	- 3.9	36	4	- 4	3	2	0	0	0	2.3	24	20.6	SW	12	13	9	8	4.8	73
RENO	1342	863.2	1013.7	12.4	- 0.4	6.0	2.5	22.2	8	-11.7	4	0	18	- 3.9	51	44	30	14	7	0	64	25	1.6	22	17.0	SW	11+	3	8	10	7.5	83
WINNEMUCCA	1311	866.2	1014.5	10.7	- 0.9	4.9	2.8	22.2	9	-11.7	4	0	16	- 3.3	60	20	- 1	5	12	0	71	51	2.7	20	15.6	SW	12	2	3	25	8.6	30
NEW HAMPSHIRE																																
CONCORD	104	1000.7	1013.7	7.2	- 2.7	2.3	- 0.8	18.9	14	-12.8	11	0	20	- 3.3	67	46	- 48	14	9	0	T	0	2.1	29	11.6	W	3	7	9	14	6.2	52
MT WASHINGTON OBS	1909			- 4.7	-11.2	- 7.9	- 1.4	6.1	28	-21.1	10	0	30			301	134	91	23	0	1176	152			62.1Y	W	4	3	3	24	8.5	21
NEW JERSEY																																
ATLANTIC CITY	20	1015.2	1017.5	14.1	3.0	8.6	0.4	23.9	15	- 5.6	11	0	11	1.1	61	36	- 57	14	10	0	T	0	3.1	27	14.3	27	1	8	14	8	5.5	54
ATLANTIC CITY U	3			13.2	5.6	9.4	0.3	21.1	14	- 2.8	11	0	3			34	- 62	14	10						18.3	W	1					
NEWARK	2	1015.6	1016.4	13.6	5.0	9.3	1.9	25.0	15	- 2.8	11	0	2	1.1	59	33	- 53	16	8	0	0	0	3.0	27	17.4	24	1	6	8	16	6.6	
TRENTON U	17			13.2	4.2	8.7	1.1	25.0	15	- 3.9	11	0	5			27	- 54	14	11		T	T			21.5	NW	1	7	9	14	6.4	56
NEW MEXICO																																
ALBUQUERQUE	1619	837.8	1016.1	15.6	- 1.6	7.0	0.6	22.8	9+	-11.1	28	0	16	- 7.2	43	2	- 8	2	4	0	15	25	1.0	25	17.0	SW	1	14	11	5	3.9	79
CLAYTON	1515			16.4	- 0.8	7.8	2.4	28.9	12	- 8.3	25	0	19			3	- 6	2	2		41	25						11	8	11	5.2	
ROSWELL	1112	888.9	1013.9	20.4	0.8	10.6	1.0	28.9	7+	- 6.7	28	0	11	- 5.0	40	T	- 7	T	1	0	0	0	1.6	24	18.3	NW	19	13	9	8	4.5	68
NEW YORK																																
ALBANY	84	1004.7	1015.4	8.9	- 0.2	4.4	0.4	21.1	14	- 8.3	21	0	15	- 0.6	71	32	- 36	11	13	0	T	T	2.4	26	13.9	NW	1	2	6	22	8.3	25
BINGHAMTON	485	956.0	1015.8	8.2	0.4	4.3	1.0	19.4	2	- 6.1	10	0	15	- 0.6	73	47	- 17	16	16	0	43	25	3.2	25	16.1	W	1	1	3	26	9.1	24
BUFFALO	215	989.5	1015.5	8.3	1.4	4.9	0.9	15.6	28+	- 6.1	10	0	11	1.1	77	103	12	42	17	2	76	25	3.1	26	14.3	SW	29+	1	2	27	9.2	23
NEW YORK U	40	1013.2	1016.5	13.0	5.1	9.1	0.7	25.0	15	- 1.1	11	0	2	0.6	58	46	- 40	19	9	0	0	0	2.0	28	13.0	W	1					61
NEW YORK KENNEDY	4	1015.6	1016.5	11.7	3.7	7.7	- 0.2	20.6	15	- 2.2	21+	0	6	1.1	66	36	- 53	19	7	0	0	0	3.8	28	17.4	27	1	7	11	12	6.0	
NEW YORK LA GUARDIA	3	1015.6	1016.6	12.9	5.6	9.3	0.7	23.3	15	- 0.6	11	0	2	0.6	57	39	- 52	16	7	0	0	0	3.5	28	16.1	W	1	5	10	15	6.7	
ROCHESTER	167	995.3	1015.8	10.2	1.9	6.1	1.6	19.4	28	- 5.0	9	0	10	1.7	76	97	33	40	16	1	107	25	3.4	28	17.0	SW	1	1	4	25	8.9	25
SYRACUSE	125	1000.0	1015.0	8.5	1.1	4.8	0.3	17.8	28	- 5.6	10	0	13	2.2	85	171	97	49	21	1	523	356	2.9	25	18.8	W	1	1	1	28	9.2	20

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
NORTH CAROLINA	M	Mb.	Mb.	C.	C.	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm			Mm	Mm	M.p.s.		M.p.s							%
ASHEVILLE	652	943.8	1020.8	17.2	1.7	9.5	2.5	23.9	23	- 7.8	11	0	13	3.9	74	91	20	34	9	0	0	0	1.1	33	13.4	33	29	13	6	11	4.9	68
CAPE HATTERAS R	2	1020.0	1020.3	18.7	9.5	14.1	0.7	26.1	28+	- 2.2	18	0	2	8.9	71	31	- 73	14	7	1	0	0	3.3	30	13.9	24	16+	16	8	6	3.9	66
CHARLOTTE	224	992.9	1020.4	18.3	4.6	11.5	1.3	25.0	3	- 4.4	11	0	6	5.6	69	12	- 53	4	5	0	0	0	1.0	23	14.3	NW	21	12	7	11	5.1	66
GREENSBORO	273	988.5	1020.5	16.8	2.8	9.8	1.0	24.4	24	- 7.2	11	0	10	2.8	65	31	- 37	10	6	0	0	0	1.4	24	12.5	SW	25	12	8	10	5.2	66
RALEIGH	132	1004.1	1020.0	20.1	5.0	12.6	2.6	28.3	27	- 5.0	11	0	9	3.9	58	15	- 55	10	5	0	0	0	1.3	25	9.4	32	29+	14	6	10	4.3	63
WILMINGTON	9	1019.3	1020.8	21.5	7.6	14.6	1.6	28.3	27+	- 1.7	12+	0	4	8.9	73	12	- 66	3	10	1	0	0	1.0	26	14.8	SW	28	15	8	7	3.8	85
NORTH DAKOTA																																
BISMARCK	502	955.3	1017.4	- 0.2	-10.2	- 5.2	- 3.5	13.3	13	-22.8	23	0	30	- 7.8	83	12	- 3	8	4	0	140	76	0.5	36	15.2	NW	13	6	7	17	7.1	33
FARGO	273	983.7	1017.7	0.2	- 7.8	- 3.8	- 1.7	15.0	13	-16.1	9	0	30	- 6.1	82	23	2	11	7	0	99	51	1.0	33	13.9	W	13	5	6	19	7.4	36
WILLISTON	579	946.2	1017.4	- 1.1	-12.1	- 6.6	- 4.1	11.7	13	-22.2	20	0	30	- 9.4	81	19	4	7	7	0	163	76	0.4	32	15.6	SW	13	7	7	16	6.6	36
OHIO																																
AKRON	368	972.6	1017.7	11.9	2.9	7.4	2.5	22.2	14	- 6.7	11	0	13	1.1	65	62	5	21	11	2	18	T	3.0	23	12.5	22	29	0	7	23	8.7	
CINCINNATI ABBE OB	232			13.4	4.5	8.9	1.9	21.1	14	- 4.4	10	0	8			113	38	38	12		0	0			11.6	SW	25					37
CLEVELAND	237	987.8	1017.2	10.9	3.1	7.0	1.8	19.4	15	- 4.4	11	0	8	2.2	73	67	0	17	14	2	84	76	2.8	24	14.3	SW	28+	0	7	23	8.7	27
COLUMBUS	247	988.5	1018.8	11.8	2.7	7.3	2.2	20.0	15	- 6.1	11+	0	13	2.8	75	136	73	52	11	2	T	T	2.0	22	14.3	SW	28	1	9	20	8.0	28
DAYTON	305	981.7	1018.4	11.8	2.6	7.2	1.8	20.0	15+	- 6.7	10	0	11	2.2	73	98	30	45	12	3	T	0	2.4	22	14.8	W	28	2	10	18	7.8	43
MANSFIELD	395			11.6	2.9	7.3	2.0	20.6	15+	- 5.6	11	0	10			81	13	24	10	2	5	T	3.4	23	13.0	21	15+	2	6	22	8.3	
TOLEDO	204	991.5	1017.1	10.2	0.7	5.5	1.8	19.4	14	- 7.2	10	0	14	0.6	70	83	31	36	10	2	5	T	2.2	25	13.9	W	1	2	6	22	8.1	29
YOUNGSTOWN	359	973.9	1017.3	9.7	2.2	6.0	1.9	18.3	15	- 4.4	7	0	14	1.1	73	43	- 28	18	15	1	84	25	3.0	24	13.9	24	28	0	6	24	8.8	
OKLAHOMA																																
OKLAHOMA CITY	392	968.8	1015.7	17.2	6.2	11.7	2.6	26.7	1	- 1.7	21	0	2	5.0	70	71	32	35	7	2	0		1.0	18	13.9	SW	13	7	9	14	6.3	41
TULSA	198	991.9	1016.2	17.4	6.4	11.9	3.2	25.0	14	- 1.7	10	0	1	6.1	72	161	103	82	6	4	T		1.8	19	19.2	SW	1	8	8	14	6.3	47
OREGON																																
ASTORIA	2	1008.5	1009.4	10.2	3.4	6.8	- 1.1	15.6	9	- 1.7	1	0	8	3.3	80	379	95	72	26	2	T	0	1.8	18	13.0	27	23+	2	4	24	8.8	
BURNS	1265			5.8	- 3.0	1.4	- 0.8	14.4	9	-11.1	23	0	22			68	39	13	22		302	102						1	3	26	9.0	
EUGENE	109	998.0	1011.7	9.4	4.2	6.8	- 0.7	16.7	9	- 3.9	2	0	4	5.0	89	520	377	58	28	0	38	25	3.0	17	10.7	16	19	0	3	27	9.4	
MEACHAM	1234		1011.7	1.4	- 2.7	- 0.6	- 1.9	10.0	10	- 8.3	3	0	24			256	151	36	29		1697	864			14.8	20	12	0	0	30	9.8	
MEDFORD	396	965.5	1013.5	10.9	4.3	7.7	1.9	21.1	9	- 2.2	19	0	3	3.3	76	178	112	49	23	0	T	T	0.4	26	13.0	16	30	0	3	27	9.3	
PENDLETON	452	957.0	1011.2	9.2	2.6	5.9	0.7	18.3	10	- 2.2	6	0	5	0.6	71	96	60	15	22	0	231	102	2.1	24	12.5	28	23+	0	4	26	9.3	
PORTLAND	6	1009.5	1010.8	9.6	3.9	6.8	- 0.5	14.4	11	- 1.7	3+	0	3	3.9	84	293	158	67	26	0	T		2.6	17	13.4	SW	28	1	3	26	9.2	14
SALEM	60	1003.4	1010.8	9.7	3.6	6.7	- 0.7	16.1	11+	- 4.4	3+	0	5	3.9	82	387	242	62	28	0	13	T	3.4	19	13.0	18	28+	1	2	27	9.1	
SEXTON SUMMIT R	1169	878.8	1013.1	2.8	- 0.9	0.9	- 5.1	8.9	10+	- 5.6	19	0	22	0.6	95	612	501	120	28		1082	381			24.1	20	15	0	1	29	9.8	
PACIFIC AREA																																
GUAM TAGUAC R	110			30.0	22.7	26.4	0.1	30.6	29+	20.0	26+	0	0			53	-209	12	21		0	0			9.4	SE	16+					63
JOHNSTON	2	1010.8	1011.3	27.8	23.7	25.8	- 0.7	28.9	28+	19.4	26	0	0	22.2	79	188	136	87	16	3	0	0	3.5	10	14.3	E	24	6	7	17	7.1	46
KOROR R	29			31.3	24.4	27.9	0.6	33.3	3	22.8	21+	14	0			421	92	110	21	3	0	0			11.2	S	19	0	7	23	8.7	45
KWAJALEIN	2	1008.1	1008.7	30.4	25.7	28.1	0.7	31.1	20+	22.8	17	0	0	23.9	78	89	-219	29	19	0	0	0	5.1	7	13.0	9	17	6	14	10	6.0	
MAJURO	3			29.3	24.8	27.1	0.1	30.6	27	22.2	20	0	0			361	- 43	153	24		0	0			10.7	E	24+	2	12	16	7.6	66
PAGO PAGO	4	1010.2	1010.2	29.0	23.9	26.4		31.1	27+	22.2	28+	0	0	23.3	84	481		85	25	3	0	0	2.9	6	15.6	N	6	0	7	23	8.7	24
PONAPE R	37			31.3	23.8	27.6	0.9	32.2	26+	22.2	29+	6	0			264	-164	41	24	2	0	0			8.5	NE	16	0	9	21	8.1	41
TRUK MOEN ISLAND	2			30.6	25.2	27.9	0.8	31.7	24	23.3	14	0	0			218	- 96	30	27	0	0	0			11.2	S	15	0	2	28	9.0	50
WAKE	3	1012.5	1012.9	29.8	23.4	26.6	- 0.3	31.1	10	21.1	11	0	0	20.6	74	57	- 21	24	13	1	0	0	6.3	6	15.6	N	11	11	17	2	4.2	42
YAP R	13			30.5	24.2	27.3	- 0.2	31.7	14+	22.2	29	0	0			268	- 15	76	22	1	0	0			10.7	SE	19	2	15	13	6.0	56
PENNSYLVANIA																																
ALLENTOWN	118	1002.7	1017.0	12.2	2.2	7.2	1.7	23.3	15	- 5.0	11	0	11	1.1	67	42	- 42	19	9	0	T	0	2.9	27	17.9	30	1	5	8	17	6.9	
ERIE	223	989.5	1016.7	9.3	2.7	6.0	1.7	17.8	15	- 2.2	10	0	9	1.1	74	72	- 13	19	12	2	10	T	3.4	24	15.6	28	1	1	4	25	9.0	
HARRISBURG	103	1004.4	1017.3	13.2	3.3	8.3	1.9	24.4	15	- 3.3	18+	0	9	0.6	60	26	- 49	9	9	0	T	T	2.0	29	15.2	W	1	5	12	13	6.5	38
PHILADELPHIA	2	1016.3	1017.2	13.9	3.8	8.9	2.1	24.4	15	- 5.6	11	0	8	2.8	68	16	- 70	7	10	0	T	0	2.8	27	15.6	W	1	8	11	11	5.7	53
PITTSBURGH	347	973.6	1018.1	11.1	2.4	6.7	1.8	20.0	15	- 6.1	11	0	13	1.1	69	67	10	26	13	2	20	T	3.1	25	15.6	27	1	1	8	21	8.2	34
SCRANTON	283	981.7	1016.4	9.6	0.9	5.3	1.1	20.0	15	- 6.1	10	0	15	- 1.1	66	38	- 37	11	12	0	10	T	2.4	26	13.0	W	28	4	4	22	8.0	33
WILLIAMSPORT	160	997.6	1017.2	10.0	1.5	5.8	0.7	21.7	15	- 4.4	18	0	11	1.6	72	57	- 31	17	10	1	10	T	1.9	29	11.6	28	1	4	4	22	7.9	
RHODE ISLAND																																
BLOCK ISLAND	34			10.7	4.4	7.6	0.2	16.1	2	- 3.9	20	0	5			31	- 63	14	8		0	0						6	11	13	6.4	
PROVIDENCE	16	1012.5	1014.9	10.9	2.1	6.6	0.4	20.6	15+	- 6.1	11	0	9	0.0	66	58	- 46	23	9	2	T	0	2.8	28	13.0	28	1	7	6	17	6.4	52

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation, ground	Pressure		Temperature								No of days				Precipitation							Wind					No of days sunrise to sunset				
		Station ☉	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
SOUTH CAROLINA	M	Mb	Mb	C	C	C	C	C.		C				C	%	Mm	Mm	Mm			Mm	Mm	M.p.s.		M.p.s							%
CHARLESTON	12	1019.3	1021.3	23.4	9.2	16.3	3.1	30.0	27	0.0	12+	0	2	10.0	70	21	- 32	11	4	0	0	0	0.8	27	16.1Y	NW	21	14	10	6	4.2	68
CHARLESTON U	3			21.4	11.7	16.6	1.8	27.2	27+	1.7	11	0	0			18	- 31	7	4		0	0			13.9	SW	25+					
COLUMBIA	65	1012.9	1021.1	23.6	6.4	15.0	2.9	29.4	3	- 4.4	12	0	8	8.3	71	10	- 50	8	2	0	0	0	1.0	27	11.2	31	21	14	5	11	4.2	73
GRNVLLE-SPRTNBRG	292	985.8	1020.6	18.1	3.9	11.1	0.3	25.6	3	- 5.6	11	0	9	5.0	69	34	- 38	17	7	0	0	0	0.8	26	12.5	W	21	15	6	9	4.4	65
SOUTH DAKOTA																																
ABERDEEN	395	968.8	1017.3	1.4	- 7.0	- 2.8	- 1.8	16.7	13	-16.1	23	0	30	- 5.6	82	17	- 2	10	5	0	107	102	0.8	1	11.2	35	20+	4	4	22	7.8	
HURON	390	968.8	1016.8	3.8	- 4.3	- 0.2	0.2	18.3	13	-13.3	9	0	28	- 3.9	78	24	7	13	8	0	155	102	0.2	4	12.5	N	20	4	6	20	7.9	31
RAPID CITY	964	902.5	1015.9	6.1	- 5.8	0.2	- 1.6	21.1	29	-17.8	5	0	26	- 6.7	67	19	8	9	5	0	246	178	1.4	35	18.8	NW	7	4	8	18	7.4	37
SIOUX FALLS	432	964.4	1017.2	6.3	- 3.3	1.5	1.2	18.3	13	-11.7	9	0	26	- 3.3	75	26	0	18	10	1	T	T	0.2	3	12.5	7	14	4	4	22	7.9	
TENNESSEE																																
BRISTOL	459	965.8	1020.6	16.0	2.6	9.3	1.6	24.4	27	- 6.1	11	0	11	3.9	72	115	51	38	9	1	0	0	1.0	28	14.3	32	27	5	13	12	6.5	
CHATTANOOGA	203	995.6	1020.6	18.1	4.4	11.3	1.6	25.0	23+	- 3.3	11	0	6	6.7	75	149	56	82	9	2	0	0	0.4	25	14.3	NW	27	9	9	12	5.6	55
KNOXVILLE	299	984.8	1020.3	17.3	5.4	11.3	2.1	23.3	27+	- 3.3	11+	0	4	5.6	70	127	45	70	8	2	0	0	0.8	27	13.9	NW	21	5	12	13	6.4	62
MEMPHIS	79	1008.8	1019.0	19.0	9.1	14.1	4.0	26.1	24+	- 0.6	11+	0	2	8.9	73	216	104	63	10	5	0	0	1.8	17	15.6	34	27	12	3	15	5.7	53
NASHVILLE	180	997.6	1019.7	18.7	6.5	12.6	3.4	26.7	14	- 3.3	10	0	3	6.1	69	198	114	95	9	4	0	0	1.4	20	14.8	S	25+	7	5	18	6.8	43
OAK RIDGE R	276			16.4	4.6	10.5	2.0	23.3	3	- 3.9	11	0	10			274	178	134	9		0	0			16.5Y		25	7	7	16	6.5	
TEXAS																																
ABILENE	544	952.6	1015.5	20.6	8.5	14.6	2.9	27.8	14+	- 1.1	28	0	1	7.2	68	6	- 23	4	2	3	0	0	3.0	20	17.0	NW	27	11	5	14	5.5	54
AMARILLO	1098	889.3	1013.2	18.3	2.6	10.4	2.7	27.8	1	- 7.2	28	0	6	- 1.1	57	3	- 14	3	2	1	10	T	3.0	22	17.9	SW	26+	12	9	9	4.9	62
AUSTIN	182	994.6	1016.7	24.2	12.5	18.4	3.5	30.6	4	2.2	29	0	0	12.2	73	15	- 39	8	6	2	0	0	0.6	18	15.2	NW	27+	10	5	15	5.7	53
BROWNSVILLE	6	1015.2	1015.7	28.6	18.7	23.7	3.9	32.2	5	5.6	29	1	0	18.9	78	22	- 11	8	6	2	0	0	3.0	16	15.2	SE	24	16	11	3	4.2	66
CORPUS CHRISTI	12	1014.6	1016.2	28.1	17.3	22.7	4.9	31.7	26	3.3	29	0	0	18.3	79	8	- 36	3	4	1	0	0	2.8	12	17.4	S	24	10	9	11	5.2	57
DALLAS	147			21.6	11.2	16.4	3.7	28.9	23	5.0	28	0	0	10.6	72	52	- 17	20	7	5			1.7	17	12.5	15	19	10	6	14	6.0	
DEL RIO	313	979.3	1015.4	24.1	11.7	17.9	3.0	29.4	4	0.0	29	0	1	10.6	69	T	- 16	T	0	0	0	0	1.6	12	11.6	29	19	11	7	12	5.4	
EL PASO	1194	882.8	1015.2	22.3	1.9	12.1	1.4	28.9	12+	- 7.8	29	0	11	- 5.0	33	2	- 6	2	2	0	T	T	1.7	26	18.8	W	19	16	10	4	3.2	87
FORT WORTH	164	996.3	1016.9	20.9	9.9	15.4	2.8	28.3	18	2.2	29	0	0	11.1	79	52	- 10	28	7	5	0	0	1.5	18	12.5	31	27+	10	5	15	6.0	
GALVESTON U	2			24.1	18.6	21.3	4.1	27.8	15	11.1	28	0	0			14	- 76	5	8		0	0			13.4	NW	28+					65
HOUSTON INTERCON	29	1013.9	1017.6	26.2	13.1	19.6	4.7	30.6	22+	1.7	29	0	0	15.0	78	40	- 59	18	9	2	0	0	1.3	13	11.2	17	24+	10	12	8	4.9	61
LUBBOCK	992	902.8	1014.3	19.9	4.0	11.9	3.1	29.4	7+	- 6.7	28	0	7	- 1.1	50	T	- 14	T	0	1	T	0	2.3	25	17.9	26	25+	12	10	9	4.9	72
MIDLAND	869	916.0	1014.4	21.7	5.6	13.7	2.3	29.4	1	- 3.9	28	0	3	1.1	52	T	- 12	T	0	0	0	0	2.2	21	20.1	30	24	12	11	7	4.7	
PORT ARTHUR	5	1017.6		25.0	13.3	19.2	3.8	30.0	4	2.2	29	0	0	16.1	85	51	- 37	37	5	1	0	0	2.1	14	12.1	SW	27	11	9	10	4.9	56
SAN ANGELO	580	949.2	1015.6	23.2	8.6	15.9	3.3	30.6	2	- 2.2	29	0	2	6.7	61	1	- 19	1	1	1	0	0	2.2	22	12.5	31	27+	10	9	11	5.3	
SAN ANTONIO	240	988.5	1016.5	25.1	12.4	18.8	3.5	31.1	14	- 1.1	29	0	2	12.8	72	7	- 27	3	6	0	0	0	0.6	14	15.2	NW	27	9	5	16	6.1	44
VICTORIA	32	1012.5	1016.6	27.5	15.3	21.4	4.6	32.2	4	3.9	29	1	0	16.7	79	20	- 40	18	3	2	0	0	1.7	13	19.2Y	NW	20	11	7	12	5.5	
WACO	153	998.6	1016.7	23.0	11.7	17.3	3.6	30.0	4	1.7	29	0	0	11.1	71	17	- 39	8	6	5	0	0	1.8	18	12.5	17	24+	10	5	15	5.9	
WICHITA FALLS	303	979.3	1016.0	20.7	7.8	14.3	2.9	30.0	14+	- 1.1	21	0	1	8.3	73	43	7	41	5	2	0	0	1.8	19	15.6	27	27	10	7	13	5.8	
UTAH																																
MILFORD	1533	844.9		10.4	- 4.3	3.1	0.8	22.2	9	-17.8	25	0	22			22	9	12	7		163	51			25.0	SW	12	4	6	20	7.2	48
SALT LAKE CITY	1286	870.0	1015.5	9.8	- 0.4	4.7	2.1	23.3	12	-10.0	27	0	14	- 2.8	62	64	31	21	11	0	495	178	2.6	17	18.8	NW	12	2	8	20	9.3	48
WENDOVER	1291	868.9	1015.9	7.9	- 1.4	3.3	0.2	20.6	12	- 7.8	21	0	19			11	4	4	7		56	25										
VERMONT																																
BURLINGTON	101	1001.4	1014.0	5.9	- 0.1	2.9	1.1	16.1	14	- 7.2	19	0	16	- 4.4	61	59	- 8	18	11	0	66	25	1.7	27	13.4	S	8	1	5	24	8.5	18
VIRGINIA																																
LYNCHBURG	279	985.1		16.3	3.4	9.9	1.6	26.1	24	- 7.2	11	0	9			26	- 39	11	6		0	0			12.5	W	1	11	8	11	5.7	57
NORFOLK	7	1018.3	1019.3	17.7	6.2	11.9	1.2	28.3	28	- 0.6	18+	0	4	3.9	59	48	- 29	31	4	0	0	0	1.7	28	14.3	21	28	15	10	5	4.1	79
RICHMOND	50	1012.9	1019.2	18.4	3.0	10.7	1.6	27.8	27	- 5.6	7	0	11	2.8	62	32	- 45	18	6	0	0	0	1.4	25	14.3	SW	28	10	10	10	5.4	64
ROANOKE	350	977.3	1019.8	15.8	3.4	9.6	1.4	25.0	24	- 8.9	11	0	8	2.2	62	45	- 23	11	8	0	T	0	2.2	29	13.9	30	9	8	11	11	6.1	
WALLOPS ISLAND	3			14.7	5.1	9.9		24.4	25	- 4.4	11	0	6			43		19	8		0	0			20.1Y	W	1					
WASHINGTON																																
OLYMPIA	59	1002.0	1009.2	8.0	0.7	4.3	- 2.2	15.0	9	- 5.6	19+	0	13	2.2	84	329	134	50	25	1	48	25	2.6	19	13.4	18	28+	0	4	26	9.1	
QUILLAYUTE	55	999.7	1007.2	8.4	1.0	4.7	- 2.3	12.8	11+	- 5.0	5	0	13	3.3	89	436	98	65	25	2	112	25	1.1	14	16.5	SE	27	1	4	25	8.6	14
SEATTLE	6			8.9	3.7	6.3	- 2.1	15.0	9	- 0.6	3	0	1			213	81	38	26		T	0			16.1Y	SSW	12					
SEATTLE-TACOMA	122	992.2	1008.9	9.1	3.9	6.5	- 0.1	15.6	9	- 0.6	5	0	1	2.8	78	203	67	39	25	0	5	T	2.0	16	13.4	SW	28	2	1	27	9.1	20
SPOKANE	718	925.5	1010.5	3.7	- 1.8	0.9	- 1.1	13.3	10	- 7.8	25+	0	21	- 2.2	81	130	73	23	22	0	599	254	2.4	17	20.1	SW	12	1	4	25	9.0	11

CLIMATOLOGICAL DATA

METRIC UNITS

NOVEMBER 197[illegible]

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Ice pellets				Fastest mile (1.6 kilometers)							
		Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb	Mb.	C	C	C	C.	C		C.				C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
WASHINGTON																																
STAMPEDE PASS R	1206	871.3		- 1.5	- 4.3	- 2.9	- 2.6	4.4	11	- 8.9	5	0	29			344	25	52	29		2637	1854						1	0	29	9.6	
WALLA WALLA	289			8.6	2.8	5.7	0.1	18.3	10	- 2.8	5	0	7			105	61	13	25		155	102			13.9	S	16	0	3	27	9.3	13
YAKIMA	321	972.2	1011.1	7.1	- 0.8	3.1	0.1	15.6	28	- 7.8	4	0	19	- 1.7	73	72	47	20	17	0	191	102	1.4	25	11.6	[illegible]	28+	2	5	23	8.6	
WEST INDIES																																
SAN JUAN P. R.	4	1013.5	1016.0	30.0	24.1	27.1	1.4	33.3	1	22.2	27	5	0	19.4	66	76	- 88	27	14	0	0	0	3.9	8	13.9	NE	13	3	23	4	5.2	48
WEST VIRGINIA																																
BECKLEY	763	930.2	1020.2	12.2	1.5	6.8	1.2	22.8	24	-10.6	11	0	15	1.7	72	115	47	46	16	0	18	T	2.4	23	13.0	26	1	4	5	21	7.8	
CHARLESTON	286	985.1	1019.8	14.4	2.0	8.2	0.8	25.0	15	- 8.3	11	0	13	2.8	72	138	67	60	14	1	T	0	1.6	24	13.9	27	27	3	4	23	7.8	
ELKINS	594	947.5		11.7	- 1.2	5.3	0.4	21.7	24+	-10.0	7	0	21			83	13	22	14		81	T						3	7	20	7.9	
HUNTINGTON	252	988.8	1019.4	14.3	3.6	8.9	1.4	23.9	15	- 5.6	11	0	10	2.8	67	131	69	58	14	3	T	0	1.6	24	10.7	27	25	4	5	21	8.0	
PARKERSBURG	187			12.8	3.1	7.9	0.9	23.9	15	- 7.2	11	0	13			88	28	29	16		5	T			17.9	SW	1					37
WISCONSIN																																
GREEN BAY	209	990.5	1016.7	5.7	- 2.5	1.6	0.4	12.2	21	-10.0	6	0	20	- 2.2	76	37	- 12	16	10	2	61	51	1.8	29	15.2	SW	21	5	6	19	7.4	35
LA CROSSE	199	992.9	1018.0	6.8	- 1.6	2.6	1.4	17.8	13	-10.0	9	0	18	- 1.1	80	49	0		8	2	T		0.5	27								
MADISON	262	984.8	1017.0	7.8	- 2.7	2.6	1.4	17.8	14	-10.6	10	0	21	- 1.1	80	38	- 17	12	9	1	10	T	1.1	27	12.5	SW	21+	2	7	21	7.9	41
MILWAUKEE	206	991.2	1017.0	7.4	- 0.2	3.6	1.5	15.6	14	- 7.2	6	0	16	- 1.7	70	46	- 9	20	9	1	T	T	2.1	27	13.9	SW	[illegible]	5	7	18	7.4	44
WYOMING																																
CASPER	1627	833.7	1014.5	5.6	- 4.4	0.6	- 0.3	19.4	9	-16.7	4	0	22	- 6.1	64	20	2	9	6	0	335	203	5.2	22	20.6	26	12+	4	6	20	7.9	
CHEYENNE	1867	808.3	1014.8	7.2	- 3.6	1.8	0.6	16.1	12	-10.0	4	0	20	- 8.3	52	32	16	19	7	0	442	356	3.0	28	25.0	NW	12	6	11	13	6.6	44
LANDER	1696	825.3	1014.8	5.9	- 6.1	- 0.1	0.5	18.3	12	-16.1	5	0	27	- 7.2	64	19	- 5	6	6	1	343	127	1.5	26	17.0	SW	12	3	9	18	7.4	56
SHERIDAN	1208	875.0	1015.4	4.9	- 8.1	- 1.6	- 2.3	21.7	12	-20.6	5	0	29	- 7.2	68	18	- 3	19	5	0	297	229	1.3	29	18.8	SW	12	2	8	20	7.9	44

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	285	361	534
HUNTSVILLE	294	367	611
MOBILE	91	109	250
MONTGOMERY	195	252	399
ALASKA			
ANCHORAGE	1532	3675	3262
ANNETTE	1017	2625	2086
BARTER ISLAND	1872	5806	6037
BETHEL	1329	3762	3826
BETTLES	2217	5067	4774
BIG DELTA	2019	4454	4122
COLD BAY	817	3177	3126
FAIRBANKS	1968	4135	4170
HOMER	1258	3521	3285
JUNEAU	1253	3237	2788
KING SALMON	1204	3288	3464
KODIAK	960	3214	2760
KOTZEBUE	1779	4767	4537
MC GRATH	2022	4467	4243
NOME	1417	4495	4253
ST. PAUL ISLAND	827	3520	3556
SUMMIT	1852	5015	4594
TALKEETNA	1720	4136	3554
UNALAKLEET	1573	4569	4112
YAKUTAT	1190	3334	2970
ARIZONA			
FLAGSTAFF	829	1583	1792
PHOENIX	156	158	199
TUCSON	216	239	235
WINSLOW	614	971	925
YUMA	125	125	108
ARKANSAS			
FORT SMITH	316	422	573
LITTLE ROCK	261	324	589
CALIFORNIA			
BAKERSFIELD	263	287	331
BISHOP	642	932	884
BLUE CANYON	896	1490	1149
EUREKA U	399	1617	1498
FRESNO	360	454	435
LONG BEACH	207	217	210
LOS ANGELES	159	184	292
LOS ANGELES U	156	165	153
MT SHASTA R	820	1526	1367
OAKLAND	343	757	639
RED BLUFF	439	539	421
SACRAMENTO	384	461	466
SANDBERG R	616	940	763
SAN DIEGO	132	138	205
SAN FRANCISCO	327	760	671
SAN FRANCISCO U	285	994	841
SANTA MARIA	379	781	737
STOCKTON	345	435	451
COLORADO			
ALAMOSA	937	2077	2146
COLORADO SPRINGS	754	1359	1458
DENVER	758	1253	1296
GRAND JUNCTION	708	1046	1140
PUEBLO	682	1036	1116
CONNECTICUT			
BRIDGEPORT	501	707	873
HARTFORD	635	1059	1213
DELAWARE			
WILMINGTON	469	663	865
DIST.OF COLUMBIA			
WASHINGTON DULLES	564	845	943
WASHINGTON NATIONAL	399	506	714
FLORIDA			
APALACHICOLA U	72	87	180
DAYTONA BEACH	15	25	97
FORT MYERS	12	12	44
JACKSONVILLE	82	108	180
KEY WEST	0	0	0
LAKELAND U	21	25	72
MIAMI	1	1	13
ORLANDO	13	19	68
PENSACOLA	79	96	221
TALLAHASSEE	101	148	235
TAMPA	24	30	71
WEST PALM BEACH	2	2	22
GEORGIA			
ATHENS	295	389	540
ATLANTA	295	382	553
AUGUSTA	263	359	448
COLUMBUS	200	255	405
MACON	189	245	386
ROME	351	484	650
SAVANNAH	148	195	313
IDAHO			
BOISE	692	1194	1301
LEWISTON	749	1251	1285
POCATELLO	843	1610	1606
ILLINOIS			
CAIRO U	358	482	669
CHICAGO O HARE	687	1003	1249
CHICAGO MIDWAY	685	988	1119
MOLINE	733	1069	1208
PEORIA	671	978	1158
ROCKFORD	744	1127	1335
SPRINGFIELD	578	799	1031
INDIANA			
EVANSVILLE	459	630	873
FORT WAYNE	635	970	1209
INDIANAPOLIS	552	783	1069
SOUTH BEND	611	904	1258
IOWA			
BURLINGTON	680	962	1154
DES MOINES	719	996	1273
DUBUQUE	805	1241	1467
SIOUX CITY	799	1156	1362
WATERLOO	827	1290	1493
KANSAS			
CONCORDIA	661	964	1056
DODGE CITY	622	889	954
GOODLAND	780	1337	1290
TOPEKA	603	852	977
WICHITA	541	758	849
KENTUCKY			
COVINGTON	583	828	951
LEXINGTON	490	684	898
LOUISVILLE	450	607	876
LOUISIANA			
ALEXANDRIA	169	216	381
BATON ROUGE	86	104	262
LAKE CHARLES	78	89	213
NEW ORLEANS	80	98	219
SHREVEPORT	164	204	348
MAINE			
CARIBOU	1117	2192	2198
PORTLAND	813	1533	1567
MARYLAND			
BALTIMORE	524	769	844
MASSACHUSETTS			
BLUE HILL OBS R	694	1233	1178
BOSTON	570	955	979
WORCESTER	750	1386	1346
MICHIGAN			
ALPENA	866	1653	1902
DETROIT	685	1086	1150
DETROIT METRO	702	1086	1240
FLINT	733	1212	1431
GRAND RAPIDS	748	1206	1347
HOUGHTON LAKE	871	1622	1858
LANSING	745	1279	1389
MARQUETTE U	889	1589	1800
MUSKEGON	743	1237	1384
SAULT STE MARIE	949	1912	2061
MINNESOTA			
DULUTH	1106	2111	2198
INTERNATIONAL FALLS	1186	2126	2412
MINNEAPOLIS	915	1454	1724
ROCHESTER	903	1467	1698
ST CLOUD	988	1687	1872
MISSISSIPPI			
JACKSON	173	234	392
MERIDIAN	174	223	442
MISSOURI			
COLUMBIA REGIONAL	559	792	922
KANSAS CITY	578	804	919
ST JOSEPH	626	869	1000
ST LOUIS	538	751	859
SPRINGFIELD	454	632	853
MONTANA			
BILLINGS	1058	1737	1612
GLASGOW	1306	2056	1965
GREAT FALLS	1191	1933	1756
HAVRE	1344	2114	2045
HELENA	1208	2183	2004
KALISPELL	1076	2158	2285
MILES CITY	1056	1714	1728
MISSOULA	1036	1969	2040
NEBRASKA			
GRAND ISLAND	847	1278	1279
LINCOLN	772	1153	1192
NORFOLK	858	1317	1398
NORTH PLATTE	892	1528	1459
OMAHA	750	1094	1128
SCOTTSBLUFF	883	1588	1491
VALENTINE	897	1516	1554
NEVADA			
ELKO	844	1626	1802
ELY	965	1942	1869
LAS VEGAS	349	391	431
RENO	659	1378	1438
WINNEMUCCA	719	1477	1596
NEW HAMPSHIRE			
CONCORD	860	1646	1540
MT WASHINGTON OBS	1409	4066	4145
NEW JERSEY			
ATLANTIC CITY	519	828	867
ATLANTIC CITY U	476	655	720
NEWARK	479	663	841
TRENTON U	515	750	852
NEW MEXICO			
ALBUQUERQUE	606	906	840
CLAYTON	561	947	1078
ROSWELL	410	567	621
NEW YORK			
ALBANY	750	1386	1350
BINGHAMTON	749	1355	1493
BUFFALO	720	1233	1358
NEW YORK U	493	684	766
NEW YORK KENNEDY	568	866	844
NEW YORK LA GUARDIA	485	682	785
ROCHESTER	653	1136	1294
SYRACUSE	723	1245	1261
NORTH CAROLINA			
ASHEVILLE	473	685	880
CAPE HATTERAS R	246	277	353
CHARLOTTE	361	487	582
GREENSBORO	453	636	734
RALEIGH	312	440	648
WILMINGTON	224	263	368
NORTH DAKOTA			
BISMARCK	1263	2152	1952
FARGO	1187	1982	1930
WILLISTON	1338	2190	2036
OHIO			
AKRON	587	919	1224
CINCINNATI ABBE OB	500	668	894
CLEVELAND	605	924	1177
COLUMBUS	589	846	1125
DAYTON	593	853	1073
MANSFIELD	588	871	1111
TOLEDO	686	1108	1263
YOUNGSTOWN	659	1112	1274
OKLAHOMA			
OKLAHOMA CITY	362	498	634
TULSA	343	462	621
OREGON			
ASTORIA	614	1637	1448
BURNS U	904	1784	1749
EUGENE	614	1184	1159
MEACHAM	1014	2183	2009
MEDFORD	569	961	1126
PENDLETON	666	1152	1208
PORTLAND	618	1056	1161
SALEM	624	1243	1176
SEXTON SUMMIT R	931	1986	1555
PENNSYLVANIA			
ALLENTOWN	593	957	1116
ERIE	658	1135	1370
HARRISBURG	534	808	980
PHILADELPHIA	507	721	851
PITTSBURGH	621	960	1204
SCRANTON	699	1220	1258
WILLIAMSPORT	672	1166	1184
RHODE ISLAND			
BLOCK ISLAND	577	948	970
PROVIDENCE	632	1093	1104
SOUTH CAROLINA			
CHARLESTON	158	192	345
CHARLESTON U	133	155	261
COLUMBIA	205	262	453
GRNVLLE-SPRTNBRG	387	520	574
SOUTH DAKOTA			
ABERDEEN	1132	1815	1803
HURON	995	1607	1651
RAPID CITY	972	1650	1583
SIOUX FALLS	902	1454	1615
TENNESSEE			
BRISTOL	483	664	865
CHATTANOOGA	374	520	674
KNOXVILLE	373	518	659
MEMPHIS	244	319	572
NASHVILLE	316	408	688
OAK RIDGE R	415	565	773
TEXAS			
ABILENE	227	293	425
AMARILLO	420	630	787
AUSTIN	83	91	244
BROWNSVILLE	16	16	40
CORPUS CHRISTI	20	20	88
DALLAS	143	170	339
DEL RIO	83	84	218
EL PASO	336	433	494
FORT WORTH	182	219	347
GALVESTON U	23	24	117
HOUSTON INTERCON	74	82	179
LUBBOCK	340	470	656
MIDLAND	252	348	437
PORT ARTHUR	83	96	219
SAN ANGELO	170	204	371
SAN ANTONIO	85	89	211
VICTORIA	26	26	138
WACO	118	140	292
WICHITA FALLS	248	300	461
UTAH			
MILFORD	815	1503	1401
SALT LAKE CITY	732	1206	1289
WENDOVER	809	1306	1262
VERMONT			
BURLINGTON	825	1588	1602
VIRGINIA			
LYNCHBURG	448	649	807
NORFOLK	353	436	552
RICHMOND	414	582	704
ROANOKE	461	669	816
WALLOPS ISLAND	450	731	658
WASHINGTON			
OLYMPIA	748	1664	1487
QUILLAYUTE	728	1985	1705
SEATTLE	642	1271	1102
SEATTLE-TACOMA	633	1316	1341
SPOKANE	933	1736	1682
STAMPEDE PASS R	1142	3000	2727
WALLA WALLA U	676	1086	1088
YAKIMA	816	1484	1464
WEST VIRGINIA			
BECKLEY	613	981	1222
CHARLESTON	541	763	901
ELKINS	698	1205	1344
HUNTINGTON	503	680	896
PARKERSBURG U	553	780	914
WISCONSIN			
GREEN BAY	897	1463	1684
LA CROSSE	844	1242	1466
MADISON	847	1405	1609
MILWAUKEE	788	1238	1486
WYOMING			
CASPER	951	1778	1728
CHEYENNE	883	1772	1693
LANDER	988	1879	1817
SHERIDAN	1070	1919	1785

COOLING DEGREE DAYS

(Base 65° F.)

State and station	Current season: This month	Current season: Period January through this month	Normals January through this month
ALABAMA			
BIRMINGHAM	28	1887	
HUNTSVILLE	11	1849	
MOBILE	110	2971	
MONTGOMERY	45	2467	
ALASKA			
ANCHORAGE	0	0	
ANNETTE	0	0	
BARROW	0	0	
BARTER ISLAND	0	0	
BETHEL	0	0	
BETTLES	0	9	
BIG DELTA	0	14	
COLD BAY	0	0	
FAIRBANKS	0	39	
HOMER	0	0	
JUNEAU	0	0	
KING SALMON	0	7	
KODIAK	0	0	
KOTZEBUE	0	[illegible]	
MC GRATH	0	4	
NOME	0	0	
ST. PAUL ISLAND	0	0	
SUMMIT	0	0	
TALKEETNA	0	0	
UNALAKLEET	0	0	
YAKUTAT	0	0	
ARIZONA			
FLAGSTAFF	0	143	
PHOENIX	36	4024	
TUCSON	26	2693	
WINSLOW	0	951	
YUMA	54	4014	
ARKANSAS			
FORT SMITH	8	1741	
LITTLE ROCK	17	2090	
CALIFORNIA			
BAKERSFIELD	18	2692	
BISHOP	0	1063	
BLUE CANYON	0	470	
EUREKA U	0	1	
FRESNO	4	1891	
LONG BEACH	6	988	
LOS ANGELES	2	459	
LOS ANGELES U	9	1127	
MT SHASTA R	0	430	
OAKLAND	0	136	
RED BLUFF	0	1909	
SACRAMENTO	0	1351	
SANDBERG R	0	965	
SAN DIEGO	8	632	
SAN FRANCISCO	0	129	
SAN FRANCISCO U	0	107	
SANTA MARIA	4	119	
STOCKTON	0	1491	
COLORADO			
ALAMOSA	0	52	
COLORADO SPRINGS	0	442	
DENVER	0	631	
GRAND JUNCTION	0	1167	
PUEBLO	0	1024	
CONNECTICUT			
BRIDGEPORT	0	1001	
HARTFORD	0	1038	
DELAWARE			
WILMINGTON	0	1434	
DIST.OF COLUMBIA			
WASHINGTON DULLES	0	1216	
WASHINGTON NATIONAL	3	1706	
FLORIDA			
APALACHICOLA U	193	2899	
DAYTONA BEACH	156	3103	
FORT MYERS	271	3812	
JACKSONVILLE	80	2696	
KEY WEST	400	4654	
LAKELAND U	188	[illegible]	
MIAMI	243	4171	
ORLANDO	199	3662	
PENSACOLA	115	3012	
TALLAHASSEE	72	2699	
TAMPA	205	3496	
WEST PALM BEACH	311	4057	
GEORGIA			
ATHENS	11	1683	
ATLANTA	20	1674	
AUGUSTA	11	1998	
COLUMBUS	21	2275	
MACON	30	2402	
ROME	11	1764	
SAVANNAH	52	2506	
HAWAII			
HILO	321	3126	
HONOLULU	362	4263	
KAHULUI	321	3389	
LIHUE	321	3744	
IDAHO			
BOISE	0	890	
LEWISTON	0	981	
POCATELLO	0	483	
ILLINOIS			
CAIRO U	3	1799	
CHICAGO O HARE	0	746	
CHICAGO MIDWAY	0	1151	
MOLINE	0	995	
PEORIA	0	998	
ROCKFORD	0	828	
SPRINGFIELD	0	1221	
INDIANA			
EVANSVILLE	2	1567	
FORT WAYNE	0	928	
INDIANAPOLIS	1	1155	
SOUTH BEND	0	978	
IOWA			
BURLINGTON	0	999	
DES MOINES	0	1152	
DUBUQUE	0	685	
SIOUX CITY	0	1028	
WATERLOO	0	828	
KANSAS			
CONCORDIA	0	1248	
DODGE CITY	0	1525	
GOODLAND	0	837	
TOPEKA	0	1283	
WICHITA	0	1552	
KENTUCKY			
COVINGTON	0	1046	
LEXINGTON	0	1269	
LOUISVILLE	2	1544	
LOUISIANA			
ALEXANDRIA	62	2266	
BATON ROUGE	128	2956	
LAKE CHARLES	136	2686	
NEW ORLEANS	136	2962	
SHREVEPORT	66	2154	
MAINE			
CARIBOU	0	[illegible]	
PORTLAND	0	502	
MARYLAND			
BALTIMORE	0	1219	
MASSACHUSETTS			
BLUE HILL OBS R	0	664	
BOSTON	0	904	
WORCESTER	0	617	
MICHIGAN			
ALPENA	0	337	
DETROIT	[illegible]	[illegible]	
DETROIT METRO	0	778	
FLINT	0	587	
GRAND RAPIDS	0	768	
HOUGHTON LAKE	0	395	
LANSING	0	657	
MARQUETTE	0	389	
MUSKEGON	0	573	
SAULT STE MARIE	0	220	
MINNESOTA			
DULUTH	0	175	
INTERNATIONAL FALLS	0	334	
MINNEAPOLIS	0	769	
ROCHESTER	0	560	
ST CLOUD	0	442	
MISSISSIPPI			
JACKSON	81	2541	
MERIDIAN	76	2378	
MISSOURI			
COLUMBIA REGIONAL	2	1277	
KANSAS CITY	[illegible]	1231	
ST JOSEPH	0	1306	
ST LOUIS	4	1395	
SPRINGFIELD	4	1333	
MONTANA			
BILLINGS	0	[illegible]	
GLASGOW	0	538	
GREAT FALLS	0	570	
HAVRE	0	462	
HELENA	0	311	
KALISPELL	0	258	
MILES CITY	0	724	
MISSOULA	0	347	
NEBRASKA			
GRAND ISLAND	0	1065	
LINCOLN	0	[illegible]	
NORFOLK	0	[illegible]	
NORTH PLATTE	0	702	
OMAHA	0	1106	
SCOTTSBLUFF	0	641	
VALENTINE	0	837	
NEVADA			
ELKO	0	423	
ELY	0	[illegible]	
LAS VEGAS	8	3155	
RENO	0	381	
WINNEMUCCA	[illegible]	585	
NEW HAMPSHIRE			
CONCORD	0	446	
MT WASHINGTON OBS	0	0	
NEW JERSEY			
ATLANTIC CITY	0	[illegible]	
ATLANTIC CITY U	0	937	
NEWARK	0	1466	
TRENTON U	0	1251	
NEW MEXICO			
ALBUQUERQUE	0	1270	
CLAYTON	0	747	
ROSWELL	0	1469	
NEW YORK			
ALBANY	0	753	
BINGHAMTON	0	501	
BUFFALO	0	678	
NEW YORK U	0	1289	
NEW YORK KENNEDY	0	923	
NEW YORK LA GUARDIA	0	1339	
ROCHESTER	0	851	
SYRACUSE	0	795	
NORTH CAROLINA			
ASHEVILLE	0	969	
CAPE HATTERAS R	25	1824	
CHARLOTTE	0	1534	
GREENSBORO	0	1342	
RALEIGH	7	1478	
WILMINGTON	24	2043	
NORTH DAKOTA			
BISMARCK	0	411	
FARGO	0	448	
WILLISTON	0	467	
OHIO			
AKRON	0	822	
CINCINNATI ABBE OB	0	1265	
CLEVELAND	0	841	
COLUMBUS	0	1042	
DAYTON	0	1172	
MANSFIELD	0	931	
TOLEDO	0	742	
YOUNGSTOWN	0	638	
OKLAHOMA			
OKLAHOMA CITY	11	1687	
TULSA	5	1831	
OREGON			
ASTORIA	0	13	
BURNS U	0	407	
EUGENE	0	235	
MEACHAM	0	222	
MEDFORD	0	844	
PENDLETON	0	831	
PORTLAND	0	403	
SALEM	0	231	
SEXTON SUMMIT R	0	271	
PACIFIC AREA			
GUAM TAGUAC R	442	4715	
JOHNSTON	411	4456	
KOROR R	522	5775	
KWAJALEIN	534	5777	
MAJURO	479	5381	
PAGO PAGO	446	5351	
PONAPE R	505	5475	
TRUK MOEN ISLAND	523	5686	
WAKE	455	5037	
YAP R	495	5470	
PENNSYLVANIA			
ALLENTOWN	0	982	
ERIE	0	497	
HARRISBURG	0	1130	
PHILADELPHIA	0	[illegible]	
PITTSBURGH	0	846	
SCRANTON	0	[illegible]	
WILLIAMSPORT	0	692	
RHODE ISLAND			
BLOCK ISLAND	0	536	
PROVIDENCE	0	983	
SOUTH CAROLINA			
CHARLESTON	56	[illegible]	
CHARLESTON U	46	2428	
COLUMBIA	[illegible]	2124	
GRNVLLE-SPRINBRG	0	1532	
SOUTH DAKOTA			
ABERDEEN	[illegible]	761	
HURON	[illegible]	691	
RAPID CITY	0	599	
SIOUX FALLS	0	872	
TENNESSEE			
BRISTOL	1	1101	
CHATTANOOGA	1	1709	
KNOXVILLE	2	1445	
MEMPHIS	19	2235	
NASHVILLE	[illegible]	1770	
OAK RIDGE R	0	1338	
TEXAS			
ABILENE	32	2125	
AMARILLO	1	1456	
AUSTIN	93	2649	
BROWNSVILLE	[illegible]	[illegible]	
CORPUS CHRISTI	265	3543	
DALLAS	45	2539	
DEL RIO	69	2983	
EL PASO	7	1812	
FORT WORTH	33	2405	
GALVESTON U	191	3015	
HOUSTON INTERCON	151	[illegible]	
LUBBOCK	2	1594	
MIDLAND	5	1737	
PORT ARTHUR	137	2596	
SAN ANGELO	49	2366	
SAN ANTONIO	114	2846	
VICTORIA	201	[illegible]	
WACO	72	2553	
WICHITA FALLS	35	2124	
UTAH			
MILFORD	0	598	
SALT LAKE CITY	0	1048	
WENDOVER	0	[illegible]	
VERMONT			
BURLINGTON	0	650	
VIRGINIA			
LYNCHBURG	0	1163	
NORFOLK	17	[illegible]	
RICHMOND	9	1542	
ROANOKE	0	1208	
WALLOPS ISLAND	2	1218	
WASHINGTON			
OLYMPIA	0	67	
QUILLAYUTE	0	12	
SEATTLE	0	131	
SEATTLE-TACOMA	0	140	
SPOKANE	0	530	
STAMPEDE PASS R	0	[illegible]	
WALLA WALLA U	0	979	
YAKIMA	0	585	
WEST INDIES			
SAN JUAN P.R.	475	[illegible]	
WEST VIRGINIA			
BECKLEY	0	574	
CHARLESTON	2	1130	
ELKINS	[illegible]	428	
HUNTINGTON	0	1296	
PARKERSBURG U	[illegible]	1161	
WISCONSIN			
GREEN BAY	0	638	
LA CROSSE	[illegible]	[illegible]	
MADISON	0	613	
MILWAUKEE	0	[illegible]	
WYOMING			
CASPER	0	[illegible]	
CHEYENNE	0	293	
LANDER	0	412	
SHERIDAN	0	[illegible]	

STORM SUMMARY

NOVEMBER 1973

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				@ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				Ø ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS
Alabama	8	4		40	7						[illegible]	6																	
Alaska												?																	
Arizona *																													
Arkansas	13	3	1	24	6			3			2	5																	
California								?	?	3		?	?			?	?				?					9	8	?	?
Colorado																			4	4									
Connecticut												3																	
Delaware												4															1	?	
Florida *																													
Georgia	2	2			5							5																	
Hawaii																											1	5	
Idaho											1	4																	
Illinois					?						3	?	?			?	?												
Indiana											13	6																	
Iowa															1	4						1	4						
Kansas	8	2			5			4	?			5				4					4								
Kentucky	3	1		4	5																								
Louisiana	6	3		1	4							4				2												3	
Maine *																													
Maryland												4																?	
Massachusetts											2	4																	
Michigan *																													
Minnesota *																													
Mississippi	18	4	1	81	6			°4	3		2	4	3			3												5	4
Missouri	3	1	5	7	5						3	5	?			?	?												
Montana											2	4																	
Nebraska																				4				5					
Nevada	1	1									7	6																	
New Hampshire *																													
New Jersey	1	1								1	8	5											1	?					
New Mexico *																													
New York										1	2	5	?		1	3				?									
North Carolina *																													
North Dakota *																													
Ohio												4		1															
Oklahoma	8	4	5	61	7			4	4			4		2		4										2		6	?
Oregon												?	?				2	?	4									?	
Pacific Area *																													
Pennsylvania <>																													
Puerto Rico *																													
Rhode Island											1	3				1													
South Carolina	1	1			4							4																	
South Dakota																				4				6					
Tennessee	3	2		1	5						21	5				5										3	1	4	
Texas	9	4		4	5			5	?	2		5																	
Utah												5																	
Vermont *																													
U.S. Virgin Is. *																													
Virginia *																													
Washington *																													
West Virginia																												5	
Wisconsin *																													
Wyoming												°6	C			3				3									

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

NOVEMBER 1973

Herbert J. Thompson and Ray J. Haley,
Office of Hydrology

During the month severe flash flooding occurred in several counties along the West Virginia - Kentucky border, and major flooding was reported on the Cumberland River in Kentucky. In the White River Basin in Arkansas a new record crest occurred on the Buffalo River at Gilbert. Less serious flooding was reported on the Arkansas River and the Sulphur, Trinity, and Sabine Rivers in Texas. Minor flooding occurred in several river basins including the Tombigbee, Des Moines, Maramec, Kansas, Lower Missouri, Kentucky, Green, and Tennessee.

The flooding in the Ohio and Arkansas - White - Red Basins signaled the beginning of another major flood on the Lower Mississippi during the following month.

Near record rainfall totals for the month in northern California, western Oregon, and much of the Columbia River Basin conclusively ended the drought which in the Spokane area had lasted for 13 months. This excessive rainfall caused flooding on the Upper Sacramento River, coastal streams in Oregon, and the Willamet River Basin.

Hydrological events of unusual significance or involving loss of life or property damage are discussed in more detail below.

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	OHIO RIVER BASIN		
Kanawha and Big Sandy River Basins	Severe flash flooding occurred on the 27th in Lincoln, Boone, and Kanawha counties in western West Virginia and Johnson and Martin counties in eastern Kentucky. More than 3 inches of rain fell over the area with a storm total of 8 inches reported at Thelma, Kentucky, where 1.03 inches was observed in a 20-minute downpour. Among the communities affected were Cedar Grove, Dupont City, Drybranch, Glasgow, Winfrede, and Lauderdale. Minor river flooding was also reported. Damage to roads and homes was estimated at $179,000 in West Virginia and $510,000 in Kentucky. About 300 people were evacuated with 150 being sheltered overnight.	0	689
Cumberland River Basin	A low pressure system moved northeastward up the basin on the 26th followed by another system the next day. Rainfall averaged 5 inches over the basin with some reports of more than 8 inches and a maximum point total at Petros, Tennessee, of 11.4 inches. Major flooding developed along the Upper Cumberland River in southeastern Kentucky which was comparable to the record flood of 1946, but slightly lower at most points. However, the crest of 42.8 feet at Barbourville, Kentucky equalled that of of 1946. Damage of $1,814,000 was reported to agriculture, highways, and residence from Williamsburg to Baxter-Harlan, even though the Corps of Engineers estimates that $8 million damage was prevented through the operation of the flood protection	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

NOVEMBER 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	OHIO RIVER BASIN-Cont'd		
	system, including flood stage forecasts and warnings. An additional $74,000 damage was reported along the Harpath River. Counties affected were Bell, Knox, Harlan, and Whitley, including the communities of Pineville, Middlesboro, and Harlan in Kentucky. Downstream, Wilson County in Tennessee was hit hard by flooding of Town Creek which runs through the community of Lebanon. From 1,200 to 1,500 people were evacuated from these areas.		
	ARKANSAS-RED-WHITE BASINS		
Lower Arkansas, Red, and White River Basins	A ten-day period of rainfall from the 17th to the 27th caused extensive flooding along the lower Arkansas River and some of the northern tributaries of the Red River in eastern Oklahoma and Arkansas and in the White Basin in northern Arkansas. The heaviest rainfall occurred at the end of this period after the ground was thoroughly soaked. Storm totals of 6 to 7 inches or more were common throughout this area. The Buffalo River at Gilbert, Arkansas, rose to 43 feet in a 40 hour period, 23d-25th, reaching a crest of 46.6 feet, which was a new record for the station. The previous record crest was 44.0 feet on December 10, 1971. In eastern Oklahoma most damage was to roads and bridges. Along the Arkansas River there was some loss to soybean and cotton crops not yet harvested. Flooding of residential areas in North Little Rock caused evacuation of 23 families. There was considerable damage to marinas and other riverside facilities, including a large warehouse under construction in the Little Rock area.	0	N.A.
Sulphur River (Texas)	Three periods of moderate lowland flooding occurred during November. The stream was above flood stage at both the beginning and end of the month. Rainfall amounts of 1 to more than 3 inches occurred on the 3d-4th, 19th-20th, and on the 26th which served to maintain the stream above flood stage most of the month. Damage, estimated at $125,000 by the Corps of Engineers, was almost entirely agricultural.	0	125

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

NOVEMBER 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	LOWER MISSISSIPPI BASIN		
Mississippi River Main Stem	After a 3-foot rise during the first week of the month, stages remained relatively stable in the Caruthersville-Memphis-Helena reach until the last seven days of the month when heavy rains over the major tributary systems caused a 13 to 14 foot rise along this reach with the river approaching flood stage at the end of the month. Below Natchez, the river was in general recession most of the month but a strong rise also occurred through this reach during the final week due to heavy rains over the Arkansas - Red Basins.	0	0
	WEST GULF OF MEXICO DRAINAGE		
Sabine River Basin	Two periods of flooding occurred during the month along the Upper Sabine River. Flooding from heavy runoff in October continued until the 13th. During the period 20th-26th, rainfall of up to 5 inches fell over the basin resulting in another period of flooding which extended into December. Damage estimates by the Corps of Engineers include: $110,000 from Iron Bridge Dam to Lake Fork Creek; $46,000 from River Hill, Texas to Logansport, Louisiana; $74,000 along Lake Fork Creek; and $9,000 along Big Sandy Creek. An estimated 1,000 acres were inundated.	0	239
Trinity River Basin	Except for the East Fork of the Trinity near Crandall, flooding was primarily a continuation of that which began in October. Although more than 58,000 acres were inundated there was little additional damage since crops had already been destroyed by earlier flooding.	0	1
	PACIFIC SLOPE DRAINAGE		
Sacramento River Basin	Northern California experienced one of the wettest Novembers on record. Inflow to Shasta and Clair Engle Lakes was the greatest of record. A new all time record precipitation total for November of 28.36 inches was recorded at Blue Canyon in the Sierra Nevada Mountains. Precipitation in the Sacramento River Valley was 300 to 400 percent of normal. The major storm activity occurred in two periods, 8th-17th and the 28th-30th. Flood stages were exceeded at Tehama Bridge and Vina Woodson Bridge with warning stages exceeded at Ord Ferry, Colusa Bridge, Moulton Weir, Colusa	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

NOVEMBER 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	PACIFIC SLOPE DRAINAGE-Cont'd		
	Weir, Tisdale Weir, Fremont Weir, and Wilkins Slough. What damage occurred was agricultural in nature.		
Russian and Napa River Basins	Rainfall totals for November were 3 to 5 times normal, ranging from 14 to 33 inches in the Russian River Basin and 13 to 17 inches in the Napa Basin. The excessive rain fell over a period of 20 days which combined with the previously dry conditions prevented any significant flooding although the Russian River exceeded warning stage at Summer House, cresting at 30.5 feet on the 12th.	0	0
Eel and Smith River Basins	The excessive precipitation over Northern California discussed above resulted in significant rises with crests near flood stage at several points. Warning stages were exceeded at Dr. Fine Bridge and Crescent City on the Smith River, Fernbridge on the Eel River, and Bridgeville on the Van Duzen River, a tributary of the Eel.	0	0
Coquille River Basin	Unusually heavy rainfall occurred over the southern Oregon Coastal Range during November with monthly totals ranging up to the 45.45 inches reported near Port Orford. There were three periods of heavy rainfall; the 4th-6th, 8th-16th, and 27th-29th. There was some flooding along the coast but the more serious flooding occurred in the Coquille River Basin where more than 18,000 acres were inundated. Damage was to pasture lands and roads.	0	5
Coastal Streams in Oregon	It was the heaviest November rainfall in 40 years over western Oregon. Monthly totals over the central Coast Range averaged 26 inches with the greatest amount of 34.18 inches reported from the Alsea Fish Hatchery. The Wilson, Siuslaw, Alsea, Siletz, and Nehalem Rivers went over flood stage with the Alsea River making the greatest rise, cresting 5.2 feet over flood stage at tidewater on the 15th. Damage estimated by the Corps of Engineers at $366,000.	0	366
Willamette River Basin	Precipitation totals for November, in addition to the average of 26 inches over the Coast Range mentioned above, included an average of 19 inches over the Willamette Valley and 24 inches over the northern Cascades, most of which fell as snow above the 2,500	0	2,212

Basin and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	PACIFIC SLOPE DRAINAGE-Cont'd		
	foot level. This unusually heavy rainfall caused flooding on streams draining the western side of the basin, most significant of which was the 8 days of flooding on the Tualatin River and the 15 days of flooding on the Pudding River. Damage was estimated by the Corps of Engineers at $2,212,000.		

FLOOD STAGE DATA

(All dates in November unless otherwise specified)

NOVEMBER 1973

River and station	Flood stage	Above flood stages -dates		Crest	
		From—	To—	Stage	Date
	Ft.			Ft.	
EAST GULF OF MEXICO DRAINAGE					
Old Town Creek:					
Tupelo, Miss.	21	28	29	24.70	28
Tombigree:					
Fulton, Miss.	16	28	Dec 4	18.31	28
Amory, Miss.	20	28	Dec 3	24.73	29
Aberdeen, Miss	34	29	Dec 6	37.56	30
Pearl:					
Jackson, Miss.	18	28	Dec 11	24.40	Dec 2
Bogalusa, La.	15	29	Dec 15	17.5	Dec 2
Upper Mississippi Basin					
East Fork Des Moines River:					
Burt, Iowa	10	21	25	#10.5	23
North Raccoon River:					
Jefferson, Iowa	10	21	28	#11.8	23
Des Moines River:					
Saylorville, Iowa	12	23	30	14.49	25
Big River:					
Byrnesville, Mo	16	26	28	19.1	27
Meramec River:					
Pacific, Mo.	18	26	30	24.30	29
Eureka, Mo.	18	27	29	20.8	28
Valley Park, Mo.	16	27	30	19.05	29
Missouri Basin					
Platte River:					
Agency, Mo.	20	22	23	22.2	22
Fancy Creek:					
Winkler, Kans.	11	Oct 13	6	#26.49	Oct 18
Wakarusa River:					
Lawrence, Kans.	23	20	20	#25.0	20
Stranger Creek:					
Easton, Kans.	15	20	21	17.05	21
Grand River:					
Sumner, Mo.	26	21	23	29.00	22
Blackwater River:					
Valley City, Mo.	22	20	22	26.00	21
Pottawatomie Creek:					
Garnett, Kans.	26	20	21	#27.50	21
Lane, Kans.	23	21	22	#23.24	22
Gasconade River:					
Jerome, Mo.	15	26	28	18.48	27
Missouri River:					
Lexington, Mo.	22	21	23	22.4	22
Waverly, Mo.	18	Oct 11	3	28.84	Oct 13
		21	25	19.80	22
Ohio Basin					
West Fork:					
Clarksburg, W. Va.	7	28	28	7.3	28
Little Kanawha:					
Glenville, W. Va.	23	28	28	24.28	28
Coal:					
Tornado, W. Va.	25	28	28	26.0	28
Paint Creek:					
Bourneville, Ohio	10	28	30	10.11	29
Scioto:					
Circleville, Ohio	14	26	30	16.75	29
Piketon, Ohio	16	27	Dec 1	19.55	30
North Fork Kentucky:					
Hazard, Ky.	20	27	28	23.4	28
Jackson, Ky.	29	28	29	34.4	28
Green:					
Munfordville, Ky.	28	28	30	#35.7	29
Brownsville, Ky.	18	28	Dec 1	#22.74	30
Woodbury, Ky.	33	28	Dec 2	#38.14	30
Embarrass:					
Lawrenceville, Ill.	11	26	29	13.5	27
White:					
Elliston, Ind.	18	27	Dec 1	19.20	28
Edwardsport, Ind.	15	29	Dec 2	15.7	30
Skillet Fork:					
Wayne City, Ill.	15	25	28	#18.40	26
Little Wabash:					
Wilcox, Ill.	16	25	30	#20.00	28
Carmi, Ill	7	30	Dec 4	#27.38	30
Harpeth:					
Kingston Springs, Tenn.	15	27	29	20.77	28
Ohio Basin-Continued					
Red:					
Port Royal, Tenn.	30	27	29	35.44	28
Cumberland:					
Baxter Harlan W.W.O., Ky.	16	27	28	22.0	28
Pineville, Ky.	1002	27	29	1008.7	28
Barbourville, Ky.	27	27	Dec 1	42.8	29
Williamsburg, Ky.	21	27	Dec 2	31.13	30
Clarksville, Tenn.	46	28	30	46.2	29
French Broad:					
Rosman, N. C.	8	21	21	8.01	21
Emory River:					
Oakdale, Tenn.	25	27	27	25.78	27
		28	28	26.19	28
South Chickamauga Creek:					
Chickamauga, Tenn.	10	28	30	15.51	29
Elk:					
Fayetteville, Tenn.	661	27	28	661.95	28
Duck:					
Columbia, Tenn.	32	27	30	39.97	29
Tennessee:					
Whitesburg, Ala.	560	28	Dec 3	564.41	Dec 1
Florence, Ala.	419	28	Dec 3	419.74	Dec 2
Gilbertville, Ky.	320	29	Dec 11	327.70	Dec 6
Ohio River:					
Shawneetown, Illinois	33	30	Dec 8	# 39.2	Dec 6
Dam 50, Ky.	34	30	Dec 9	# 41.8	Dec 6
Cairo, Ill.	40	30	Dec 13	45.68	Dec 9
White Basin					
Buffalo:					
Gilbert, Ark.	30	25	25	46.6	25
Current:					
Doniphan, Mo.	12	26	27	16.50	27
Black:					
Poplar Bluff, Mo.	16	25	27	18.0	26
Pocahonias, Ark.	17	25	Dec 16	22 59	30
Black Rock, Ark.	14	24	1/	25.3	25
				25.9	Dec 5
Cache:					
Patterson, Ark.	7	26	1/	10.3	Dec 7
White:					
Calico Rock, Ark.	19	25	26	29.75	25
Patesville, Ark.	23	25	27	36.0	26
Newport, Ark.	26	26	Dec 10	30.2	28
				29.3	Dec 6
Augusta, Ark.	32	28	Dec 15	34.05	29
					Dec 8
Georgetown, Ark.	21	29	Dec 19	24.9	Dec 1
				25.6	Dec 8
Arkansas Basin					
Cow Creek:					
Lyons, Kans.	18	23	24	18.1	23
Little Caney:					
Copan, Okla.	21	24	25	E 23.0	25
Caney:					
Ramona, Okla.	27	25	26	E 29.0	26
Bird Creek:					
Avant, Okla.	16	25	25	E 19.0	25
Sperry, Okla.	21	25	25	E 25.0	25
Owasso, Okla.	25	25	27	E 29.0	27
Neosho:					
Chanute, Kans.	23	21	21	23.02	21
Oswego, Kans.	17	22	23	17.55	22
Illinois:					
Tahlequah, Okla.	11	24	26	E 22.0	26
Little:					
Tecumseh, Okla.	11	25	25	11.0	25
Deep Fork:					
Beggs, Okla.	18	25	30	E 22.0	27
Fourche Maline:					
Red Oak, Okla.	15	24	26	20.5	25
Poteau:					
Poteau, Okla.	24	24	25	E 27.0	25
Panama, Okla.	24	24	29	E 36.0	25
Fourche La Fave:					
Houston, Ark.	25	25	Dec 3	31.32	28
Arkansas:					
Ozark L & D 12, 1 W, Ark.	357	25	28	365.25	26

FLOOD STAGE DATA

(All dates in November unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest	
		From—	To—	Stage	Date
	Ft.			Ft.	
Arkansas Basin-Continued					
Arkansas-Continued					
Morrilton, Ark.	30	25	29	35.94	27
Little Rock, Ark.	23	26	29	24.81	27
Red River Basin					
Washita:					
Pauls Valley, Okla.	24	24	25	E 26.0	24
Blue:					
Blue, Okla.	21	25	27	29.35	26
Muddy Boggy Creek:					
Farris, Okla.	38	24	28	E 42.0	25
Sulphur:					
Hagansport, Tex.	44	Oct 27	7	47.69	Oct 31
		21	21	44.60	21
		25	Dec 6	46.95	27
					Dec 4
Naples, Tex.	22	2	15	31.13	8
		26	Dec 12	U	U
Little Missouri:					
Boughton, Ark.	20	24	25	20.99	25
Saline:					
Benton, Ark.	20	24	25	23.11	24
Ouachita:					
Arkadelphia, Ark.	17	24	25	21.42	24
		26	28	20.08	27
Camden, Ark.	26	26	Dec 17	37.0	Dec 8
Lower Mississippi Basin					
St. Francis:					
St. Francis, Ark.	18	25	1/	20.6	28
Tallahatchie:					
Swan Lake, Miss.	26	30	Dec 12	27.37	Dec 3
WEST GULF OF MEXICO DRAINAGE					
Calcasieu:					
Hineston, La.	12	28	Dec 1	U	U
Lake Fork Creek:					
Quitman, Tex. (Near)	16	2	3	18.41	2
		28	29	16.60	29
Sabine:					
Emory, Tex.	12	Oct 31	13	14.53	1
		26	Dec 7	13.30	29
Mineola, Tex.	14	Oct 15	18	A 17.65	5
		26	Dec 11	16.44	Dec 1
Gladewater, Tex.	26	7	18	29.79	12
Longview, Tex.	25	13	20	26.21	16
		29	U	25.30	29
Attoyac Bayou:					
Chireno, Tex. (Near)	14	6	11	16.49	7
Angelina:					
Lufkin, Tex. (Near)	8	U	1	10.10	29-30
Neches:					
Alto, Tex. (Near)	16	30	Dec 16	17.90	Dec 5
Diboll, Tex. (Near)	10	Oct 13	1/	A 13.81	6
Lawsons Crossing, Tex.	4	12	15	4.15	13
East Fork Trinity:					
Crandall, Tex.	13	Oct 20	4	16.23	Oct 31
		9	17	14.64	16
		26	Dec 4	13.94	27
Trinity:					
Dallas, Tex.	30	Oct 31	1	32.08	Oct 31
Rosser, Tex.	26	U	3	28.62	2
WEST GULF OF MEXICO DRAINAGE Continued					
Trinity--Continued:					
Trinidad, Tex.	28	1	7	34.52	3
Liberty, Tex.	24	Oct 13	9	28.0	Oct 20-22
Moss Bluff, Tex.	4	B U	Dec 16	A 7.4	4-5
Navasota:					
Easterly, Tex. (Near)	14	24	28	15.6	26
Bryan, Tex. (Near)	12	3	8	12.50	6
		26	1/	13.2	30
Guadalupe:					
Dupont, Tex.	20	Oct 11	30	26.5	Oct 14
Nueces:					
Tilden, Tex.	14	Sept 26	5	22.4	Oct 8
Mathis Bridge, Tex.	15	Sept 27	4	30.1	Oct 12
Calallen, Tex.	7	Sept 28	7	11.0	Oct 13
PACIFIC SLOPE DRAINAGE					
Sacramento:					
Tehama, Calif.	213	18	19	214.1	18
		30	1/	216.1	Dec 1
Vina Woodson Bridge, Calif	183	30	1	185.1	Dec 1
South Fork Coquille:					
Myrtle Point, Ore.	35	4	5	35.24	5
		8	10	36.48	9
		11	17	38.98	12
		29	30	36.12	29
Coquille:					
Coquille, Ore.	21	13	13	21.1	13
		14	14	21.0	14
		16	17	21.3	16
Wilson:					
Tillamook, Ore.	10	9	9	11.94	9
		15	16	11.71	15
		27	29	12.39	28
Sinslow:					
Mapleton, Ore.	18	15	16	21.64	15
Alsea:					
Tidewater, Ore.	18	15	16	E 23.2	15
Siletz:					
Siletz, Ore.	16	15	16	E 18.74	16
Nehalem:					
Foss, Ore.	13	15	17	14.29	16
		28	28	14.00	28
Columbia Basin					
Marys:					
Philomath, Ore.	20	15	15	20.98	15
Luckiamute:					
Suver, Ore.	27	16	16	31.9	16
South Yamhill:					
Whiteson, Ore.	38	15	18	44.5	16
Pudding:					
Aurora, Ore.	20	15	25	25.7	17
		29	Dec 2	20.8	30
Tualatin:					
Farmington, Ore.	29	15	23	32.38	17
Johnson Creek:					
Sucamore, Ore.	8	15	16	10.24	15
Willamette:					
Oregon City, Ore. (Lower)	27	17	17	27.3	17

B Above flood stage entire month.

A See previous monthly for additional crest information.

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y. 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	86	2.7	-1.0	25	2.1
1000	22	164	.9	-3.5	27	3.2
950	30	542	2.2	-1.7	27	6.6
900	30	978	.3	-3.2	28	11.4
850	30	1,435	-1.8	-5.8	29	13.9
800	30	1,916	-3.5	-8.7	29	14.6
750	30	2,425	-5.1	-11.6	29	16.2
700	30	2,966	-7.1	-15.6	29	17.7
650	30	3,542	-9.3	-19.1	28	20.7
600	30	4,157	-12.5	-22.3	28	23.8
550	30	4,817	-16.2	-27.8	28	25.5
500	30	5,527	-21.2	-31.6	28	25.3
450	30	6,297	-26.4	-37.0	28	26.3
400	30	7,138	-32.3	-41.0	28	27.1
350	30	8,071	-38.8	-45.2	27	27.8
300	30	9,110	-45.6		28	29.8
250	29	10,297	-51.9		28	33.4
200	29	11,728	-56.3		28	32.2
175	29	12,574	-56.9		28	29.8
150	27	13,537	-56.3		28	27.9
125	27	14,692	-57.4		27	23.5
100	26	16,097	-58.7		28	21.2
80	24	17,493	-59.3		27	20.9
70	24	18,330	-58.8		27	19.4
60	24	19,297	-58.9		27	16.7
50	24	20,443	-58.6		26	16.4
40	21	21,845	-56.9		26	18.0
30	19	23,671	-55.1		26	19.8
25	18	24,836	-54.8		25	22.3
20	16	26,269	-54.0		26	27.4
15	9	28,172	-48.6			
10	5	30,904	-45.9			
7						

ALBUQUERQUE, N. MEX. 837 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,619	1.2	-8.0	22	.3
1000						
950						
900						
850						
800	30	1,993	6.6	-9.3	26	3.6
750	30	2,520	4.0	-10.9	27	6.6
700	30	3,077	.5	-13.6	27	9.4
650	30	3,669	-2.5	-16.6	27	12.3
600	30	4,299	-6.4	-21.2	27	13.8
550	29	4,971	-10.9	-26.5	26	15.8
500	29	5,697	-15.3	-31.1	26	18.8
450	27	6,495	-20.5	-35.5	26	20.4
400	27	7,356	-26.9	-41.1	26	21.1
350	26	8,306	-34.0	-46.5	27	21.2
300	24	9,370	-41.8	-51.7	27	22.8
250	22	10,609	-50.4		27	24.7
200	22	12,035	-59.0		27	25.3
175	22	12,867	-61.3		27	25.3
150	21	13,818	-62.5		26	24.4
125	21	14,936	-64.8		26	24.8
100	21	16,290	-67.4		26	22.4
80	21	17,632	-67.4		27	18.8
70	21	18,439	-66.1		27	14.7
60	20	19,370	-65.2		26	11.5
50	20	20,486	-63.6		27	8.5
40	18	21,864	-61.3		27	9.8
30	18	23,674	-57.1		26	11.5
25	18	24,833	-55.2		26	16.4
20	18	26,268	-52.1		26	21.6
15	18	28,146	-48.9		26	31.7
10	7	30,818	-49.4			
7						

AMARILLO, TEXAS 890 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,095	4.3	-1.9	24	2.7
1000						
950						
900						
850	30	1,469	9.6	-3.9	26	7.8
800	30	1,972	9.7	-7.9	27	9.4
750	30	2,506	7.4	-11.4	26	10.9
700	30	3,070	3.9	-14.7	26	11.4
650	30	3,668	.2	-17.6	26	11.7
600	30	4,304	-3.9	-21.0	26	13.4
550	30	4,985	-8.8	-24.5	26	15.3
500	30	5,716	-14.1	-29.1	26	17.2
450	30	6,506	-19.9	-34.3	26	19.1
400	29	7,366	-26.3	-40.0	26	21.6
350	29	8,321	-33.0	-45.4	26	24.4
300	29	9,385	-41.0	-49.6	26	27.1
250	29	10,599	-50.5		26	31.4
200	29	12,026	-58.8		26	34.3
175	29	12,860	-60.8		26	31.5
150	29	13,816	-62.0		26	30.2
125	28	14,938	-64.3		26	29.3
100	28	16,293	-66.4		26	25.6
80	27	17,643	-67.1		26	20.6
70	27	18,451	-65.8		26	16.3
60	27	19,389	-64.9		26	13.9
50	26	20,507	-63.2		27	11.6
40	26	21,892	-60.0		26	9.5
30	26	23,699	-56.9		26	14.9
25	25	24,861	-54.8		26	18.5
20	25	26,296	-52.7		26	22.1
15	20	28,156	-50.6		26	30.4
10	9	30,796	-50.1			
7						

* ANCHORAGE, ALASKA 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	45	-9.9	-12.9	02	1.6
1000	25	151	-8.1	-13.9	02	2.5
950	30	517	-7.2	-14.0	01	3.9
900	30	939	-7.3	-15.6	01	4.8
850	30	1,384	-7.9	-17.1	36	4.9
800	30	1,854	-9.5	-19.4	35	4.5
750	30	2,351	-11.2	-21.3	34	4.7
700	30	2,879	-13.4	-24.0	33	4.8
650	30	3,440	-16.3	-26.8	32	6.0
600	30	4,038	-19.7	-31.5	32	7.9
550	30	4,679	-23.5	-34.9	32	9.9
500	30	5,370	-28.2	-39.2	31	10.5
450	30	6,119	-32.6	-41.5	31	11.8
400	30	6,939	-38.4	-45.1	31	12.6
350	30	7,848	-44.5	-46.3	31	12.6
300	30	8,864	-50.3		30	11.6
250	30	10,044	-53.5		30	14.6
200	30	11,474	-54.7		30	15.2
175	30	12,331	-53.8		30	14.3
150	30	13,322	-53.4		30	13.1
125	30	14,495	-53.7		30	13.7
100	29	15,930	-54.2		30	13.6
80	29	17,361	-54.4		30	14.2
70	29	18,215	-55.0		30	14.5
60	29	19,199	-55.7		30	15.5
50	27	20,359	-55.8		30	16.8
40	26	21,775	-56.6		30	17.6
30	23	23,615	-58.3		31	19.6
25	22	24,766	-59.1		31	20.0
20	22	26,163	-59.8		31	21.9
15	19	27,963	-60.6		31	22.6
10	17	30,512	-60.8		31	26.1
7	7	32,724	-58.6			

* ANNETTE, ALASKA 1004 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	37	-1.2	-7.6	06	2.4
1000	19	131	-1.7	-10.2	04	3.5
950	30	479	-3.1	-9.2	09	4.3
900	30	905	-5.8	-11.2	11	4.1
850	30	1,352	-8.0	-13.8	13	3.1
800	30	1,821	-10.4	-16.0	15	2.6
750	29	2,314	-13.1	-20.1	15	1.8
700	29	2,836	-16.4	-23.2	15	.9
650	29	3,390	-19.8	-26.5	20	.7
600	29	3,980	-23.3	-30.2	24	1.4
550	29	4,612	-27.3	-35.0	26	2.1
500	29	5,292	-32.1	-39.4	29	1.9
450	29	6,029	-37.0	-40.0	30	2.6
400	29	6,834	-42.4	-39.2	31	4.6
350	28	7,721	-47.3		30	5.6
300	28	8,731	-50.3		30	8.7
250	27	9,906	-51.1		29	10.2
200	27	11,360	-50.2		31	11.1
175	27	12,230	-50.9		31	11.3
150	27	13,232	-51.6		31	12.3
125	27	14,412	-52.8		30	11.7
100	27	15,848	-54.0		31	12.5
80	27	17,278	-54.6		31	12.6
70	27	18,131	-55.6		31	12.9
60	26	19,113	-56.2		31	12.6
50	26	20,267	-57.7		32	13.1
40	25	21,675	-58.8		32	14.4
30	23	23,482	-59.2		32	15.0
25	20	24,616	-59.9		32	16.4
20	17	26,031	-59.4		32	15.6
15	9	27,781	-59.6			
10	8	30,367	-54.8			
7						

ATHENS, GEORGIA 992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	8.1	6.2	26	.4
1000						
950	30	606	11.9	5.0	25	4.1
900	30	1,058	10.5	1.7	26	6.6
850	30	1,533	8.9	-1.9	27	8.0
800	30	2,034	7.9	-6.6	27	9.1
750	30	2,565	6.0	-9.8	27	11.2
700	30	3,127	3.1	-13.4	27	12.4
650	30	3,724	.1	-16.4	27	13.8
600	30	4,361	-3.3	-20.3	28	15.4
550	30	5,044	-7.5	-23.9	28	17.1
500	30	5,779	-12.4	-27.9	28	19.7
450	30	6,575	-18.0	-31.7	28	22.1
400	30	7,445	-24.6	-38.2	28	23.8
350	30	8,406	-31.8	-43.4	28	26.2
300	30	9,474	-40.3	-48.7	28	27.0
250	30	10,692	-49.8		28	29.1
200	30	12,120	-59.0		28	33.0
175	30	12,952	-61.6		28	35.1
150	30	13,903	-63.4		28	34.1
125	30	15,017	-65.8		28	32.7
100	30	16,364	-68.5		28	26.0
80	29	17,699	-69.1		28	19.4
70	29	18,500	-67.3		28	14.2
60	29	19,436	-64.4		28	10.8
50	29	20,558	-61.5		27	7.9
40	29	21,954	-57.8		27	8.5
30	29	23,788	-53.3		27	9.5
25	29	24,968	-51.2		27	10.5
20	28	26,431	-48.9		26	11.5
15	27	28,327	-47.3		26	17.9
10	17	31,027	-46.1		26	27.6

* BARROW, ALASKA 1020 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	8	-13.5	-15.5	07	.9
1000	25	179	-12.2	-14.8	14	.8
950	28	550	-14.2	-16.1	07	1.0
900	28	960	-14.5	-17.9	15	.5
850	28	1,393	-15.3	-20.0	13	.8
800	28	1,850	-16.5	-22.0	12	.3
750	28	2,334	-18.0	-25.0	22	.6
700	28	2,848	-19.9	-27.4	27	1.9
650	28	3,395	-22.5	-29.7	27	2.0
600	28	3,979	-25.8	-33.1	27	2.8
550	28	4,604	-29.6	-36.5	27	3.7
500	28	5,278	-33.9	-38.6	28	4.4
450	28	6,010	-38.2	-40.1	29	5.3
400	28	6,813	-43.1	-42.6	29	7.0
350	28	7,706	-48.0		29	8.5
300	28	8,709	-52.6		29	9.4
250	28	9,879	-54.9		29	11.0
200	28	11,305	-55.0		28	9.9
175	28	12,160	-54.4		28	9.5
150	27	13,150	-54.4		28	9.7
125	27	14,316	-55.3		28	9.9
100	25	15,746	-55.9		27	10.8
80	22	17,170	-57.5		28	12.8
70	21	18,003	-58.0		28	13.6
60	19	18,992	-58.5		28	15.0
50	15	20,161	-59.8		28	18.4
40	13	21,554	-61.7		28	20.9
30						
25						
20						
15						
10						

BARTER IS., ALASKA 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	15	-16.4	-18.8	23	1.9
1000	26	177	-13.0	-16.1	25	2.5
950	29	546	-13.5	-17.4	25	2.3
900	29	958	-13.2	-18.8	26	2.4
850	29	1,392	-14.0	-20.3	26	1.8
800	29	1,852	-15.3	-21.9	27	1.7
750	29	2,338	-17.2	-23.6	27	1.8
700	29	2,853	-19.4	-26.0	28	2.1
650	29	3,401	-22.0	-28.4	28	2.7
600	29	3,986	-25.3	-31.9	29	3.6
550	29	4,613	-29.1	-34.8	29	4.1
500	29	5,288	-33.4	-37.3	29	5.2
450	29	6,021	-38.0	-39.5	29	5.7
400	29	6,824	-43.0	-41.4	29	7.0
350	29	7,717	-48.0		29	7.7
300	29	8,721	-52.2		30	8.1
250	29	9,893	-54.7		30	8.8
200	29	11,319	-54.6		30	8.3
175	29	12,174	-54.7		30	7.2
150	29	13,161	-54.5		30	8.3
125	28	14,333	-55.4		29	8.3
100	26	15,742	-56.0		29	10.4
80	26	17,156	-57.6		29	10.9
70	26	17,997	-58.6		29	12.8
60	26	18,964	-59.5		30	13.6
50	23	20,135	-60.0		29	14.5
40	20	21,542	-60.7		30	16.2
30	17	23,334	-62.0		30	18.3
25	13	24,481	-63.2		30	21.9
20	7	25,882	-63.2			
15	6	27,642	-65.3			
10						

BETHEL, ALASKA 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	39	-6.4	-9.1	13	.4
1000	26	161	-5.5	-7.5	10	.4
950	30	530	-3.7	-6.9	25	1.6
900	30	957	-4.9	-8.9	26	2.8
850	30	1,406	-6.2	-12.1	27	4.6
800	30	1,879	-7.7	-14.7	27	5.6
750	30	2,379	-9.8	-18.2	27	6.8
700	30	2,909	-12.4	-20.3	27	7.5
650	30	3,472	-15.3	-24.9	28	8.4
600	30	4,073	-18.7	-30.2	27	9.7
550	30	4,717	-22.7	-33.4	27	10.5
500	30	5,410	-26.9	-35.5	27	12.4
450	30	6,163	-31.8	-38.0	28	12.8
400	30	6,987	-37.2	-39.1	28	14.1
350	30	7,901	-42.9	-41.2	26	13.8
300	30	8,924	-48.9		26	15.5
250	30	10,109	-53.5		26	17.9
200	30	11,534	-55.7		26	17.2
175	30	12,386	-54.9		27	16.4
150	30	13,373	-54.6		27	14.6
125	28	14,553	-54.6		27	13.9
100	28	15,984	-54.3		27	13.6
80	28	17,413	-54.3		27	13.5
70	28	18,269	-54.4		27	13.9
60	27	19,254	-54.8		28	14.7
50	27	20,419	-55.0		28	16.0
40	27	21,845	-55.7		29	16.0
30	27	23,671	-57.4		29	18.5
25	27	24,822	-59.0		29	19.9
20	26	26,217	-59.1		30	20.8
15	20	28,054	-59.2		30	23.5
10	8	30,615	-59.2			

* BISMARCK, N. DAK. 955 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	503	-6.8	-8.6	31	.9
1000						
950	20	588	-7.7	-10.5	33	1.2
900	30	969	-4.2	-7.3	31	4.4
850	30	1,421	-3.2	-9.0	31	6.6
800	30	1,900	-4.5	-11.2	30	8.1
750	30	2,406	-6.8	-13.7	29	10.1
700	30	2,942	-9.5	-17.4	29	11.8
650	30	3,512	-12.5	-20.3	28	12.8
600	30	4,119	-16.1	-24.7	28	14.1
550	30	4,769	-20.1	-29.0	28	15.8
500	30	5,469	-24.7	-33.5	28	18.1
450	30	6,228	-30.1	-36.3	28	20.6
400	30	7,056	-36.0	-41.0	27	23.8
350	30	7,974	-42.4	-44.6	27	26.8
300	30	8,997	-48.9		27	28.8
250	30	10,182	-53.8		27	30.9
200	30	11,606	-56.1		27	30.0
175	30	12,453	-57.0		27	28.1
150	30	13,429	-56.8		27	27.4
125	30	14,584	-57.3		27	24.5
100	30	15,991	-58.6		27	21.8
80	30	17,390	-59.5		27	18.9
70	30	18,226	-59.8		27	16.6
60	29	19,189	-60.8		27	16.5
50	29	20,322	-60.7		27	16.2
40	27	21,708	-61.7		27	15.1
30	27	23,491	-61.0		27	15.8
25	25	24,624	-61.2		27	16.3
20	24	26,015	-60.2		27	19.0
15	19	27,803	-59.5		27	21.9
10	6	30,381	-56.5			

BOISE, IDAHO 912 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	871	4.3	-1.1	12	3.3
1000						
950						
900	30	981	4.9	-2.1	13	3.6
850	30	1,446	2.6	-4.3	20	3.4
800	30	1,934	-.8	-6.5	24	5.6
750	30	2,446	-4.5	-8.8	25	8.6
700	30	2,986	-8.2	-11.9	25	10.6
650	30	3,558	-11.4	-15.8	26	13.0
600	30	4,168	-15.0	-19.3	25	15.7
550	30	4,821	-19.2	-24.2	26	17.2
500	30	5,524	-24.2	-29.1	25	19.9
450	30	6,285	-29.0	-35.8	26	22.3
400	30	7,118	-34.2	-38.9	26	25.9
350	30	8,043	-40.4	-43.1	26	28.6
300	30	9,077	-46.9		26	31.4
250	30	10,268	-53.2		27	34.8
200	30	11,689	-57.6		27	33.3
175	30	12,530	-58.4		26	31.5
150	29	13,502	-57.6		26	27.2
125	29	14,651	-58.6		26	23.4
100	29	16,050	-59.6		26	20.1
80	27	17,438	-60.9		26	17.4
70	27	18,268	-61.0		26	16.7
60	27	19,227	-60.6		27	14.2
50	27	20,361	-60.8		27	12.1
40	25	21,748	-60.4		27	10.1
30	25	23,540	-60.3		27	11.8
25	24	24,681	-59.8		27	12.7
20	22	26,083	-59.2		27	13.9
15	19	27,897	-57.3		27	18.8
10						
7						

BOOTHVILLE, LA. 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	1	18.4	15.7	05	1.2
1000	29	164	19.3	15.8	11	1.9
950	29	604	16.7	12.1	16	3.1
900	29	1,065	15.2	6.5	20	2.8
850	29	1,548	13.4	1.5	23	3.3
800	29	2,057	11.7	-2.0	24	4.0
750	29	2,595	9.1	-4.8	24	5.1
700	29	3,163	6.3	-10.6	25	5.1
650	29	3,767	3.1	-14.7	26	6.2
600	29	4,411	-.7	-18.8	26	7.0
550	29	5,100	-4.9	-23.0	26	8.3
500	29	5,842	-10.1	-27.4	26	9.8
450	29	6,646	-15.9	-31.0	26	11.4
400	29	7,522	-22.3	-36.2	26	12.8
350	29	8,493	-29.4	-41.8	26	14.8
300	29	9,571	-38.0	-49.1	26	17.9
250	28	10,801	-47.5		26	20.7
200	28	12,245	-56.6		26	24.5
175	26	13,081	-61.0		26	26.8
150	26	14,032	-63.9		26	27.2
125	26	15,140	-67.7		26	24.0
100	26	16,466	-72.3		26	19.3
80	26	17,772	-73.5		27	13.0
70	26	18,557	-71.3		27	8.7
60	26	19,479	-66.9		27	5.7
50	24	20,600	-61.6		27	3.6
40	24	21,994	-57.6		26	2.6
30	22	23,828	-53.1		25	1.9
25	22	25,011	-50.6		5	1.4
20	22	26,474	-48.3		26	2.2
15	22	28,379	-45.7		25	5.0
10	9	31,093	-42.8			
7						

* BROWNSVILLE, TEXAS 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	7	20.4	17.8	16	1.5
1000	30	132	23.1	19.3	15	3.7
950	30	578	20.2	17.0	16	8.1
900	30	1,044	18.0	11.3	17	7.7
850	30	1,533	15.9	5.8	19	6.5
800	30	2,047	14.5	-.2	20	5.3
750	30	2,589	11.9	-5.7	22	3.7
700	30	3,163	8.4	-10.0	25	3.3
650	30	3,771	4.3	-13.9	26	3.6
600	30	4,417	.4	-19.5	27	4.2
550	30	5,109	-4.3	-23.7	27	5.2
500	30	5,852	-9.3	-27.1	27	6.7
450	29	6,659	-14.8	-31.6	26	8.1
400	29	7,539	-21.4	-37.0	26	9.7
350	29	8,513	-28.7	-43.8	26	12.6
300	29	9,595	-37.2	-51.2	26	13.7
250	29	10,830	-46.6		26	16.2
200	28	12,277	-56.6		25	21.2
175	28	13,114	-61.7		25	21.9
150	28	14,059	-65.7		25	20.5
125	28	15,158	-69.4		25	17.8
100	27	16,477	-73.7		25	12.4
80	26	17,773	-75.1		26	7.7
70	25	18,551	-72.6		27	4.7
60	24	19,465	-69.2		27	1.9
50	24	20,571	-63.1		20	.8
40	23	21,960	-58.5		21	1.1
30	23	23,793	-53.0		15	.5
25	23	24,977	-50.0		10	1.3
20	22	26,449	-47.7		06	2.6
15	20	28,353	-44.8		07	1.5
10	16	31,064	-41.1		26	4.6
7	11	33,466	-39.5			

BUFFALO, N. Y. 989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	218	4.1	.6	26	2.9
1000						
950	30	546	3.0	.0	26	6.8
900	30	982	.4	-2.7	27	9.2
850	30	1,439	-1.7	-4.8	27	11.2
800	30	1,921	-3.1	-9.4	27	13.4
750	30	2,431	-4.7	-13.6	27	15.0
700	30	2,972	-6.9	-16.8	28	17.0
650	30	3,548	-9.5	-20.2	28	18.3
600	30	4,162	-12.9	-25.0	28	20.6
550	30	4,821	-16.9	-28.3	28	22.4
500	30	5,530	-21.5	-31.7	28	25.0
450	30	6,299	-26.6	-37.2	28	26.9
400	30	7,140	-32.2	-41.4	28	27.1
350	30	8,073	-38.6	-45.0	28	28.6
300	30	9,113	-45.2		28	32.6
250	30	10,312	-52.0		28	36.1
200	30	11,741	-56.8		28	34.9
175	30	12,585	-57.8		28	33.3
150	30	13,556	-58.1		28	31.0
125	30	14,703	-58.9		28	28.2
100	30	16,101	-59.3		28	24.5
80	29	17,496	-60.2		28	21.8
70	29	18,328	-60.7		28	20.9
60	29	19,288	-60.3		28	19.8
50	29	20,426	-59.5		27	16.8
40	27	21,829	-58.1		27	16.8
30	25	23,655	-56.4		26	17.8
25	24	24,812	-56.3		26	20.1
20	24	26,235	-54.9		26	26.5
15	17	28,089	-52.6		26	31.8
10	8	30,770	-48.5			
7						

CAPE HATTERAS, N. C. 1020 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	12.7	8.6	31	3.5
1000	30	170	14.0	6.2	30	4.7
950	30	602	11.6	3.0	28	6.5
900	30	1,052	9.5	.1	28	7.6
850	30	1,525	7.5	-4.3	28	9.5
800	29	2,025	5.8	-8.6	28	11.5
750	29	2,551	3.6	-12.7	28	13.7
700	28	3,109	1.4	-14.9	27	15.4
650	28	3,703	-1.3	-19.7	27	17.2
600	28	4,337	-4.7	-21.8	27	20.2
550	28	5,016	-8.6	-25.7	27	22.2
500	28	5,748	-13.7	-29.5	27	24.0
450	28	6,540	-19.2	-34.5	28	26.0
400	28	7,406	-25.6	-39.1	28	28.4
350	28	8,364	-32.6	-44.5	28	31.3
300	28	9,428	-40.9	-49.5	28	34.3
250	28	10,645	-49.8		28	37.4
200	28	12,077	-57.6		28	37.8
175	28	12,915	-60.4		28	36.4
150	28	13,870	-62.3		28	33.6
125	27	14,991	-64.4		28	31.2
100	27	16,347	-66.5		28	27.1
80	25	17,700	-66.1		28	20.6
70	25	18,513	-64.3		28	16.1
60	25	19,461	-62.5		28	11.0
50	25	20,596	-59.2		28	12.2
40	23	22,003	-56.2		27	8.5
30	23	23,852	-52.2		27	8.8
25	23	25,037	-50.8		27	10.0
20	23	26,498	-48.9		27	13.2
15	19	28,416	-46.8		26	17.0
10	12	31,078	-47.4			
7						

RAWINSONDE DATA

Average monthly values

• CARIBOU, MAINE 986 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	191	-3.3	-5.8	26	2.8
1000	4	203	-6.8	-9.2		
950	30	480	-3.6	-5.4	27	5.5
900	30	917	-4.8	-7.2	28	8.5
850	30	1,356	-6.4	-9.3	28	9.6
800	30	1,829	-7.6	-12.1	28	10.7
750	30	2,331	-9.2	-14.9	28	[illegible]
700	30	2,862	-11.0	-18.0	28	13.7
650	30	3,429	-13.6	-21.4	28	14.5
600	30	4,034	-16.8	-24.4	28	15.4
550	30	4,663	-20.7	-27.8	28	17.7
500	30	5,302	-25.1	-33.4	28	19.4
450	29	6,036	-30.0	-38.2	28	20.3
400	29	6,965	-35.5	-41.8	28	22.4
350	29	7,886	-41.5	-43.8	28	24.9
300	29	8,916	-47.2		28	26.8
250	28	10,108	-51.5		28	29.6
200	28	11,551	-53.0		28	27.0
175	29	12,411	-53.6		27	26.0
150	28	13,402	-54.0		27	22.6
125	24	14,566	-54.4		27	19.7
100	26	15,989	-56.2		27	17.1
80	25	17,400	-56.6		27	15.8
70	25	18,247	-56.9		27	15.1
60	24	19,218	-57.5		27	15.0
50	24	20,372	-57.1		26	15.5
40	24	21,785	-56.7		26	14.3
30	23	23,603	-57.0		26	20.1
25	22	24,768	-55.9		26	22.4
20	19	26,186	-54.9		26	25.9
15	15	28,016	-55.1		26	30.4
10	9	30,638	-53.3			

CHARLESTON, S. C. 1020 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	29	13	11.2	8.6	33	.7
1000	29	179	14.3	8.7	30	1.4
950	29	612	13.2	3.7	28	3.6
900	29	1,065	11.1	1.5	28	4.7
850	29	1,542	9.8	-3.4	27	6.1
800	29	2,044	8.0	-6.0	27	7.3
750	29	2,574	5.9	-12.6	28	8.8
700	29	3,136	3.6	-14.7	28	10.8
650	29	3,734	.5	-17.7	28	12.6
600	29	4,372	-3.0	-20.3	28	[illegible]
550	29	5,057	-6.8	-24.3	28	16.7
500	29	5,793	-11.8	-28.8	28	17.7
450	28	6,598	-17.6	-33.6	28	[illegible]
400	28	7,468	-24.3	-38.0	28	21.2
350	28	8,430	-31.0	-44.3	28	23.7
300	28	9,499	-40.1	-48.4	28	26.5
250	28	10,718	-49.7		28	29.2
200	28	12,148	-58.6		28	31.2
175	28	12,980	-61.9		28	32.5
150	26	13,923	-63.6		28	32.6
125	25	15,043	-66.0		28	31.6
100	25	16,365	-69.1		28	23.1
80	25	17,713	-69.2		28	16.8
70	25	18,516	-66.8		28	12.8
60	25	19,454	-64.4		28	10.0
50	24	20,581	-60.3		28	8.3
40	24	21,987	-56.2		27	6.5
30	24	23,836	-51.5		27	6.8
25	23	25,030	-48.5		26	6.8
20	20	26,565	-46.8		25	8.7
15	16	28,421	-44.6		26	13.2
10	6	31,139	-42.0			

CHATHAM, MASS. 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	16	5.9	1.5	28	3.1
1000	27	134	5.5	-.8	29	4.6
950	30	537	4.0	[illegible]	28	8.1
900	30	975	1.5	-5.1	28	9.6
850	30	1,434	-.4	-8.6	28	11.2
800	30	1,918	-1.8	-11.9	28	[illegible]
750	30	2,430	-3.4	-15.1	28	15.4
700	30	2,973	-5.7	-17.3	28	17.8
650	30	3,551	-8.5	-20.4	28	20.1
600	30	4,168	-11.9	-23.7	28	22.4
550	30	4,830	-15.8	-28.5	28	24.4
500	30	5,542	-20.7	-31.8	28	26.1
450	30	6,312	-26.2	-37.0	28	27.9
400	30	7,154	-32.1	-41.9	28	30.4
350	30	8,087	-38.4	-44.3	28	30.8
300	29	9,126	-45.5		28	34.2
250	29	10,325	-51.4		28	37.4
200	29	11,759	-55.9		28	36.5
175	29	12,607	-57.1		28	34.4
150	29	13,562	-57.1		28	[illegible]
125	28	14,739	-59.3		27	27.1
100	28	16,135	-61.5		28	[illegible]
80	28	17,518	-60.2		27	18.4
70	27	18,348	-60.5		27	15.5
60	27	19,310	-59.8		27	13.6
50	26	20,453	-59.2		27	12.5
40	24	21,851	-58.1		27	14.4
30	23	23,663	-56.5		27	17.4
25	23	24,820	-55.2		25	19.2
20	19	26,248	-53.7		26	25.9
15	16	28,124	-51.1		26	33.1
10	13	30,766	-50.9		27	43.1
	9	33,037	-50.8			

CHIHUAHUA, MEXICO 858 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	1,428	6.9	-3.7	25	1.4
1000						
950						
900						
850	28	1,516	11.8	-3.0	25	1.5
800	30	2,019	13.1	-4.4	24	[illegible]
750	30	2,559	10.2	[illegible]	24	6.1
700	30	3,129	7.0	-10.6	24	8.3
650	30	3,734	3.4	-14.2	25	9.1
600	30	4,379	-1.0	-17.7	25	9.9
550	30	5,066	-5.5	[illegible]	25	11.2
500	30	5,806	-10.6	-25.7	25	12.9
450	30	6,608	-16.5	[illegible]	26	14.2
400	30	7,482	-22.7	-35.7	26	[illegible]
350	30	8,450	-30.2	-41.2	26	18.6
300	30	9,525	-38.8	-48.1	26	19.8
250	30	10,750	-48.5		26	23.2
200	30	12,187	-58.0		26	22.8
175	30	13,022	-61.5		26	23.7
150	30	13,970	-64.4		26	23.4
125	30	15,076	-67.5		25	[illegible]
100	30	16,411	-69.9		25	18.4
80	30	17,737	-70.5		26	14.4
70	30	18,530	-70.5		26	11.5
60	30	19,452	-67.5		26	7.8
50	30	20,564	-62.8		26	5.1
40	29	21,954	-58.4		26	5.2
30	28	23,781	-53.6		26	5.4
25	28	24,951	-50.8		25	[illegible]
20	28	26,420	-49.6		26	5.2
15	24	28,313	-47.1		26	8.8
10	13	31,022	-44.9		27	17.9

• COLD BAY, ALASKA 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	28	30	2.8	[illegible]	[illegible]	[illegible]
1000	27	159	3.1	-.3	[illegible]	1.6
950	28	567	.9	-2.9	23	1.6
900	28	[illegible]	-1.2	-5.4	28	2.2
850	28	1,455	-2.2	-10.9	26	3.1
800	28	1,935	-3.5	-14.0	26	4.3
750	28	2,444	-5.4	-17.6	28	5.7
700	28	2,983	-8.2	-20.8	28	[illegible]
650	28	3,555	-11.2	-24.4	28	7.8
600	28	4,165	-14.7	-26.0	27	9.3
550	28	4,819	-18.0	-28.2	27	10.2
500	29	5,524	-22.8	-33.2	27	[illegible]
450	28	6,289	-27.6	-35.3	27	13.8
400	28	7,127	-33.3	-39.3	26	15.5
350	28	8,056	-39.7	-40.7	27	17.8
300	27	9,115	-47.0		27	20.7
250	27	10,294	-54.1		26	20.6
200	27	11,715	-59.1		27	18.5
175	27	12,544	-58.1		27	17.4
150	27	13,518	-56.8		27	[illegible]
125	27	14,674	-55.5		27	13.7
100	27	16,093	-55.9		28	12.5
80	27	17,513	-55.5		28	11.9
70	27	18,366	-55.1		29	10.7
60	27	19,350	-55.6		29	9.5
50	26	20,512	-55.3		29	9.5
40	25	21,935	-56.2		30	9.7
30	23	23,765	-56.5		31	12.2
25	21	24,927	-56.9		31	11.8
20	19	26,350	-56.7		32	12.9
15	15	28,202	-56.7		32	13.3
10	6	30,807	-57.1			

DAYTON, OHIO 984 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	299	5.2	2.0	22	1.8
1000						
950	30	570	5.7	1.3	24	5.2
900	30	1,011	3.9	-.1	26	7.6
850	30	1,475	2.6	-4.6	26	9.3
800	30	1,965	1.4	-8.4	26	11.8
750	30	2,484	-.1	-13.2	27	13.5
700	30	3,034	-2.5	-14.7	27	15.7
650	30	3,619	-5.3	-17.1	27	17.2
600	30	4,244	-8.8	-21.5	27	18.8
550	30	4,913	-13.3	-25.4	28	21.0
500	30	5,632	-17.8	-29.1	28	24.0
450	30	6,413	-22.6	-34.5	28	27.6
400	30	7,267	-28.6	-39.0	28	30.0
350	30	8,213	-35.3	-43.8	28	31.4
300	30	9,267	-43.2	-46.6	28	34.5
250	30	10,471	-51.7		28	35.2
200	30	11,895	-58.8		28	36.0
175	30	12,731	-60.2		28	35.8
150	30	13,690	-61.2		27	33.2
125	30	14,822	-62.0		28	30.1
100	29	16,195	-63.6		27	23.7
80	29	17,565	-63.4		27	18.5
70	28	18,383	-62.8		28	15.6
60	26	19,330	-62.0		28	13.2
50	24	20,460	-59.8		27	13.0
40	24	21,862	-57.4		27	13.9
30	23	23,694	-55.2		26	16.2
25	23	24,863	-53.7		26	21.4
20	21	26,294	-52.4		26	23.5
15	19	28,147	-50.9		26	27.6
10	14	30,771	-49.8		26	38.2

DEL RIO, TEXAS 979 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	314	14.2	11.3	11	1.6
1000						
950	30	509	15.7	10.0	15	4.2
900	30	1,028	14.9	7.1	17	5.3
850	30	1,512	14.4	1.2	20	5.1
800	30	2,024	13.5	-4.4	23	5.3
750	30	2,564	10.8	-8.6	25	6.9
700	30	3,135	6.8	-12.5	26	7.9
650	30	3,739	2.9	-15.5	26	8.7
600	30	4,382	-1.1	-19.4	26	9.6
550	30	5,070	-5.8	-23.9	26	11.3
500	30	5,809	-11.1	-27.9	26	13.0
450	30	6,610	-16.6	-31.1	26	14.9
400	30	7,484	-22.8	-36.6	25	15.7
350	30	8,452	-30.0	-43.1	26	18.9
300	30	9,529	-38.4	-50.3	26	19.8
250	30	10,757	-47.9		26	22.6
200	30	12,197	-57.3		26	24.6
175	30	13,034	-61.0		26	26.4
150	30	13,984	-64.2		26	25.6
125	30	15,091	-67.3		26	23.3
100	30	16,426	-70.2		26	18.5
80	30	17,747	-71.4		26	12.3
70	30	18,538	-70.8		27	8.6
60	30	19,460	-67.4		27	6.2
50	30	20,571	-62.4		27	5.2
40	30	21,961	-58.6		25	4.7
30	29	23,794	-53.1		26	5.8
25	28	24,973	-51.6		26	5.9
20	27	26,429	-49.0		26	7.4
15	26	28,323	-47.2		27	10.3
10	18	31,050	-44.7		27	19.5

DENVER, COLO. 834 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	1,611	.1	-6.8	24	1.2
1000						
950						
900						
850						
800	30	1,949	4.7	-8.5	27	2.8
750	30	2,473	2.7	-12.0	28	5.2
700	30	3,027	-1.1	-14.8	28	8.6
650	30	3,615	-4.7	-17.7	28	11.1
600	30	4,240	-8.7	-20.1	28	13.9
550	30	4,909	-12.7	-24.8	27	16.9
500	30	5,630	-17.4	-29.9	27	19.3
450	30	6,411	-22.7	-34.5	27	20.9
400	30	7,264	-29.3	-40.5	27	22.5
350	30	8,207	-36.3	-47.3	26	25.1
300	30	9,255	-44.4		26	27.5
250	30	10,455	-52.5		26	29.3
200	29	11,872	-59.3		26	30.5
175	29	12,706	-60.6		26	31.8
150	29	13,666	-60.6		27	28.8
125	29	14,799	-61.6		26	25.4
100	28	16,171	-62.7		26	22.1
80	26	17,545	-62.6		26	15.0
70	24	18,368	-62.7		26	14.3
60	22	19,320	-62.6		26	13.5
50	22	20,445	-62.1		27	10.6
40	22	21,829	-60.9		26	11.8
30	18	23,631	-57.4		26	13.7
25	17	24,789	-56.9		26	17.2
20	17	26,204	-56.5		26	22.4
15	14	28,054	-53.9		26	29.1

DODGE CITY, KANS. 923 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	791	2.6	-3.3	25	1.3
1000						
950						
900	30	993	6.3	-2.5	26	2.4
850	30	1,463	7.3	-5.7	26	4.8
800	30	1,962	6.4	-8.7	26	6.8
750	30	2,490	4.9	-12.5	26	8.8
700	30	3,049	1.7	-15.9	26	11.5
650	30	3,642	-2.1	-19.3	26	13.7
600	30	4,273	-6.2	-22.4	26	14.9
550	30	4,948	-10.3	-26.3	26	17.3
500	30	5,676	-15.3	-30.8	26	19.5
450	30	6,463	-20.9	-35.4	26	21.6
400	30	7,322	-27.4	-40.0	26	24.7
350	30	8,273	-34.5	-45.5	26	26.3
300	30	9,328	-42.8		26	29.2
250	29	10,537	-51.3		26	33.3
200	29	11,960	-59.0		26	34.7
175	29	12,793	-61.2		26	33.7
150	29	13,750	-61.3		26	32.3
125	28	14,873	-62.9		26	30.4
100	28	16,239	-65.1		27	24.1
80	26	17,599	-65.1		26	19.9
70	26	18,414	-64.3		26	17.4
60	25	19,360	-62.8		26	14.5
50	23	20,485	-61.7		26	12.3
40	22	21,873	-60.0		26	11.9
30	20	23,684	-56.8		25	15.4
25	18	24,840	-56.2		26	18.6
20	16	26,254	-55.4		26	20.6
15	12	28,092	-53.7		26	28.6

EL PASO, TEXAS 882 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	1,193	6.2	-9.6	27	1.9
1000						
950						
900						
850	30	1,504	12.7	-7.4	28	4.0
800	30	2,011	10.5	-9.0	27	7.6
750	30	2,545	7.3	-11.2	26	9.4
700	30	3,108	3.5	-14.1	25	10.6
650	30	3,706	.1	-17.0	25	12.1
600	30	4,343	-3.8	-21.4	25	12.6
550	30	5,024	-8.0	-25.4	26	13.5
500	30	5,758	-13.0	-29.6	25	14.9
450	30	6,552	-18.5	-34.5	25	16.3
400	30	7,420	-24.9	-39.0	25	18.8
350	30	8,379	-32.3	-43.9	25	20.8
300	30	9,445	-40.6	-48.8	26	23.9
250	30	10,664	-49.6		26	26.3
200	30	12,094	-58.6		26	25.8
175	29	12,930	-61.2		26	26.7
150	29	13,883	-63.0		26	24.7
125	28	14,997	-65.3		26	23.1
100	28	16,344	-68.2		26	19.0
80	27	17,682	-69.4		26	14.9
70	27	18,483	-67.8		26	13.4
60	27	19,414	-66.4		26	10.8
50	27	20,525	-63.5		27	7.8
40	24	21,909	-60.1		26	7.9
30	23	23,726	-55.0		26	10.6
25	23	24,895	-53.0		26	13.7
20	20	26,343	-50.1		26	[illegible]
15	17	28,235	-48.8		26	21.8

ELY, NEV. 806 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	1,908	-2.8	-7.0	21	3.4
1000						
950						
900						
850						
800	26	1,981	-.5	-7.1	20	4.0
750	30	2,485	-.3	-9.5	22	4.3
700	30	3,034	-3.4	-11.9	25	7.7
650	30	3,617	-6.9	-14.4	26	11.2
600	30	4,237	-10.5	-18.2	26	14.3
550	30	4,903	-14.3	-22.1	27	16.3
500	30	5,619	-19.0	-27.1	27	19.1
450	30	6,397	-24.0	-31.2	27	21.1
400	30	7,246	-29.9	-37.8	26	23.8
350	30	8,188	-36.1	-43.3	26	24.8
300	30	9,239	-43.9		27	26.5
250	30	10,441	-51.9		27	29.8
200	30	11,863	-59.4		27	28.7
175	30	12,695	-60.7		27	29.4
150	30	13,656	-60.4		27	28.6
125	29	14,790	-60.7		27	25.3
100	29	16,174	-62.1		26	21.4
80	28	17,535	-62.2		27	16.1
70	26	18,379	-62.0		26	14.6
60	25	19,332	-62.0		26	14.0
50	24	20,462	-61.1		27	12.8
40	22	21,849	-60.1		27	13.3
30	20	23,656	-58.6		27	12.4
25	19	24,805	-57.3		27	15.4
20	19	26,221	-55.8		26	20.8
15	12	28,077	-54.2		27	25.5
10						

EMPALME, MEXICO 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	12	13.5	4.2	34	.9
1000	30	127	20.0	4.3	35	1.8
950	30	570	20.5	1.7	35	2.6
900	30	1,034	18.2	-.9	30	2.1
850	30	1,521	15.7	-4.8	25	3.1
800	30	2,032	12.8	-8.3	24	4.5
750	30	2,571	10.0	-11.4	25	6.3
700	30	3,140	6.9	-13.5	24	7.0
650	30	3,745	3.4	-16.4	26	8.2
600	30	4,389	-.6	-19.1	26	9.8
550	30	5,079	-4.9	-23.3	26	12.2
500	30	5,821	-10.1	-28.1	26	12.7
450	30	6,624	-15.7	-32.4	26	14.9
400	30	7,501	-22.4	-36.8	26	16.8
350	30	8,470	-29.8	-41.5	26	18.6
300	30	9,546	-38.5	-48.7	26	20.6
250	30	10,773	-48.5		26	23.5
200	30	12,207	-58.6		26	24.9
175	30	13,039	-62.3		25	25.9
150	30	13,984	-65.1		25	25.3
125	30	15,090	-67.0		25	23.4
100	30	16,429	-69.4		25	17.0
80	29	17,760	-69.5		25	12.1
70	28	18,558	-69.0		25	8.5
60	28	19,485	-66.9		27	5.6
50	28	20,597	-62.9		28	3.2
40	28	21,986	-58.6		27	3.9
30	25	23,815	-53.8		27	5.1
25	23	24,989	-51.2		27	4.3
20	21	26,440	-49.8		26	6.1
15	17	28,319	-48.1		27	10.1
10	8	31,019	-44.3			

• FAIRBANKS, ALASKA 1003 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	135	-18.4	-24.1	31	.4
1000	16	226	-17.5	-20.1	08	.9
950	30	545	-15.0	-18.7	10	1.5
900	30	955	-13.4	-18.2	14	2.2
850	30	1,391	-12.8	-18.5	15	.5
800	30	1,853	-13.3	-19.4	29	1.3
750	30	2,343	-15.2	-21.9	29	2.0
700	30	2,862	-17.7	-24.8	30	2.6
650	30	3,414	-20.3	-28.0	30	3.6
600	30	4,003	-23.3	-30.7	30	4.3
550	30	4,635	-26.8	-34.2	30	5.2
500	30	5,318	-30.5	-38.1	30	7.2
450	30	6,060	-35.2	-40.7	30	8.8
400	29	6,870	-41.1	-43.3	30	9.8
350	29	7,769	-46.7		31	10.5
300	29	8,776	-52.0		31	11.7
250	28	9,959	-54.9		31	12.1
200	28	11,384	-55.0		31	12.9
175	28	12,239	-54.6		31	11.9
150	28	13,226	-54.3		31	11.5
125	28	14,394	-54.3		30	12.6
100	29	15,823	-55.0		30	12.9
80	28	17,247	-55.8		30	14.3
70	29	18,096	-56.5		30	15.6
60	28	19,073	-57.0		30	15.0
50	27	20,219	-58.7		30	17.1
40	27	21,616	-59.9		30	19.3
30	26	23,402	-61.1		30	21.0
25	25	24,544	-62.1		31	22.3
20	22	25,933	-62.6		30	23.3
15	[illegible]	27,851	-61.0			
10						

FLINT, MICH. 987 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	236	3.1	.4	25	1.7
1000						
950	30	545	1.9	-1.8	27	4.0
900	30	980	.4	-2.9	28	6.5
850	30	1,437	-1.9	-6.9	28	8.5
800	30	1,919	-2.7	-13.1	28	11.2
750	30	2,429	-4.0	-16.4	28	13.7
700	30	2,972	-6.1	-18.0	28	16.1
650	30	3,549	-8.8	-20.8	28	17.9
600	30	4,166	-12.0	-24.0	28	19.7
550	30	4,827	-16.2	-27.0	28	23.0
500	29	5,541	-21.1	-31.2	27	24.0
450	29	6,312	-26.1	-36.3	27	25.9
400	29	7,154	-32.1	-41.5	28	28.2
350	29	8,087	-38.4	-43.4	28	31.5
300	29	9,129	-45.5		28	33.5
250	29	10,325	-52.4		28	37.9
200	29	11,749	-57.5		28	36.7
175	29	12,591	-58.6		28	34.4
150	29	13,557	-59.0		28	31.5
125	29	14,701	-59.1		28	28.2
100	28	16,100	-60.5		28	22.1
80	27	17,484	-61.2		28	17.2
70	26	18,319	-61.3		28	16.5
60	26	19,277	-60.6		28	13.5
50	24	20,413	-60.0		27	14.4
40	22	21,807	-59.4		27	16.7
30	21	23,613	-57.4		26	18.4
25	20	24,767	-56.8		26	21.9
20	20	26,184	-56.1		26	25.4
15	15	[illegible]	-54.5		26	29.6
10	[illegible]	30,632	-53.2			

GLASGOW, MONT. 932 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	696	-5.0	-10.6	10	1.9
1000						
950						
900	30	967	-4.0	-8.0	19	.7
850	30	1,419	-3.5	-9.1	27	4.1
800	30	1,898	-5.1	-11.2	27	5.9
750	30	2,403	-7.7	-13.4	27	8.0
700	30	2,936	-11.0	-15.6	27	11.1
650	30	3,502	-14.0	-18.9	27	13.2
600	30	4,107	-17.3	-23.6	27	13.3
550	30	4,754	-21.3	-28.7	27	14.9
500	30	5,451	-25.9	-33.4	27	17.0
450	30	6,207	-30.8	-36.7	27	19.1
400	30	7,032	-37.0	-40.9	27	20.8
350	30	7,947	-43.2	-44.2	27	22.4
300	30	8,967	-49.8		27	24.6
250	30	10,148	-54.1		27	25.3
200	30	11,572	-56.0		27	25.5
175	30	12,421	-55.8		27	25.7
150	30	13,402	-56.4		27	22.8
125	30	14,559	-56.4		27	21.1
100	31	15,972	-57.8		27	19.4
80	31	17,377	-58.5		27	18.1
70	30	18,215	-59.2		27	15.9
60	29	19,176	-59.8		27	14.7
50	28	20,315	-59.9		27	13.5
40	27	21,703	-60.5		29	13.7
30	26	23,493	-60.7		28	14.5
25	26	24,629	-60.3		28	14.6
20	24	26,019	-60.6		28	16.2
15	23	27,805	-59.6		27	18.4
10	12	30,402	-54.9			

RAWINSONDE DATA

Average monthly values

NOVEMBER 1973

GRAND JUNCTION, COLO. 85[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,472	1.1	-7.4	11	1.2
1000						
950						
900						
850	16	1,534	2.6	-7.7	13	2.4
800	30	1,976	3.3	-7.5	18	2.8
750	30	2,497	.8	-10.4	22	4.7
700	30	3,048	-2.8	-12.4	24	7.4
650	30	3,632	-6.4	-14.9	25	10.0
600	30	4,253	-10.2	-18.0	26	14.2
550	30	4,919	-14.0	-23.7	26	17.2
500	30	5,637	-18.5	-28.6	26	19.6
450	30	6,415	-23.4	-33.9	26	23.2
400	30	7,266	-29.6	-38.7	26	26.1
350	30	8,208	-36.7	-43.4	26	27.7
300	30	9,255	-44.3		27	28.2
250	30	10,456	-51.9		27	31.0
200	30	11,880	-58.4		27	29.2
175	30	12,718	-59.1		27	30.2
150	30	13,684	-59.4		27	26.0
125	29	14,817	-60.8		26	23.3
100	29	16,198	-62.5		26	19.1
80	29	17,571	-63.7		26	16.2
70	27	18,382	-63.8		26	13.5
60	25	19,332	-62.3		26	12.8
50	23	20,459	-61.6		27	13.5
40	21	21,850	-60.7		27	11.6
30	20	23,651	-59.1		27	12.2
25	19	24,798	-57.4		27	15.8
20	19	26,213	-56.0		26	19.3
15	18	28,053	-53.9		26	26.9
10						

* GREAT FALLS, MONT. 883 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,118	-5.0	-8.8	23	3.4
1000						
950						
900						
850	30	1,419	-3.4	-9.7	23	6.7
800	30	1,898	-4.5	-10.0	24	9.2
750	30	2,404	-7.2	-11.6	25	11.4
700	30	2,938	-10.6	-14.5	26	13.1
650	30	3,505	-13.8	-18.7	26	13.9
600	30	4,110	-17.3	-22.8	26	14.4
550	30	4,756	-21.6	-26.9	26	15.8
500	30	5,453	-26.1	-31.6	26	18.1
450	30	6,208	-31.2	-35.4	26	20.3
400	30	7,032	-37.1	-39.7	26	22.9
350	30	7,945	-43.6	-40.9	26	25.3
300	30	8,964	-50.1		26	28.5
250	30	10,141	-55.0		26	27.8
200	29	11,561	-56.7		27	27.1
175	29	12,407	-57.0		26	25.0
150	29	13,383	-56.8		26	22.2
125	29	14,539	-57.4		26	20.2
100	29	15,945	-58.3		26	17.0
80	27	17,353	-59.0		26	16.2
70	27	18,189	-59.7		26	15.9
60	26	19,147	-59.8		26	13.7
50	25	20,260	-60.5		27	12.4
40	22	21,656	-61.0		27	14.4
30	19	23,448	-60.6		27	13.3
25	17	24,587	-60.9		28	13.7
20	13	25,979	-60.5		28	15.0
15	6	27,724	-58.7			
10						

GREEN BAY, WIS. 990 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	210	-.3	-3.0	31	1.7
1000						
950	30	540	-.4	-5.0	30	3.7
900	30	972	-1.8	-7.1	30	4.1
850	30	1,426	-2.9	-10.9	29	5.8
800	30	1,905	-4.2	-14.5	29	7.0
750	30	2,413	-6.0	-17.1	29	10.0
700	30	2,951	-7.9	-19.8	28	12.6
650	30	3,524	-10.8	-21.6	28	14.4
600	30	4,136	-13.8	-25.6	28	16.8
550	30	4,792	-17.6	-27.8	28	19.7
500	30	5,499	-22.5	-33.4	28	23.0
450	30	6,265	-27.7	-37.1	27	25.8
400	30	7,102	-33.5	-42.4	27	29.4
350	30	8,030	-39.4	-45.1	27	32.3
300	29	9,067	-46.4		27	37.2
250	28	10,262	-52.6		27	40.0
200	28	11,665	-57.5		27	36.0
175	28	12,526	-58.4		27	33.8
150	28	13,497	-58.0		27	26.6
125	27	14,643	-59.0		27	25.4
100	25	16,039	-59.5		28	24.9
80	25	17,425	-60.4		28	18.8
70	25	18,257	-60.3		27	18.9
60	24	19,216	-60.7		27	18.9
50	23	20,350	-60.5		27	18.8
40	22	21,740	-60.6		27	16.8
30	20	23,540	-59.4		27	19.3
25	20	24,682	-58.7		27	19.9
20	18	26,082	-58.3		26	20.4
15	15	27,918	-56.2		26	26.7
10	10	30,573	-52.7			

GREENSBORO, N. C. 988 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	275	5.0	1.8	25	.9
1000						
950	30	600	9.9	.4	27	5.0
900	30	1,049	8.8	-1.3	27	7.1
850	30	1,521	7.2	-3.6	28	9.5
800	30	2,018	5.5	-7.2	28	11.6
750	30	2,544	3.5	-11.3	28	13.0
700	30	3,101	.5	-14.6	28	14.0
650	30	3,693	-2.0	-17.7	28	16.2
600	30	4,325	-5.5	-20.7	28	18.8
550	30	5,003	-9.6	-25.7	28	21.3
500	30	5,732	-14.1	-30.1	28	23.6
450	30	6,523	-19.6	-33.8	28	26.1
400	30	7,387	-26.1	-36.7	28	28.5
350	30	8,343	-33.1	-44.0	28	30.0
300	30	9,406	-41.1	-49.2	29	32.2
250	30	10,622	-50.1		29	34.3
200	30	12,049	-58.9		28	35.7
175	30	12,861	-61.7		28	37.5
150	30	13,835	-62.2		28	34.7
125	30	14,959	-63.6		28	30.2
100	29	16,324	-66.5		28	24.9
80	29	17,673	-66.6		28	18.5
70	29	18,484	-65.0		28	14.1
60	29	19,427	-63.1		28	12.2
50	28	20,557	-60.0		27	9.5
40	28	21,962	-57.0		28	9.2
30	26	23,805	-53.1		27	11.6
25	26	24,987	-50.5		27	12.9
20	26	26,449	-48.5		26	15.6
15	23	28,345	-47.2		27	24.0
10	14	30,993	-47.6		27	31.1

GUADALUPE IS., MEXICO 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	23	15.9	11.9	34	5.8
1000	30	156	15.1	10.1	32	6.0
950	30	589	13.8	4.4	31	5.7
900	30	1,044	12.6	-1.1	30	4.6
850	30	1,523	11.7	-6.6	30	4.3
800	30	2,028	10.4	-7.9	28	4.8
750	30	2,563	8.1	-10.8	28	5.0
700	30	3,129	4.9	-13.2	27	5.4
650	30	3,730	1.8	-16.7	27	6.2
600	30	4,371	-1.6	-20.2	26	6.7
550	30	5,058	-5.9	-24.0	25	7.9
500	30	5,797	-11.1	-26.6	25	9.1
450	30	6,597	-16.9	-33.1	25	11.2
400	30	7,469	-23.9	-38.0	24	12.4
350	30	8,433	-31.2	-43.3	24	14.2
300	30	9,503	-39.7	-48.5	24	14.3
250	30	10,725	-49.1		25	14.6
200	30	12,154	-59.4			
175	30	12,983	-63.4			
150	30	13,925	-65.4			
125	30	15,031	-67.3			
100	30	16,372	-68.4			
80	29	17,705	-68.5			
70	28	18,510	-67.0			
60	28	19,443	-65.6			
50	28	20,559	-62.4			
40	28	21,947	-58.9			
30	28	23,770	-54.7			
25	23	24,945	-52.7			
20	21	26,399	-49.9			
15	19	28,305	-47.6			
10	8	30,954	-46.9			

* GUAM, MARIANA IS. 998 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	111	25.4	23.2	09	3.3
1000						
950	30	549	23.5	21.4	08	9.1
900	30	1,021	20.7	17.7	09	9.1
850	30	1,515	18.2	11.3	09	8.3
800	30	2,033	16.1	6.3	09	8.0
750	30	2,579	13.7	.5	09	8.5
700	30	3,158	10.9	-5.5	09	9.1
650	30	3,773	7.8	-10.4	09	9.4
600	30	4,428	3.9	-13.5	09	9.5
550	30	5,130	-.2	-18.0	10	10.8
500	30	5,886	-4.8	-21.3	10	12.0
450	30	6,706	-10.0	-28.6	09	11.2
400	30	7,605	-15.6	-33.4	08	11.2
350	30	8,602	-22.5	-39.3	08	10.4
300	30	9,712	-30.9	-46.4	07	9.7
250	30	10,979	-41.1	-54.0	06	8.4
200	30	12,456	-53.1		05	6.4
175	30	13,304	-59.8		04	5.4
150	30	14,250	-67.5		05	5.3
125	30	15,327	-75.3		07	6.1
100	30	16,596	-81.8		09	7.8
80	28	17,846	-80.4		09	7.8
70	28	18,610	-75.1		09	5.8
60	28	19,520	-68.4		10	4.2
50	28	20,626	-64.4		11	3.2
40	27	22,007	-59.9		09	4.5
30	25	23,822	-54.6		08	6.8
25	24	24,996	-52.6		08	9.3
20	24	26,450	-49.2		09	11.8
15	20	28,360	-43.5		08	15.1
10	9	31,111	-40.8			

HILO, HAWAII 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	21.4	19.0	22	1.5
1000	30	136	22.0	19.1	18	1.5
950	30	582	19.1	17.2	13	3.6
900	30	1,045	16.0	14.4	12	4.1
850	30	1,530	13.1	11.3	12	3.6
800	30	2,039	10.6	6.7	13	3.1
750	30	2,576	9.1	.2	11	3.5
700	30	3,145	6.4	-6.1	10	3.0
650	30	3,750	3.1	-9.0	12	2.1
600	30	4,395	-.4	-14.1	13	1.6
550	30	5,086	-4.5	-19.4	06	1.1
500	30	5,829	-9.2	-25.0	34	1.8
450	30	6,637	-14.0	-28.9	34	2.7
400	30	7,521	-19.8	-33.3	33	4.5
350	30	8,500	-27.4	-40.1	31	7.2
300	30	9,587	-36.2	-47.3	31	11.3
250	30	10,825	-46.4		30	16.3
200	30	12,270	-57.8		29	20.9
175	30	13,101	-63.0		29	22.1
150	29	14,040	-68.2		29	19.0
125	28	15,120	-72.3		30	13.5
100	26	16,426	-75.2		30	8.4
80	24	17,726	-72.8		34	3.4
70	24	18,516	-69.9		03	1.7
60	24	19,443	-66.1		09	1.1
50	24	20,560	-62.0		09	2.4
40	23	21,953	-58.8		12	3.3
30	22	23,777	-54.4		08	2.5
25	21	24,950	-52.4		07	4.1
20	20	26,404	-49.6		09	5.8
15	19	28,302	-46.8		11	6.8
10	11	31,038	-41.7			

HUNTINGTON W. VA. 989 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	6.3	2.5	20	1.2
1000						
950	30	579	7.6	2.0	24	5.3
900	30	1,024	6.0	-.6	25	9.2
850	30	1,491	4.3	-3.7	26	11.7
800	30	1,983	2.9	-5.7	27	13.7
750	30	2,504	1.0	-9.9	27	15.6
700	30	3,056	-1.3	-14.0	27	17.5
650	30	3,645	-4.0	-16.6	27	19.3
600	30	4,272	-7.6	-19.5	27	20.8
550	30	4,944	-11.7	-23.8	28	23.2
500	30	5,668	-16.0	-28.5	28	26.5
450	30	6,454	-21.4	-32.5	28	28.6
400	28	7,312	-27.4	-38.1	28	31.3
350	28	8,264	-33.9	-43.4	28	34.8
300	27	9,324	-41.4	-45.8	28	37.9
250	27	10,538	-50.1		28	38.0
200	27	11,969	-58.1		28	38.3
175	27	12,806	-60.2		28	37.6
150	27	13,765	-61.2		27	35.7
125	26	14,897	-62.5		28	30.6
100	26	16,268	-64.4		27	24.4
80	24	17,630	-64.4		27	19.7
70	24	18,448	-63.3		27	15.6
60	24	19,398	-62.0		27	11.8
50	23	20,531	-59.7		27	12.3
40	22	21,936	-57.0		26	10.5
30	21	23,773	-53.9		26	13.2
25	21	24,949	-52.1		26	16.4
20	21	26,399	-50.6		26	20.6
15	20	28,281	-49.5		26	27.1
10	12	30,994	-48.2		26	29.6

* INTERNATIONAL FALLS, MINN. 971 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	359	-4.8	-8.5	22	1.0
1000						
950	30	532	-5.4	-7.2	27	2.0
900	30	956	-6.4	-8.7	27	3.9
850	30	1,403	-6.8	-10.6	28	5.8
800	30	1,876	-7.7	-11.9	28	8.0
750	30	2,377	-9.1	-15.4	28	9.4
700	30	2,909	-11.5	-17.6	28	10.9
650	30	3,474	-14.3	-21.7	28	12.1
600	30	4,077	-17.9	-26.6	28	13.2
550	30	4,723	-21.9	-30.5	28	15.0
500	30	5,418	-26.4	-36.0	28	16.0
450	30	6,172	-31.6	-39.8	27	17.6
400	30	6,995	-37.4	-42.6	27	21.3
350	30	7,908	-43.5	-44.8	27	23.2
300	30	8,929	-49.3		27	25.0
250	30	10,112	-53.8		27	26.6
200	29	11,538	-55.9		27	24.7
175	29	12,388	-55.8		27	23.1
150	29	13,369	-56.0		27	22.5
125	29	14,528	-56.6		28	19.2
100	28	15,934	-57.9		27	19.0
80	27	17,335	-59.0		27	18.3
70	25	18,170	-60.1		27	15.0
60	23	19,128	-61.0		28	14.7
50	21	20,263	-60.9		27	14.3
40	19	21,644	-62.1		28	14.2
30	17	23,424	-61.5		28	14.8
25	12	24,555	-60.3		27	14.9
20	10	25,946	-60.4			
15	6	27,779	-60.3			
10						

JACKSON, MISS. 1007 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	100	12.3	10.1	16	1.4
1000	27	172	12.7	9.3	16	1.5
950	30	596	14.2	6.7	20	4.7
900	30	1,053	13.6	1.7	23	5.7
850	30	1,533	11.9	1.2	24	6.5
800	30	2,039	9.8	-3.6	25	7.8
750	30	2,573	7.6	-7.9	26	9.5
700	30	3,138	4.6	-12.5	26	10.8
650	30	3,739	1.6	-16.7	26	12.1
600	30	4,379	-2.4	-19.6	26	13.7
550	30	5,064	-6.3	-24.2	26	14.4
500	30	5,802	-11.4	-28.9	26	15.7
450	30	6,602	-17.1	-33.2	26	17.3
400	30	7,474	-23.6	-37.4	26	18.8
350	30	8,438	-30.8	-43.6	26	20.2
300	30	9,510	-39.3	-50.4	26	20.7
250	30	10,734	-48.8		27	23.3
200	30	12,167	-58.5		27	28.9
175	30	13,000	-61.9		27	30.3
150	30	13,948	-64.2		27	31.7
125	30	15,056	-67.3		27	29.0
100	30	16,391	-70.5		27	24.4
80	29	17,713	-71.6		27	16.8
70	28	18,504	-69.2		27	13.9
60	28	19,432	-66.1		28	11.3
50	27	20,548	-62.6		26	7.0
40	25	21,937	-58.6		27	8.3
30	25	23,766	-53.9		26	9.3
25	25	24,943	-51.6		26	10.6
20	25	26,400	-48.9		26	10.2
15	24	28,299	-46.9		26	13.4
10	20	30,963	-45.0		26	21.1

JOHN F. KENNEDY INT. AP NY 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	7.5	-1.5	29	2.8
1000	28	147	6.7	-.8	29	4.5
950	30	554	5.2	-1.0	28	7.9
900	30	994	2.8	-2.6	29	9.7
850	30	1,456	1.3	-4.5	29	12.2
800	30	1,943	-.7	-6.3	29	14.2
750	30	2,457	-2.2	-11.7	29	15.4
700	30	3,003	-4.4	-14.5	28	17.3
650	30	3,585	-6.8	-17.1	28	19.2
600	30	4,205	-10.5	-21.4	28	21.0
550	30	4,870	-14.8	-24.5	28	22.4
500	30	5,584	-19.7	-29.4	28	24.4
450	30	6,360	-24.5	-35.3	28	26.8
400	30	7,207	-30.5	-39.8	28	28.5
350	30	8,146	-37.3	-43.7	28	30.5
300	30	9,191	-44.6	-48.6	29	35.9
250	30	10,393	-51.4		29	38.5
200	29	11,828	-56.4		28	40.0
175	29	12,673	-58.0		29	38.7
150	28	13,638	-58.7		28	34.1
125	27	14,781	-60.1		28	29.1
100	27	16,171	-60.8		28	24.8
80	26	17,555	-61.2		28	19.6
70	26	18,385	-60.7		28	16.1
60	25	19,340	-60.0		27	13.1
50	25	20,484	-58.0		27	12.3
40	24	21,899	-56.5		27	13.2
30	24	23,732	-55.0		27	14.3
25	23	24,902	-53.5		27	17.7
20	21	26,335	-52.0		27	22.5
15	17	28,184	-51.9		26	28.7
10	5	30,764	-53.3			

JOHNSTON IS., PACIFIC AREA 1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	25.6	22.0	10	3.2
1000	30	103	24.6	22.3	10	3.8
950	30	552	21.2	19.9	10	4.6
900	30	1,020	18.3	16.4	11	3.9
850	30	1,509	15.3	12.5	12	2.9
800	30	2,022	13.0	9.3	14	2.1
750	30	2,563	10.3	5.4	14	1.8
700	30	3,135	7.1	.7	17	1.5
650	30	3,743	4.4	-5.1	18	1.4
600	30	4,390	.7	-10.2	20	1.5
550	30	5,085	-3.3	-14.7	21	1.9
500	30	5,832	-7.8	-19.6	23	2.9
450	30	6,644	-13.0	-25.4	23	3.8
400	29	7,534	-19.1	-31.1	22	5.3
350	29	8,516	-26.1	-37.6	22	7.1
300	29	9,611	-34.3	-45.1	23	9.5
250	29	10,859	-44.3		23	12.7
200	29	12,318	-55.7		24	15.6
175	29	13,157	-61.7		25	15.5
150	29	14,099	-66.8		27	12.6
125	28	15,186	-72.4		27	8.4
100	28	16,481	-76.9		30	5.1
80	25	17,766	-75.7		36	2.8
70	24	18,546	-71.7		05	3.1
60	24	19,464	-67.5		08	4.1
50	23	20,577	-63.2		10	4.0
40	22	21,965	-59.5		09	4.4
30	22	23,789	-54.2		08	6.6
25	21	24,968	-52.0		08	8.7
20	20	26,426	-48.8		09	9.9
15	19	26,334	-45.3		10	9.6
10	11	31,096	-39.9		11	5.7

KEY WEST, FLA. 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	23.8	20.2	07	3.2
1000	30	151	23.4	19.7	08	4.6
950	30	597	20.1	17.4	09	5.6
900	30	1,063	17.1	13.5	10	4.7
850	30	1,549	14.6	7.6	10	2.8
800	30	2,060	12.2	2.5	12	1.4
750	30	2,599	10.4	-5.2	06	.6
700	30	3,171	7.8	-9.7	03	.3
650	30	3,778	4.5	-13.6	29	.4
600	30	4,425	.7	-17.6	24	1.3
550	30	5,118	-3.3	-22.3	25	2.1
500	30	5,865	-8.4	-27.0	27	2.5
450	30	6,674	-13.9	-31.5	26	3.7
400	30	7,557	-20.4	-36.7	27	5.4
350	29	8,534	-27.7	-42.7	27	7.7
300	29	9,621	-36.0	-50.0	28	12.1
250	29	10,863	-45.1		27	16.5
200	29	12,320	-55.5		27	21.1
175	29	13,160	-60.7		27	22.0
150	29	14,109	-65.3		27	19.7
125	29	15,207	-69.9		27	15.9
100	29	16,519	-74.8		28	10.1
80	29	17,812	-75.1		30	5.0
70	29	18,590	-73.0		31	2.0
60	29	19,505	-68.5		32	.8
50	29	20,614	-62.2		07	.7
40	29	22,010	-57.4		07	1.4
30	29	23,851	-52.5		07	3.3
25	29	25,036	-50.2		08	4.3
20	28	26,501	-47.6		09	5.5
15	24	28,425	-43.3		10	5.7
10	18	31,210	-39.6		11	6.4

* KOROR, CAROLINE IS. 1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	30	27.8	24.7	09	2.0
1000	30	60	27.1	24.7	09	2.4
950	30	534	24.1	22.1	09	4.4
900	30	1,007	21.3	18.6	10	4.6
850	30	1,501	18.4	14.5	10	4.6
800	30	2,021	16.0	10.7	10	4.6
750	30	2,568	13.3	7.3	10	5.4
700	30	3,146	10.0	3.3	10	5.8
650	30	3,760	6.9	.0	10	6.3
600	30	4,414	3.3	-4.1	10	6.9
550	30	5,116	-.7	-8.1	10	7.5
500	30	5,872	-4.7	-13.3	10	8.3
450	30	6,695	-9.4	-18.8	10	8.8
400	30	7,596	-14.9	-24.5	10	8.9
350	30	8,597	-21.4	-32.0	09	8.0
300	30	9,712	-29.9	-41.3	10	7.5
250	30	10,985	-40.1	-48.1	10	7.5
200	30	12,468	-52.5		09	6.8
175	30	13,317	-59.4		08	7.2
150	30	14,264	-67.3		08	7.2
125	28	15,343	-75.3		08	8.3
100	28	16,611	-82.3		09	10.1
80	28	17,865	-78.1		08	5.9
70	28	18,641	-72.1		02	1.1
60	28	19,560	-67.3		28	3.7
50	26	20,669	-63.5		27	3.7
40	27	22,055	-59.7		28	2.1
30	26	23,871	-55.1		10	5.7
25	23	25,040	-53.0		10	10.1
20	22	26,487	-49.8		09	14.7
15	17	28,390	-44.9		09	19.1
10	5	31,043	-42.6			

LAKE CHARLES, LA. 1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	15.6	13.9	11	1.5
1000	30	152	17.9	13.4	14	2.8
950	30	591	16.4	10.6	19	4.8
900	30	1,051	15.3	4.7	21	5.7
850	30	1,535	13.3	2.6	22	6.1
800	30	2,043	11.4	-2.8	23	6.3
750	30	2,580	8.5	-7.0	24	6.3
700	30	3,147	5.5	-11.7	25	7.6
650	30	3,749	2.6	-16.0	26	8.2
600	30	4,391	-1.5	-19.9	25	8.9
550	30	5,079	-5.9	-23.8	26	9.3
500	30	5,818	-10.9	-28.8	26	10.3
450	30	6,619	-16.5	-32.4	26	13.2
400	30	7,494	-22.9	-37.0	26	15.4
350	30	8,462	-30.1	-43.6	26	17.3
300	30	9,537	-38.6	-52.1	26	19.0
250	30	10,764	-48.0		26	20.5
200	30	12,203	-57.6		26	23.8
175	30	13,039	-61.2		26	25.7
150	30	13,989	-64.1		26	27.4
125	30	15,097	-67.4		26	24.9
100	30	16,428	-71.0		26	20.3
80	29	17,745	-72.2		27	12.9
70	28	18,534	-70.1		26	9.6
60	28	19,458	-66.5		27	6.0
50	27	20,573	-62.0		27	4.2
40	25	21,963	-58.5		25	4.6
30	23	23,797	-53.4		26	5.1
25	23	24,978	-50.9		27	5.1
20	23	26,436	-49.3		26	5.8
15	21	28,342	-46.2		26	8.1
10	16	31,085	-43.8		26	16.5

RAWINSONDE DATA

Average monthly values

LANDER, WYO. 825 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	1,697	-3.2	-8.1	15	.9
1000						
950						
900						
850						
800	30	1,941	-.4	-9.5	25	.1
750	30	2,456	-2.3	-13.2	26	2.6
700	30	3,001	-5.8	-15.5	26	7.0
650	30	3,578	-9.2	-18.2	27	11.6
600	30	4,193	-12.5	-21.8	27	16.1
550	30	4,852	-16.8	-25.4	27	17.4
500	30	5,561	-21.5	-30.6	26	18.4
450	30	6,330	-26.6	-35.0	26	19.6
400	30	7,170	-32.8	-38.2	26	22.1
350	30	8,100	-39.4	-42.5	26	24.5
300	30	9,136	-46.6		27	27.6
250	30	10,327	-53.6		27	28.7
200	30	11,745	-58.3		27	28.2
175	30	12,583	-59.2		26	28.4
150	30	13,551	-58.3		26	23.5
125	30	14,695	-59.6		26	22.8
100	30	16,088	-60.6		26	21.4
80	30	17,475	-60.7		26	14.9
70	28	18,299	-61.9		26	14.6
60	28	19,254	-61.5		26	14.2
50	28	20,383	-61.4		26	14.1
40	28	21,770	-60.6		26	11.5
30	25	23,553	-60.2		26	13.1
25	22	24,689	-60.4		26	14.3
20	19	26,086	-59.0		26	14.5
15	12	27,901	-57.8		26	17.7
10						
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• LIHUE, KAUAI, HAWAII 1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	36	23.5	20.3	08	2.6
1000	30	140	23.4	20.2	09	3.5
950	30	586	19.8	18.1	10	4.9
900	30	1,051	16.7	14.7	11	4.8
850	30	1,537	13.4	10.8	11	4.3
800	30	2,047	11.9	4.0	11	3.9
750	30	2,586	9.6	-1.9	12	3.3
700	30	3,155	6.7	-7.0	13	2.3
650	30	3,761	3.3	-10.1	15	1.6
600	30	4,406	.3	-15.8	19	1.0
550	30	5,099	-3.5	-19.3	27	.9
500	30	5,846	-8.2	-23.7	28	1.6
450	30	6,656	-13.5	-27.4	29	2.9
400	30	7,541	-19.8	-33.1	29	4.6
350	30	8,521	-27.0	-39.1	29	7.4
300	30	9,610	-35.8	-46.9	29	10.7
250	30	10,850	-46.3		29	14.3
200	30	12,294	-58.0		28	18.1
175	30	13,125	-63.2		28	18.5
150	30	14,063	-67.6		29	16.2
125	30	15,149	-71.7		30	12.7
100	28	16,460	-74.0		32	7.6
80	24	17,762	-73.0		36	4.3
70	24	18,550	-70.5		03	4.5
60	24	19,474	-66.4		06	3.4
50	24	20,590	-62.5		10	1.5
40	23	21,977	-58.6		12	1.5
30	23	23,803	-54.8		35	.1
25	22	24,980	-52.8		04	1.9
20	20	26,425	-51.0		06	2.0
15	19	28,310	-47.0		18	2.6
10	18	31,018	-43.5		24	11.8
7	15	33,435	-43.3		26	21.9
5	5	35,840	-41.0			

LITTLE ROCK, ARK. 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	79	10.6	8.3	17	.5
1000	27	162	11.1	6.5	20	.9
950	30	581	11.5	5.7	22	5.1
900	30	1,033	10.9	3.5	24	7.6
850	30	1,510	9.8	1.6	25	9.8
800	30	2,013	8.3	-4.1	26	11.2
750	30	2,545	6.7	-8.6	26	11.8
700	30	3,107	3.4	-12.6	25	13.6
650	30	3,704	-.1	-16.4	26	15.2
600	30	4,340	-3.8	-21.4	26	16.7
550	30	5,021	-8.0	-24.7	26	17.5
500	30	5,755	-12.7	-28.3	26	18.4
450	29	6,552	-18.3	-34.0	26	20.2
400	28	7,421	-24.6	-37.5	26	21.6
350	26	8,397	-31.5	-43.6	26	21.7
300	26	9,466	-40.1	-51.5	27	23.9
250	22	10,664	-49.6		27	27.0
200	21	12,112	-58.7		27	30.1
175	21	12,944	-61.9		26	31.3
150	21	13,893	-63.9		26	31.5
125	20	15,011	-66.0		27	30.2
100	20	16,356	-68.0		27	25.5
80	18	17,697	-68.7		27	18.4
70	18	18,499	-67.2		28	15.6
60	17	19,431	-65.4		28	12.5
50	15	20,549	-61.8		27	10.4
40	15	21,940	-59.3		27	10.5
30	15	23,763	-54.3		26	12.8
25	15	24,941	-51.3		26	16.3
20	14	26,406	-48.3		26	20.3
15	12	28,308	-47.2		26	22.2
10	6	31,035	-45.3			
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5						

MCGRATH, ALASKA 1005 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	28	103	-18.5	-18.8	29	.2
1000	28	187	-16.5	-18.7	35	.0
950	28	529	-13.0	-14.5	33	.3
900	28	944	-10.8	-14.5	25	.9
850	28	1,384	-10.5	-16.3	28	2.0
800	28	1,850	-11.7	-17.[illegible]	29	3.8
750	28	2,343	-13.5	-19.5	30	5.4
700	28	2,866	-15.6	-22.6	30	6.7
650	28	3,423	-18.1	-25.5	30	8.2
600	28	4,017	-21.4	-28.3	30	9.0
550	28	4,654	-25.1	-32.3	30	10.1
500	28	5,341	-29.4	-35.7	30	12.1
450	28	6,086	-34.1	-37.7	30	14.4
400	28	6,902	-38.9	-41.2	30	17.8
350	27	7,809	-44.4		30	20.0
300	25	8,815	-49.8		29	16.5
250	26	9,998	-53.1		28	17.7
200	22	11,43[illegible]	-54.2		27	15.3
175	22	12,287	-53.7		28	15.9
150	22	13,279	-53.6		28	15.9
125	22	14,452	-53.9		28	15.5
100	22	15,885	-53.9		28	16.3
80	22	17,316	-54.5		28	16.5
70	22	18,170	-55.1		28	16.9
60	22	19,154	-55.7		28	17.8
50	21	20,306	-55.8		29	11.4
40	21	21,722	-57.1		29	23.0
30	21	23,536	-58.3		29	26.2
25	19	24,705	-58.9		29	25.8
20	14	26,106	-60.2		30	26.7
15	7	28,037	-58.1			
10						
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5						

• MAJURO, MARSHALL IS. 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	3	28.4	23.9	09	3.2
1000	30	84	26.9	22.9	09	4.0
950	30	537	23.4	21.0	09	5.9
900	30	1,008	20.5	17.8	09	6.6
850	30	1,501	17.7	14.1	08	6.8
800	30	2,019	15.6	10.3	08	6.2
750	30	2,566	13.1	6.1	09	5.5
700	30	3,144	10.1	1.5	09	5.1
650	30	3,758	6.9	-3.7	08	4.4
600	30	4,412	3.2	-8.6	08	4.1
550	30	5,112	-.7	-12.7	07	3.5
500	30	5,867	-5.3	-17.9	06	3.0
450	30	6,689	-9.6	-24.3	08	2.8
400	30	7,568	-15.5	-28.9	34	2.3
350	30	8,587	-21.9	-35.6	28	5.0
300	30	9,700	-30.1	-42.2	27	8.9
250	30	10,971	-40.3	-52.6	27	11.7
200	30	12,453	-52.6		27	13.9
175	30	13,303	-59.2		28	14.6
150	30	14,252	-66.5		29	12.6
125	28	15,336	-73.4		30	8.5
100	26	16,620	-78.8		33	3.1
80	25	17,890	-77.7		35	3.0
70	25	18,667	-71.4		30	3.5
60	25	19,586	-67.8		27	6.0
50	24	20,698	-63.3		27	5.6
40	22	22,084	-58.9		27	3.7
30	20	23,907	-55.0		08	2.9
25	19	25,079	-51.8		10	9.3
20	16	26,540	-48.5		09	14.7
15	13	28,461	-43.7		09	20.0
10	5	31,221	-37.6			
7						
5						

• MEDFORD, OREG. 966 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	28	401	6.1	2.6	31	.3
1000						
950	28	540	5.8	3.0	22	.7
900	28	983	4.3	1.4	20	3.3
850	28	1,445	.9	-.8	23	6.1
800	28	1,931	-2.1	-2.9	24	9.9
750	28	2,441	-4.9	-7.1	24	12.4
700	28	2,982	-7.7	-12.7	25	14.8
650	28	3,555	-10.5	-18.4	26	15.5
600	28	4,168	-13.9	-19.8	26	17.0
550	28	4,824	-17.7	-26.7	26	18.9
500	29	5,531	-22.0	-31.7	27	21.6
450	28	6,299	-27.1	-36.2	27	23.6
400	28	7,138	-32.8	-40.0	27	26.0
350	28	8,069	-38.6	-43.9	27	27.9
300	28	9,110	-45.6		27	29.8
250	28	10,306	-52.6		28	31.0
200	28	11,728	-57.8		28	31.7
175	27	12,563	-57.4		28	28.1
150	26	13,545	-57.6		28	26.0
125	25	14,694	-59.1		28	22.0
100	25	16,088	-60.6		27	18.7
80	25	17,477	-60.0		28	15.3
70	25	18,312	-60.1		28	11.6
60	25	19,273	-60.5		27	10.9
50	24	20,412	-60.4		28	11.4
40	23	21,803	-59.9		29	8.4
30	22	23,604	-59.2		30	7.6
25	22	24,745	-59.5		29	9.0
20	21	26,144	-57.4		29	10.5
15	19	27,976	-55.8		28	13.1
10	15	30,584	-53.7		28	19.3
7	8	32,915	-50.0			

MERIDA, MEXICO 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	11	21.5	20.6	07	1.0
1000	30	136	23.4	21.4	09	3.5
950	30	585	21.8	18.7	10	6.4
900	30	1,054	19.3	14.4	10	5.8
850	30	1,544	16.4	9.6	10	4.5
800	30	2,058	13.9	5.5	11	3.5
750	30	2,600	11.5	-.4	12	2.9
700	30	3,174	8.7	-6.7	11	2.1
650	30	3,784	5.5	-11.2	11	1.2
600	30	4,434	1.8	-14.9	12	1.1
550	30	5,130	-2.3	-19.2	12	.4
500	30	5,880	-6.9	-23.6	32	.5
450	30	6,694	-12.3	-29.0	25	1.1
400	29	7,584	-18.7	-34.6	26	2.6
350	29	8,568	-25.8	-41.2	26	4.0
300	29	9,662	-34.3	-48.2	26	5.4
250	29	10,912	-44.1		24	9.5
200	29	12,371	-55.5		24	12.6
175	29	13,212	-61.0		24	14.3
150	29	14,158	-66.1		23	14.0
125	28	15,253	-70.8		23	11.5
100	28	16,555	-76.8		22	8.8
80	28	17,832	-77.7		20	5.0
70	28	18,603	-74.0		20	2.7
60	27	19,506	-70.2		09	1.3
50	27	20,608	-62.9		07	3.4
40	25	21,996	-58.8		07	4.5
30	24	23,823	-53.2		09	5.3
25	22	25,005	-50.5		07	5.2
20	22	26,470	-47.6		08	5.6
15	18	28,391	-44.6		07	4.9
10	5	31,157	-40.4			
7						

MIAMI, FLA. 1019 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	4	22.3	17.6	07	1.5
1000	30	165	22.8	18.3	09	3.3
950	30	610	19.3	16.0	10	4.3
900	30	1,074	16.3	12.5	10	3.4
850	30	1,559	13.6	7.1	11	2.1
800	30	2,068	11.6	1.9	11	.4
750	30	2,606	9.6	-5.2	31	1.1
700	30	3,177	7.6	-9.4	31	1.8
650	30	3,783	4.3	-12.3	29	2.1
600	30	4,430	.5	-17.8	28	2.5
550	30	5,123	-3.6	-22.4	27	3.2
500	30	5,869	-8.7	-27.0	27	4.5
450	30	6,677	-14.2	-31.6	27	5.5
400	30	7,559	-20.9	-36.9	28	6.7
350	30	8,535	-28.2	-42.8	27	8.5
300	30	9,619	-36.5	-49.7	28	11.5
250	30	10,858	-45.6		27	17.1
200	29	12,312	-55.4		27	23.2
175	29	13,153	-60.4		27	23.6
150	28	14,105	-64.8		28	21.8
125	28	15,205	-69.3		28	19.6
100	27	16,519	-73.9		28	12.7
80	27	17,818	-74.3		29	7.1
70	26	18,598	-71.7		30	4.0
60	26	19,517	-67.5		28	2.5
50	25	20,630	-61.4		30	.8
40	24	22,028	-57.1		14	.3
30	21	23,868	-52.7		06	2.1
25	19	25,053	-50.2		08	3.1
20	19	26,520	-47.6		09	4.5
15	16	28,454	-43.5		10	4.7
10	8	31,221	-39.7			
7						

MIDLAND, TEXAS 916 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	874	8.5	2.2	21	1.7
1000						
950						
900	30	1,016	11.2	3.0	21	3.6
850	30	1,497	14.0	-3.0	24	8.4
800	30	2,007	12.8	-7.6	26	9.3
750	30	2,545	9.6	-10.7	26	9.2
700	30	3,113	5.5	-13.2	25	9.9
650	30	3,715	1.6	-16.3	25	11.3
600	30	4,355	-2.3	-20.7	25	12.9
550	30	5,039	-7.0	-24.8	26	13.9
500	30	5,775	-12.1	-28.9	26	16.1
450	30	6,573	-17.7	-32.3	26	16.6
400	29	7,438	-24.4	-38.8	25	19.2
350	29	8,401	-31.6	-44.7	26	21.1
300	29	9,470	-39.9	-50.1	26	23.7
250	28	10,693	-49.1		26	26.1
200	26	12,133	-57.7		26	28.5
175	25	12,968	-60.8		26	29.7
150	25	13,921	-63.0		26	29.4
125	25	15,036	-66.2		26	27.6
100	24	16,382	-69.0		27	21.4
80	24	17,713	-69.5		27	15.4
70	22	18,514	-69.0		26	12.8
60	21	19,443	-66.9		27	10.1
50	20	20,560	-62.8		27	8.7
40	19	21,948	-58.9		26	8.1
30	19	23,776	-53.4		26	11.8
25	17	24,963	-49.6		26	14.9
20	15	26,425	-48.3		26	16.1
15	13	28,323	-47.2		27	16.5
10	12	31,023	-45.1		26	24.4
7						

MONTERREY, MEXICO 963 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	25	423	15.6	13.8	32	1.4
1000						
950	25	568	17.6	14.5	35	.4
900	25	1,031	17.3	10.7	15	2.3
850	25	1,520	17.6	2.5	18	3.3
800	25	2,037	16.2	-3.2	23	2.6
750	25	2,583	13.5	-7.9	26	4.1
700	25	3,159	9.1	-10.9	27	4.6
650	25	3,767	4.6	-14.4	27	6.1
600	25	4,414	.6	-18.8	27	5.6
550	25	5,107	-3.9	-23.6	26	5.8
500	25	5,851	-9.1	-28.4	26	6.8
450	25	6,658	-14.8	-33.0	26	7.8
400	25	7,538	-21.3	-36.8	26	10.4
350	25	8,512	-28.6	-43.2	26	11.9
300	25	9,593	-37.3	-51.5	26	13.4
250	25	10,827	-46.7		26	15.3
200	25	12,274	-56.7		25	19.5
175	25	13,111	-61.4		25	21.9
150	25	14,057	-65.5		25	19.6
125	25	15,158	-68.9		25	18.0
100	25	16,479	-73.3		25	14.2
80	25	17,782	-73.3		25	10.0
70	23	18,564	-72.0		26	6.6
60	23	19,481	-68.4		27	3.5
50	23	20,588	-62.9		26	1.7
40	22	21,977	-58.6		21	1.2
30	21	23,809	-53.6		06	.9
25	21	24,989	-50.7		07	.9
20	20	26,444	-48.7		09	.3
15	18	28,346	-45.8		26	2.9
10	9	31,074	-41.4			
7						

MONETT, MO. 965 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	438	8.0	4.8	17	2.2
1000						
950	30	564	8.8	4.1	20	3.2
900	30	1,013	8.5	2.4	24	7.8
850	30	1,485	7.1	-1.0	25	9.2
800	30	1,984	6.8	-4.8	26	10.8
750	30	2,512	4.9	-9.0	26	11.8
700	30	3,072	1.8	-12.5	26	13.7
650	30	3,666	-1.2	-15.5	26	16.2
600	30	4,300	-5.1	-20.3	26	18.6
550	30	4,978	-9.4	-24.4	26	19.6
500	30	5,708	-13.9	-29.0	26	21.5
450	29	6,504	-19.5	-32.8	26	22.9
400	29	7,368	-26.1	-38.5	26	25.7
350	28	8,319	-33.3	-45.0	26	27.9
300	28	9,380	-41.7	-47.0	27	29.3
250	27	10,569	-50.6		26	32.7
200	27	12,014	-59.4		26	36.9
175	27	12,844	-62.3		26	35.7
150	27	13,794	-62.9		27	34.7
125	24	14,911	-64.4		27	33.4
100	24	16,267	-66.5		27	26.5
80	22	17,611	-67.3		27	20.0
70	21	18,418	-66.1		27	18.3
60	21	19,357	-64.6		27	14.9
50	20	20,480	-62.4		27	11.8
40	20	21,873	-58.2		26	13.8
30	20	23,697	-55.2		26	16.5
25	20	24,865	-53.6		26	19.7
20	20	26,305	-52.4		25	23.1
15	18	28,183	-50.6		26	29.8
10	11	30,797	-49.7		26	33.8

MONTGOMERY, ALA. 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	57	10.4	8.1	29	.3
1000	30	173	13.0	9.7	24	.4
950	30	606	13.7	6.5	24	2.8
900	30	1,061	12.2	1.5	26	4.8
850	30	1,539	11.0	-1.7	26	5.8
800	30	2,044	9.3	-5.3	27	6.6
750	30	2,577	7.4	-8.5	27	7.6
700	30	3,142	4.4	-11.6	27	8.3
650	30	3,742	1.4	-15.1	27	10.0
600	30	4,362	-2.2	-18.0	27	11.9
550	30	5,068	-6.4	-21.8	27	13.6
500	30	5,806	-11.3	-27.3	27	15.8
450	29	6,606	-17.0	-32.5	27	16.8
400	27	7,477	-23.6	-37.5	27	17.8
350	26	8,440	-31.0	-43.1	27	19.9
300	26	9,511	-39.7	-49.0	27	21.5
250	24	10,732	-49.1		27	21.9
200	24	12,165	-58.4		27	27.3
175	24	12,997	-62.1		27	27.8
150	24	13,945	-63.6		27	28.9
125	23	15,055	-67.2		27	28.2
100	23	16,393	-69.8		27	21.9
80	23	17,717	-70.8		27	15.6
70	23	18,512	-68.8		27	10.7
60	23	19,443	-65.3		27	7.9
50	23	20,562	-61.9		27	5.5
40	23	21,956	-57.9		27	4.8
30	22	23,790	-53.0		26	6.2
25	21	24,971	-50.9		27	6.0
20	20	26,428	-49.3		27	7.7
15	18	28,326	-47.3		26	12.2
10	7	30,925	-46.4			

NASHVILLE, TENN. 998 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	180	8.7	5.2	19	1.1
1000	12	219	4.5	-2.6	12	.3
950	30	591	9.6	3.4	23	5.7
900	30	1,039	7.8	.6	25	8.6
850	30	1,509	7.0	-3.9	26	9.9
800	30	2,007	5.1	-5.0	26	11.7
750	30	2,532	3.6	-8.1	27	13.3
700	30	3,090	1.1	-12.5	27	15.1
650	30	3,683	-1.9	-15.6	27	16.2
600	30	4,316	-5.1	-20.0	27	17.5
550	30	4,995	-9.2	-24.3	27	20.5
500	30	5,725	-13.7	-28.3	27	22.7
450	30	6,519	-18.8	-32.5	27	24.7
400	30	7,385	-25.2	-38.3	27	27.8
350	30	8,344	-32.5	-43.8	27	29.6
300	30	9,408	-41.1	-44.7	27	31.6
250	30	10,621	-50.9		27	34.0
200	29	12,043	-60.1		28	38.3
175	29	12,872	-62.5		27	37.3
150	28	13,816	-63.1		28	35.9
125	28	14,933	-64.9		28	32.0
100	27	16,289	-66.8		28	25.8
80	27	17,634	-67.2		27	21.3
70	27	18,442	-66.1		28	16.6
60	26	19,360	-64.1		27	12.5
50	26	20,507	-60.5		27	11.4
40	26	21,901	-58.4		26	10.1
30	23	23,719	-55.1		26	12.6
25	22	24,869	-52.4		26	16.0
20	21	26,342	-49.7		26	19.9
15	20	28,239	-47.7		26	23.4
10	16	30,909	-46.5		26	30.2

• NOME, ALASKA 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	28	5	-6.9	-9.2	10	3.3
1000	24	152	-6.6	-9.3	11	2.9
950	28	512	-7.2	-9.8	15	3.7
900	28	934	-7.4	-12.0	19	3.6
850	28	1,378	-8.9	-14.7	22	3.1
800	28	1,846	-10.3	-17.0	23	3.9
750	28	2,342	-11.9	-19.3	24	5.4
700	28	2,868	-14.3	-22.5	24	6.5
650	28	3,427	-17.2	-25.7	24	6.6
600	28	4,023	-20.7	-29.5	24	7.8
550	28	4,662	-24.5	-32.0	24	8.5
500	28	5,351	-28.4	-34.3	25	10.4
450	26	6,099	-33.2	-36.2	25	10.2
400	28	6,917	-38.5	-40.9	25	10.2
350	28	7,828	-43.9	-42.8	25	10.8
300	28	8,846	-50.0		25	13.4
250	28	10,025	-54.7		25	14.9
200	28	11,445	-55.8		25	15.6
175	28	12,299	-53.9		25	14.1
150	28	13,288	-54.4		25	12.8
125	28	14,457	-54.2		25	12.8
100	28	15,887	-54.2		26	13.3
80	28	17,313	-55.1		26	13.4
70	27	18,161	-54.9		26	15.2
60	27	19,144	-55.9		26	15.0
50	27	20,302	-56.8		27	16.9
40	27	21,719	-56.4		27	19.4
30	26	23,538	-58.5		28	22.1
25	25	24,687	-59.5		28	22.4
20	22	26,080	-60.1		28	26.3
15	18	27,889	-60.1		29	23.7
10	12	30,407	-59.4			

NORTH PLATTE, NEBR. 916 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	30	847	-2.1	-5.5	35	.7
1000						
950						
900	30	987	1.1	-5.3	31	1.4
850	30	1,450	3.7	-7.6	29	4.1
800	30	1,942	2.7	-9.8	29	6.2
750	30	2,462	.3	-11.6	28	7.7
700	30	3,012	-2.9	-13.8	27	10.4
650	30	3,596	-6.4	-16.3	27	13.1
600	30	4,217	-10.0	-20.2	27	15.6
550	30	4,883	-14.4	-24.9	27	17.8
500	30	5,599	-18.9	-30.1	27	21.1
450	29	6,374	-23.8	-35.9	27	24.2
400	29	7,223	-30.1	-40.8	27	26.4
350	29	8,163	-37.0	-46.0	27	29.6
300	29	9,209	-44.7		26	33.5
250	29	10,408	-52.8		26	36.1
200	29	11,827	-58.5		26	37.0
175	29	12,656	-58.8		27	33.3
150	29	13,630	-60.1		27	31.2
125	29	14,767	-60.8		27	28.8
100	29	16,150	-61.8		27	24.2
80	29	17,531	-62.7		27	19.3
70	29	18,353	-62.4		27	15.4
60	28	19,308	-62.4		26	13.0
50	28	20,434	-61.9		26	12.2
40	27	21,821	-60.3		26	11.6
30	27	23,616	-59.1		26	14.5
25	27	24,762	-58.5		26	17.8
20	27	26,169	-57.5		26	20.8
15	21	28,113	-54.8		26	25.5
10	12	30,654	-51.5			

RAWINSONDE DATA

Average monthly values

NOVEMBER 1973

OAKLAND, CALIF. 1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	6	10.5	8.1	16	1.8
1000	30	150	11.0	6.7	18	2.0
950	30	577	8.7	4.6	23	3.5
900	30	1,022	6.1	2.2	25	5.8
850	30	1,489	3.6	-2.7	25	7.3
800	30	1,980	1.9	-7.8	26	8.4
750	30	2,499	-.4	-11.1	26	10.4
700	30	3,049	-2.6	-14.1	27	12.8
650	30	3,634	-5.2	-17.2	27	14.9
600	30	4,259	-8.5	-20.2	29	17.4
550	30	4,929	-12.6	-23.6	28	19.9
500	30	5,650	-17.4	-27.8	27	21.6
450	30	6,432	-22.5	-33.9	27	22.7
400	29	7,292	-28.2	-37.8	28	25.3
350	28	8,249	-35.0	-44.9	28	26.4
300	28	9,303	-43.1	-50.6	28	26.7
250	27	10,511	-52.5		29	29.9
200	26	11,918	-61.0		29	31.1
175	26	12,743	-62.8		28	27.8
150	26	13,695	-62.0		27	26.5
125	26	14,820	-62.9		27	23.6
100	23	16,190	-64.6		27	19.1
80	23	17,553	-64.2		28	13.3
70	21	18,369	-63.4		28	13.5
60	20	19,318	-63.2		28	11.5
50	19	20,441	-61.5		28	9.6
40	18	21,824	-60.8		27	11.9
30	17	23,622	-59.3		28	11.5
25	15	24,769	-57.8		27	13.0
20	14	26,187	-55.4		27	15.2
15	12	28,028	-55.2		27	18.3
10						
7						

OMAHA, NEBR. 967 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	403	1.6	-.8	03	.4
1000						
950	29	551	2.9	-1.3	02	.8
900	30	984	3.2	-4.7	27	2.4
850	30	1,447	2.9	-8.4	27	5.2
800	30	1,938	1.8	-10.2	27	7.2
750	30	2,456	-.3	-11.4	28	10.4
700	30	3,005	-3.1	-15.1	28	14.4
650	30	3,589	-6.2	-17.3	27	17.6
600	30	4,211	-9.6	-20.4	27	19.6
550	30	4,878	-13.8	-25.2	27	21.9
500	30	5,596	-18.5	-29.2	27	25.4
450	30	6,374	-23.8	-34.3	27	28.4
400	30	7,223	-30.0	-40.7	27	30.3
350	30	8,165	-36.6	-45.3	27	35.9
300	30	9,213	-44.1		27	41.9
250	30	10,415	-51.9		27	41.0
200	29	11,841	-57.8		26	41.9
175	29	12,680	-59.5		27	35.4
150	29	13,642	-60.1		27	33.7
125	29	14,780	-60.3		27	28.1
100	29	16,166	-61.5		27	22.6
80	28	17,544	-62.4		27	18.1
70	28	18,368	-62.6		27	13.6
60	26	19,318	-61.4		27	12.7
50	26	20,449	-61.6		26	11.2
40	24	21,836	-59.6		26	11.0
30	23	23,637	-58.1		26	14.7
25	22	24,791	-57.0		26	16.8
20	21	26,215	-54.9		25	21.3
15	21	28,061	-53.4		26	31.8
10	9	30,728	-51.4			
7						

+ PAGO PAGO, AMERICAN SAMOA 1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	27.9	24.0	06	3.4
1000	30	94	26.1	22.5	06	4.0
950	30	546	23.0	20.1	05	5.5
900	30	1,016	19.8	17.2	05	6.0
850	30	1,508	17.1	13.6	05	6.3
800	30	2,025	14.8	9.9	05	5.7
750	30	2,570	11.9	6.7	04	4.8
700	30	3,145	8.8	2.7	04	4.3
650	30	3,756	5.5	-1.4	03	4.5
600	30	4,407	1.8	-4.9	02	5.0
550	30	5,105	-1.8	-9.1	01	4.6
500	30	5,858	-5.9	-14.2	36	3.6
450	30	6,677	-10.3	-18.7	35	3.5
400	30	7,575	-15.8	-25.2	34	3.2
350	30	8,572	-22.7	-33.0	31	3.3
300	30	9,662	-31.1	-42.2	30	3.4
250	30	10,946	-41.7	-49.8	27	3.9
200	30	12,418	-54.4		25	6.3
175	30	13,260	-61.2		24	8.6
150	29	14,201	-68.3		22	10.9
125	29	15,279	-74.3		22	9.2
100	29	16,563	-78.2		21	4.1
80	29	17,839	-76.5		14	2.9
70	29	18,617	-72.1		11	3.9
60	29	19,537	-67.0		09	4.9
50	28	20,648	-62.6		09	7.1
40	28	22,038	-58.6		08	7.6
30	27	23,865	-54.2		08	9.2
25	26	25,041	-51.5		09	10.3
20	25	26,504	-48.0		09	13.8
15	20	28,425	-43.6		09	17.8
10	12	31,174	-39.4			
7						

* PEORIA, ILL. 993 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	200	3.1	.7	21	.4
1000	7	233	-1.8	-6.8		
950	30	557	4.6	-1.1	25	2.9
900	30	998	4.2	-3.1	27	5.6
850	30	1,462	2.8	-6.8	27	7.4
800	30	1,952	1.4	-11.3	27	9.2
750	30	2,470	-.4	-13.9	27	12.0
700	30	3,019	-3.1	-15.1	27	14.4
650	30	3,603	-5.7	-19.2	27	17.4
600	30	4,227	-8.9	-22.0	27	20.8
550	30	4,895	-13.3	-25.1	27	23.0
500	30	5,613	-18.3	-28.7	27	26.0
450	29	6,396	-23.1	-33.5	27	28.9
400	29	7,249	-29.1	-36.6	27	31.0
350	29	8,194	-35.6	-43.5	27	33.6
300	29	9,246	-43.5		27	35.8
250	28	10,452	-51.8		26	40.3
200	28	11,873	-58.9		27	41.4
175	28	12,709	-60.0		27	39.2
150	27	13,668	-60.5		27	36.0
125	27	14,801	-61.8		27	32.0
100	26	16,176	-62.4		27	25.2
80	26	17,550	-62.9		27	18.3
70	25	18,372	-62.7		27	15.4
60	24	19,323	-62.4		27	12.8
50	22	20,450	-60.8		27	10.9
40	22	21,842	-59.5		26	14.4
30	21	23,653	-56.9		26	16.5
25	21	24,811	-55.8		26	19.9
20	21	26,237	-54.1		26	25.5
15	19	28,098	-52.5		26	30.5
10	17	30,753	-49.2		26	41.0
7	13	33,116	-48.1		26	39.6

* PITTSBURGH, PA. 975 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	359	4.4	-.5	24	3.0
1000						
950	29	566	4.7	-.5	25	5.7
900	29	1,006	2.9	-2.4	26	9.7
850	29	1,468	.8	-4.4	27	12.0
800	29	1,954	-.6	-9.2	27	13.9
750	29	2,469	-2.2	-12.2	27	15.3
700	29	3,015	-4.3	-15.6	27	17.5
650	29	3,597	-6.8	-18.1	28	19.0
600	29	4,217	-10.3	-22.1	28	22.0
550	29	4,882	-14.5	-25.2	28	24.9
500	29	5,598	-19.1	-29.9	28	26.7
450	29	6,375	-24.0	-34.4	28	29.1
400	29	7,224	-30.0	-40.1	28	32.2
350	28	8,167	-36.2	-43.4	28	35.9
300	28	9,218	-43.3	-45.4	28	38.5
250	28	10,425	-50.9		28	41.1
200	27	11,849	-57.2		28	41.0
175	27	12,690	-59.1		28	39.0
150	27	13,654	-60.1		28	35.0
125	27	14,788	-61.6		28	31.4
100	25	16,169	-62.2		23	26.8
80	23	17,535	-61.8		28	20.1
70	20	18,361	-61.9		27	16.7
60	19	19,322	-61.1		27	14.0
50	19	20,460	-58.9		27	14.0
40	19	21,864	-57.6		27	14.0
30	18	23,687	-54.8		27	16.4
25	17	24,859	-53.9		26	22.0
20	15	26,293	-52.2		26	25.6
15	15	28,162	-50.6		26	35.3
10	15	30,817	-49.6		27	38.0
7	6	33,099	-49.6			

+ PONAPE, CAROLINE IS. 1004 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	39	28.9	24.3	08	3.1
1000	30	73	27.5	23.7	08	3.4
950	30	527	24.0	21.7	09	6.2
900	30	1,000	20.8	18.1	09	8.0
850	30	1,493	17.9	14.2	08	8.1
800	30	2,012	16.0	8.5	08	7.0
750	30	2,559	13.5	4.0	08	6.3
700	30	3,137	10.1	-.3	09	5.6
650	30	3,750	6.6	-3.5	09	5.9
600	30	4,403	3.2	-7.8	09	6.4
550	30	5,104	-.7	-12.3	08	6.9
500	30	5,860	-4.7	-17.8	08	7.8
450	30	6,682	-9.6	-23.0	08	8.3
400	30	7,582	-15.2	-29.0	07	6.7
350	30	8,582	-21.8	-35.7	05	4.3
300	30	9,695	-30.1	-43.1	36	.9
250	30	10,966	-40.3	-51.8	27	2.0
200	30	12,448	-52.6		27	4.1
175	30	13,297	-59.4		29	5.4
150	30	14,244	-67.3		30	5.8
125	30	15,324	-74.5		35	3.4
100	29	16,601	-80.8		05	5.5
80	29	17,857	-78.7		07	5.1
70	29	18,631	-72.3		36	1.1
60	28	19,550	-68.0		28	4.3
50	28	20,657	-64.1		27	6.7
40	27	22,040	-59.6		29	3.9
30	26	23,859	-54.7		08	4.1
25	26	25,032	-52.8		09	9.8
20	25	26,479	-49.6		09	14.7
15	23	28,384	-44.4		09	19.7
10	15	31,138	-39.0		09	26.0

PORTLAND, MAINE 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	20	1.0	-2.7	27	1.8
1000	24	135	1.3	-5.2	28	2.3
950	30	518	.9	-4.8	27	6.4
900	30	952	-.9	-6.7	28	7.7
850	30	1,407	-2.6	-9.6	29	9.3
800	30	1,886	-4.3	-12.0	29	11.4
750	30	2,394	-5.9	-15.8	29	14.2
700	30	2,932	-8.1	-18.3	28	15.7
650	30	3,505	-11.1	-21.1	28	17.4
600	30	4,116	-14.4	-23.9	28	20.5
550	30	4,771	-18.2	-28.7	28	23.4
500	30	5,477	-22.3	-33.5	28	25.8
450	30	6,244	-27.2	-38.4	28	28.9
400	30	7,082	-33.2	-42.0	28	29.5
350	30	8,012	-39.4	-44.5	28	32.1
300	30	9,049	-45.9		29	32.5
250	30	10,247	-51.6		29	31.0
200	30	11,683	-55.2		29	31.6
175	30	12,534	-56.1		28	30.7
150	30	13,514	-56.1		28	26.4
125	30	14,671	-57.0		27	25.0
100	30	16,079	-58.5		28	21.5
80	30	17,482	-58.4		28	17.8
70	29	18,329	-58.7		28	16.4
60	29	19,298	-58.6		27	14.1
50	28	20,438	-59.1		27	13.6
40	28	21,844	-57.4		27	15.3
30	28	23,661	-57.4		27	16.9
25	26	24,817	-56.1		27	21.5
20	26	26,240	-54.8		27	25.6
15	23	28,079	-53.8		27	33.6
10	14	30,654	-52.8		26	44.2

* QUILLAYUTE, WASH. 1001 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	58	3.5	2.3	11	.9
1000	16	108	2.6	.9	07	1.1
950	30	478	3.0	.9	18	3.5
900	30	914	.1	-1.2	21	5.2
850	30	1,370	-3.1	-4.3	22	6.1
800	30	1,848	-5.8	-8.8	22	7.0
750	30	2,351	-8.8	-14.0	23	7.9
700	30	2,883	-11.8	-19.5	24	9.4
650	30	3,447	-15.2	-23.0	25	10.0
600	30	4,048	-18.8	-26.7	25	11.2
550	30	4,691	-23.1	-32.1	25	12.9
500	30	5,362	-27.7	-36.4	25	14.7
450	30	6,133	-32.6	-40.8	25	16.8
400	30	6,953	-38.1	-45.1	26	20.9
350	30	7,865	-43.3	-44.7	26	24.8
300	29	8,888	-48.8		26	27.8
250	29	10,076	-51.9		26	27.2
200	29	11,516	-53.5		27	23.7
175	29	12,375	-53.8		28	22.4
150	29	13,363	-54.5		28	21.1
125	28	14,526	-55.0		27	18.0
100	26	15,945	-56.3		28	16.3
80	25	17,365	-57.4		28	13.0
70	25	18,207	-58.2		28	11.7
60	25	19,177	-58.8		29	13.3
50	25	20,321	-59.1		29	11.6
40	22	21,717	-59.5		30	10.3
30	22	23,517	-59.9		30	11.3
25	20	24,660	-59.3		31	11.1
20	16	26,062	-58.8		31	9.6
15	12	27,864	-58.4		30	14.3
10	8	30,442	-56.0			

RAPID CITY, S. DAK. 902 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	966	-3.0	-7.8	33	2.0
1000						
950						
900	20	1,023	-2.8	-6.9	34	2.3
850	30	1,443	.2	-8.2	29	3.6
800	30	1,928	-1.1	-10.3	30	5.1
750	30	2,441	-3.4	-12.9	29	6.6
700	30	2,984	-6.4	-15.5	28	7.8
650	30	3,560	-9.9	-18.4	28	10.4
600	30	4,173	-13.6	-22.2	27	13.0
550	30	4,829	-17.8	-26.5	27	15.4
500	30	5,536	-22.6	-31.3	27	17.8
450	30	6,301	-27.5	-36.6	27	21.4
400	30	7,139	-33.4	-41.0	27	24.6
350	30	8,067	-40.0	-43.3	27	29.1
300	30	9,100	-47.1		27	33.2
250	30	10,289	-53.8		27	34.5
200	30	11,710	-57.3		27	32.5
175	30	12,553	-57.8		27	30.2
150	29	13,521	-58.4		27	28.6
125	29	14,666	-59.0		27	26.7
100	29	16,062	-60.5		27	22.3
80	27	17,457	-61.0		27	18.5
70	27	18,287	-61.0		27	17.1
60	25	19,251	-61.3		27	14.2
50	24	20,378	-61.4		27	12.5
40	22	21,760	-61.7		27	13.4
30	21	23,547	-60.9		27	13.7
25	21	24,682	-60.1		27	16.3
20	19	26,079	-59.2		27	18.1
15	11	27,890	-58.9			
10						

ST CLOUD, MINN. 979 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	316	-2.2	-4.6	34	.4
1000						
950	30	551	-2.0	-5.7	30	1.4
900	30	982	-1.9	-6.8	28	3.7
850	30	1,436	-2.2	-9.6	29	6.2
800	30	1,916	-3.7	-13.3	29	7.8
750	30	2,425	-5.7	-16.0	28	10.2
700	30	2,963	-8.7	-18.4	28	11.4
650	30	3,534	-12.0	-22.1	28	12.3
600	30	4,142	-15.7	-25.4	28	14.2
550	30	4,793	-19.6	-29.4	28	16.5
500	30	5,495	-24.1	-32.3	28	19.0
450	30	6,256	-28.9	-36.7	27	22.2
400	30	7,088	-35.0	-41.8	27	26.2
350	30	8,010	-41.3	-42.4	27	28.4
300	30	9,040	-47.4		27	32.2
250	29	10,233	-52.8		27	35.8
200	29	11,658	-57.0		27	35.2
175	29	12,503	-57.2		27	32.0
150	29	13,477	-57.7		27	28.0
125	29	14,627	-58.1		27	26.0
100	29	16,028	-59.4		27	22.1
80	28	17,423	-60.6		27	19.3
70	27	18,254	-60.7		27	18.0
60	26	19,207	-60.9		27	16.9
50	26	20,341	-60.9		26	14.6
40	24	21,730	-61.5		26	15.3
30	19	23,518	-60.2		26	17.5
25	17	24,660	-59.1		26	18.8
20	17	26,061	-58.6		26	19.8
15	12	27,903	-57.6		26	26.5
10						

* ST PAUL IS., ALASKA 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	3.0	.9	20	2.9
1000	25	158	2.2	-.3	23	2.6
950	30	525	.4	-4.1	22	5.1
900	30	957	-1.6	-6.5	23	6.0
850	30	1,412	-2.7	-9.7	23	6.3
800	30	1,891	-4.3	-12.7	24	7.6
750	30	2,398	-6.8	-15.3	24	8.6
700	30	2,934	-9.4	-18.5	24	9.8
650	30	3,504	-12.4	-22.3	24	10.6
600	30	4,111	-15.8	-25.6	24	10.7
550	30	4,763	-19.8	-28.5	24	12.2
500	30	5,464	-24.3	-32.3	25	13.0
450	30	6,224	-29.5	-35.8	25	13.5
400	29	7,061	-34.8	-38.9	23	16.0
350	29	7,984	-41.1	-41.2	23	18.3
300	29	9,013	-48.2		23	21.1
250	29	10,197	-54.3		22	20.8
200	29	11,616	-57.0		23	19.9
175	29	12,460	-56.8		23	18.0
150	28	13,444	-55.0		24	17.1
125	28	14,609	-54.6		24	14.8
100	28	16,039	-54.4		25	14.3
80	27	17,468	-53.9		25	13.2
70	27	18,326	-53.8		25	13.0
60	26	19,319	-53.9		26	12.6
50	26	20,489	-54.2		27	11.6
40	25	21,918	-54.9		27	11.1
30	24	23,754	-55.6		28	12.1
25	23	24,918	-56.0		29	11.6
20	23	26,336	-56.6		29	12.5
15	20	28,165	-57.2		30	15.6
10	14	30,735	-56.1			

SALEM, ILL. 997 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	174	6.2	3.3	20	1.0
1000	12	214	2.2	-3.2	02	.5
950	30	567	7.5	1.2	25	4.2
900	30	1,012	6.1	-1.5	27	6.5
850	30	1,479	4.6	-3.9	28	7.5
800	30	1,972	3.3	-7.4	27	9.6
750	30	2,495	1.6	-10.1	27	12.3
700	29	3,049	-.9	-14.9	28	14.8
650	29	3,637	-3.8	-18.3	28	18.0
600	29	4,265	-7.3	-22.6	28	20.9
550	29	4,937	-11.5	-26.4	28	22.9
500	29	5,662	-16.0	-29.8	27	26.0
450	29	6,448	-20.8	-34.0	27	28.1
400	29	7,308	-27.0	-38.0	27	31.8
350	29	8,261	-33.7	-43.3	27	34.5
300	28	9,320	-42.3	-48.6	27	36.0
250	28	10,528	-51.7		28	35.1
200	28	11,946	-60.0			
175	28	12,775	-62.2			
150	28	13,727	-62.5			
125	27	14,850	-63.1			
100	26	16,214	-64.6			
80	24	17,571	-64.6			
70	24	18,388	-64.0			
60	24	19,336	-62.9			
50	24	20,464	-61.0			
40	24	21,860	-58.6			
30	21	23,680	-55.6			
25	18	24,856	-52.8			
20	18	26,301	-51.8			
15	13	28,158	-51.6			
10	9	30,801	-49.6			

SALEM, OREG. 1003 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	61	6.0	3.5	19	4.1
1000	21	110	5.3	3.7	19	3.7
950	30	506	4.7	3.4	21	8.1
900	30	945	2.3	1.2	22	9.0
850	30	1,405	-.7	-1.8	24	10.1
800	30	1,867	-3.6	-6.1	24	11.8
750	30	2,395	-6.4	-11.3	25	13.8
700	30	2,932	-9.2	-16.3	25	15.6
650	30	3,503	-12.2	-18.5	25	17.3
600	30	4,111	-15.9	-23.8	25	18.3
550	30	4,762	-19.7	-27.7	25	20.1
500	30	5,464	-24.2	-32.3	25	22.3
450	30	6,224	-29.3	-36.8	26	24.5
400	30	7,056	-34.9	-40.8	27	27.1
350	30	7,979	-40.8	-44.4	27	29.8
300	30	9,010	-47.7		26	28.5
250	30	10,198	-53.2		27	29.1
200	30	11,625	-55.5		28	27.0
175	30	12,476	-55.5		28	23.5
150	30	13,458	-55.9		28	21.3
125	28	14,603	-57.4		28	18.5
100	27	16,009	-58.2		28	14.9
80	26	17,411	-58.1		27	12.5
70	25	18,254	-59.2		28	11.6
60	23	19,215	-59.4		28	10.7
50	23	20,355	-59.8		28	9.7
40	21	21,744	-60.6		28	10.4
30	18	23,531	-59.9		29	10.8
25	17	24,675	-59.3		29	10.1
20	15	26,074	-58.5		29	13.5
15	10	27,868	-58.0			
10						

SALT LAKE CITY, UTAH 870 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,288	3.5	-3.1	15	2.9
1000						
950						
900						
850	29	1,473	4.7	-5.0	17	5.3
800	29	1,965	2.7	-8.7	19	6.3
750	29	2,484	-1.1	-11.0	22	6.0
700	29	3,031	-5.1	-12.6	24	8.8
650	29	3,609	-8.9	-15.4	25	10.8
600	29	4,225	-12.9	-19.3	26	12.8
550	29	4,884	-16.6	-23.4	26	15.5
500	29	5,594	-21.0	-26.6	26	18.8
450	29	6,366	-25.6	-31.8	26	22.5
400	29	7,209	-31.7	-37.2	26	25.1
350	29	8,143	-38.2	-43.4	26	27.0
300	29	9,185	-45.4		26	28.9
250	29	10,381	-52.8		27	31.3
200	29	11,801	-58.8		27	31.5
175	29	12,638	-59.1		27	30.1
150	29	13,606	-58.8		27	26.6
125	29	14,745	-60.5		26	23.5
100	29	16,130	-62.0		26	20.5
80	29	17,507	-62.7		26	17.4
70	28	18,331	-62.1		27	15.5
60	28	19,285	-61.6		27	11.6
50	27	20,414	-62.4		26	11.4
40	26	21,803	-60.6		26	10.2
30	25	23,598	-59.3		27	11.1
25	24	24,741	-58.4		27	13.1
20	23	26,149	-57.3		27	16.0
15	21	27,973	-56.1		27	21.8
10						

SAN DIEGO, CALIF. 1002 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	124	11.0	8.8	10	.5
1000	23	154	12.6	8.1	02	.5
950	30	574	12.5	4.3	28	1.4
900	30	1,027	11.2	-.1	29	2.9
850	30	1,503	9.9	-4.8	28	5.1
800	30	2,005	7.8	-7.5	28	6.9
750	30	2,535	5.5	-11.8	27	8.5
700	30	3,096	3.0	-14.7	28	9.5
650	30	3,693	-.4	-18.8	28	12.1
600	30	4,328	-4.2	-22.3	27	12.6
550	30	5,008	-8.4	-25.9	27	14.2
500	30	5,741	-13.5	-29.4	28	15.3
450	30	6,534	-18.9	-34.5	27	17.6
400	30	7,400	-25.5	-40.1	27	19.6
350	30	8,358	-32.7	-46.4	27	20.3
300	30	9,422	-40.9	-51.3	27	22.9
250	30	10,637	-50.2		27	24.8
200	30	12,063	-59.5		26	28.3
175	30	12,891	-62.7		26	28.8
150	30	13,838	-63.7		26	27.7
125	29	14,954	-65.5		25	26.2
100	29	16,307	-66.6		26	22.8
80	29	17,657	-66.5		25	16.9
70	29	18,468	-65.3		26	14.0
60	29	19,408	-64.6		26	12.3
50	28	20,532	-62.7		27	10.6
40	26	21,920	-60.4		27	11.3
30	26	23,727	-56.1		26	13.4
25	25	24,898	-53.6		26	17.5
20	24	26,337	-52.0		26	21.5
15	24	28,211	-49.9		26	28.3
10	16	30,883	-48.9		26	38.1

RAWINSONDE DATA

Average monthly values

SAN JUAN, P. R.
1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	6	24.8	19.8	11	2.0
1000	30	141	24.3	19.9	09	4.6
950	30	590	21.0	18.1	08	7.9
900	30	1,056	17.8	14.5	08	7.6
850	30	1,544	14.7	10.1	08	7.0
800	30	2,055	12.1	4.8	07	6.4
750	30	2,595	10.7	-1.2	07	5.9
700	30	3,168	8.8	-8.7	06	4.1
650	30	3,778	5.8	-11.4	06	3.5
600	30	4,429	2.0	-15.6	05	2.7
550	30	5,125	-2.2	-20.0	03	3.1
500	30	5,875	-6.9	-24.7	02	2.5
450	29	6,688	-12.5	-30.1	34	2.9
400	29	7,577	-18.7	-35.1	32	3.9
350	29	8,561	-25.9	-40.9	31	5.6
300	29	9,656	-34.4	-47.7	30	8.0
250	29	10,906	-43.8		29	12.5
200	29	12,368	-54.9		29	15.4
175	29	13,212	-60.3		29	16.1
150	29	14,159	-66.3		29	14.3
125	29	15,250	-71.4		30	13.3
100	29	16,551	-76.4		32	8.4
80	28	17,834	-76.5		35	4.5
70	28	18,610	-73.3		36	2.4
60	28	19,527	-67.4		03	1.3
50	28	20,642	-61.7		08	2.0
40	28	22,041	-57.1		08	3.9
30	28	23,881	-52.7		09	6.2
25	25	25,068	-50.0		09	7.6
20	23	26,528	-47.2		09	9.6
15	18	28,449	-43.3		10	12.7
10	7	31,210	-39.5			
7						
5						

• SAULT STE MARIE, MICH.
987 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	221	-.1	-2.0	31	1.0
1000						
950	30	525	-.9	-3.2	29	2.8
900	30	955	-3.0	-4.8	29	5.9
850	30	1,407	-4.6	-9.4	29	7.8
800	30	1,883	-6.5	-11.8	29	9.4
750	30	2,386	-8.4	-16.2	29	10.3
700	30	2,919	-10.6	-20.7	28	11.7
650	30	3,486	-13.4	-24.2	28	13.4
600	30	4,092	-16.5	-26.6	28	15.9
550	30	4,742	-20.0	-29.6	28	18.8
500	30	5,443	-24.2	-33.5	28	21.6
450	30	6,203	-29.2	-38.3	28	24.3
400	30	7,035	-34.9	-43.1	28	27.8
350	29	7,963	-41.0	-45.0	27	31.4
300	29	8,994	-47.5		27	35.6
250	29	10,184	-52.7		27	40.1
200	28	11,610	-56.3		27	37.2
175	27	12,445	-56.6		28	33.6
150	27	13,424	-56.2		28	30.0
125	26	14,583	-56.9		28	27.1
100	26	15,991	-58.2		27	22.6
80	26	17,397	-58.8		27	19.4
70	25	18,240	-59.7		27	18.4
60	25	19,203	-59.9		28	17.6
50	25	20,341	-60.2		27	14.5
40	25	21,734	-60.1		27	18.1
30	22	23,531	-59.5		27	17.8
25	21	24,680	-58.4		27	20.0
20	20	26,080	-58.0		26	23.6
15	19	27,902	-56.0		26	29.8
10	16	30,516	-52.5		26	36.5
7	9	32,829	-50.8			
5						

• SHREVEPORT, LA.
1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	12.9	11.0	15	.8
1000	27	159	13.4	9.2	18	1.9
950	30	561	14.4	8.6	20	7.1
900	30	1,038	13.5	4.9	22	9.0
850	30	1,519	12.2	-.4	23	9.3
800	30	2,026	10.1	-3.1	24	9.7
750	30	2,560	7.4	-8.0	24	9.6
700	30	3,124	4.5	-13.1	25	10.8
650	30	3,724	1.3	-17.6	25	12.2
600	30	4,364	-2.6	-21.5	25	13.5
550	30	5,048	-7.0	-25.6	26	14.1
500	30	5,785	-11.8	-29.8	26	15.7
450	30	6,583	-17.3	-33.6	26	17.3
400	30	7,455	-23.4	-37.7	26	18.4
350	30	8,420	-30.9	-43.6	26	20.4
300	30	9,492	-39.4	-50.9	26	22.4
250	30	10,715	-49.0		26	26.5
200	30	12,148	-58.2		27	28.9
175	30	12,981	-61.9		26	30.7
150	30	13,930	-64.4		27	29.4
125	30	15,037	-67.1		26	27.7
100	30	16,373	-70.2		27	24.1
80	30	17,697	-70.6		27	18.8
70	30	18,490	-69.5		27	14.5
60	30	19,417	-66.3		27	9.8
50	29	20,532	-62.6		27	7.7
40	29	21,920	-58.9		26	9.1
30	29	23,745	-54.1		26	9.8
25	28	24,918	-51.9		26	11.6
20	27	26,373	-49.2		26	13.6
15	25	26,265	-48.4		26	16.2
10	23	30,948	-45.7		26	23.9
7	21	33,325	-45.4		26	31.9
5	8	35,605	-42.9			

SPOKANE, WASH.
925 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	720	.4	-2.4	15	2.5
1000						
950						
900	30	940	.0	-2.0	18	4.7
850	30	1,397	-2.1	-5.3	21	7.4
800	30	1,877	-4.7	-7.6	22	8.6
750	30	2,382	-7.7	-10.1	23	9.4
700	30	2,916	-10.9	-14.4	24	10.4
650	30	3,482	-14.2	-18.5	25	12.7
600	30	4,086	-17.7	-23.0	25	14.6
550	30	4,732	-21.7	-28.0	25	16.2
500	30	5,427	-26.4	-33.0	25	18.3
450	30	6,181	-31.4	-38.2	25	20.6
400	30	7,005	-37.6	-42.3	25	22.8
350	30	7,919	-43.4	-42.5	25	26.0
300	30	8,942	-49.1		26	29.9
250	30	10,123	-54.1		26	32.4
200	30	11,549	-55.6		26	29.9
175	29	12,390	-54.9		27	24.7
150	29	13,378	-54.6		27	20.8
125	29	14,542	-55.6		27	19.3
100	28	15,958	-57.5		27	15.6
80	27	17,361	-58.4		27	15.9
70	27	18,201	-58.4		27	14.5
60	27	19,171	-58.7		27	12.9
50	25	20,314	-59.5		27	11.4
40	24	21,707	-59.9		28	12.1
30	23	23,498	-60.2		29	12.0
25	21	24,631	-60.0		29	11.6
20	21	26,022	-60.5		29	13.0
15	16	27,832	-60.5		29	14.1
10	9	30,423	-56.5			
7						
5						

• SWAN ISLAND, W. I.
1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	26.2	22.4	08	4.0
1000	30	118	26.0	22.0	08	5.3
950	30	569	22.3	20.1	08	7.5
900	30	1,039	19.2	15.4	09	7.4
850	30	1,529	16.1	11.6	08	6.8
800	30	2,043	13.6	7.1	08	6.0
750	30	2,585	11.3	1.3	08	5.3
700	30	3,160	9.0	-4.4	08	4.3
650	30	3,770	5.6	-9.3	08	4.7
600	30	4,420	2.0	-14.6	08	4.3
550	30	5,117	-1.9	-19.5	08	3.3
500	30	5,869	-6.2	-24.4	07	2.7
450	29	6,686	-11.4	-29.3	05	2.2
400	29	7,578	-17.6	-34.4	01	1.9
350	29	8,567	-24.5	-39.9	33	2.9
300	28	9,669	-32.8	-46.0	27	5.1
250	28	10,926	-43.0		24	7.2
200	28	12,392	-54.8		23	11.2
175	28	13,234	-60.9		24	12.1
150	28	14,179	-66.1		24	9.1
125	28	15,272	-71.1		24	4.5
100	28	16,569	-77.4		11	2.5
80	28	17,845	-77.6		08	4.6
70	28	18,616	-74.2		07	3.8
60	28	19,528	-68.4		08	2.9
50	27	20,636	-62.5		09	2.6
40	27	22,029	-57.7		09	3.6
30	26	23,861	-53.6		09	6.7
25	25	25,041	-51.5		09	9.2
20	24	26,496	-48.3		09	11.1
15	20	28,417	-43.8		09	12.7
10	15	31,168	-40.6		11	10.1
7	13	33,608	-36.2		09	7.2
5						

TAMPA, FLA.
1020 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	17.1	15.4	07	1.7
1000	30	174	19.4	16.0	10	2.7
950	30	615	17.7	13.8	14	2.8
900	30	1,076	15.1	9.5	18	1.7
850	30	1,560	13.4	3.0	23	2.0
800	30	2,068	11.2	-1.9	26	2.2
750	30	2,605	9.3	-7.3	27	2.6
700	30	3,174	6.6	-10.8	27	3.3
650	30	3,779	3.5	-14.9	27	3.8
600	30	4,424	-.1	-19.2	27	5.0
550	30	5,115	-4.4	-22.9	27	6.0
500	30	5,859	-9.4	-28.0	27	7.0
450	30	6,664	-15.4	-32.8	27	8.8
400	30	7,541	-22.1	-37.8	27	10.1
350	30	8,512	-29.4	-43.7	27	12.2
300	30	9,591	-37.8	-50.1	27	14.1
250	30	10,822	-47.2		27	17.6
200	30	12,267	-56.5		27	23.6
175	30	13,106	-60.8		27	25.3
150	30	14,056	-64.3		27	23.6
125	30	15,162	-68.4		27	21.0
100	30	16,485	-72.7		28	16.0
80	30	17,789	-73.8		28	9.5
70	30	18,571	-71.8		28	6.5
60	30	19,489	-68.0		27	3.6
50	28	20,604	-62.1		28	2.2
40	28	22,000	-57.6		29	1.0
30	28	23,837	-53.0		06	1.6
25	27	25,021	-50.3		07	2.3
20	27	26,486	-47.4		10	1.6
15	26	28,399	-44.8		22	1.3
10	17	31,126	-41.6		27	9.5
7						
5						

TOPEKA, KANS.
984 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	268	4.3	1.6	35	.1
1000						
950	30	554	5.6	.7	22	1.7
900	30	996	5.8	-1.8	24	5.0
850	30	1,464	5.9	-7.0	26	7.0
800	30	1,960	5.1	-9.3	26	9.1
750	30	2,485	2.5	-11.7	27	11.9
700	30	3,039	-.4	-15.3	27	14.8
650	30	3,628	-3.7	-17.6	27	17.2
600	30	4,256	-7.8	-21.1	26	18.9
550	30	4,926	-12.1	-25.2	27	20.6
500	30	5,650	-16.0	-29.7	26	23.2
450	30	6,435	-21.6	-34.3	26	25.6
400	30	7,292	-28.1	-39.4	27	28.3
350	30	8,240	-34.8	-45.4	27	30.5
300	30	9,296	-42.9		27	32.7
250	30	10,503	-51.6		27	34.1
200	30	11,923	-59.5		27	33.9
175	30	12,755	-61.0		28	33.4
150	30	13,712	-61.6		28	31.4
125	30	14,839	-62.7		28	28.9
100	27	16,208	-64.3		28	22.3
80	27	17,575	-64.4		28	17.3
70	27	18,391	-64.1		28	15.3
60	27	19,336	-63.5		28	12.8
50	26	20,462	-61.4		28	10.2
40	23	21,850	-59.9		27	13.2
30	19	23,667	-56.6		26	16.3
25	19	24,827	-55.4		26	17.9
20	19	26,258	-52.9		26	24.3
15	15	28,147	-50.9		26	31.6
10	11	30,832	-48.6		26	44.9
7	5	33,181	-46.8			
5						

TRUK, CAROLINE IS.
• 1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	2	28.6	24.8	06	3.2
1000	30	89	27.7	23.8	07	4.1
950	30	544	24.2	21.7	08	6.6
900	30	1,017	21.2	18.3	08	7.7
850	30	1,511	18.2	14.7	09	7.2
800	30	2,030	15.9	10.7	09	6.8
750	30	2,577	13.3	6.5	09	6.9
700	30	3,155	10.1	2.2	09	7.0
650	30	3,769	6.8	-2.0	09	7.2
600	30	4,423	3.4	-6.9	09	7.5
550	30	5,124	-.6	-10.3	09	8.1
500	30	5,861	-4.5	-17.4	09	8.8
450	30	6,704	-9.2	-21.4	09	9.0
400	30	7,605	-15.0	-27.5	08	8.4
350	30	8,605	-21.7	-34.2	09	7.4
300	30	9,719	-30.0	-42.2	09	3.4
250	30	10,990	-40.2	-50.8	15	1.3
200	30	12,472	-52.7		25	3.1
175	30	13,321	-59.6		28	3.6
150	30	14,268	-67.1		32	3.2
125	30	15,347	-74.9		03	4.0
100	30	16,619	-81.4		07	8.2
80	29	17,877	-78.1		08	5.2
70	29	18,650	-72.8		34	.8
60	28	19,567	-67.6		28	3.5
50	28	20,677	-63.4		28	4.4
40	25	22,061	-59.7		29	2.3
30	23	23,884	-54.6		09	4.8
25	22	25,053	-52.8		10	10.4
20	21	26,508	-49.2		09	14.5
15	18	28,409	-45.0		09	19.6
10	10	31,154	-39.9			
7						
5						

• TUCSON, ARIZ.
926 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	789	8.8	-4.5	14	3.1
1000						
950						
900	30	1,026	14.2	-3.1	16	2.8
850	30	1,506	12.3	-5.4	21	3.1
800	30	2,011	9.3	-8.2	23	4.6
750	30	2,543	6.1	-10.8	24	6.3
700	30	3,105	3.2	-14.8	25	8.0
650	30	3,701	-.3	-17.5	26	9.9
600	30	4,337	-3.9	-21.8	26	11.4
550	30	5,018	-8.2	-24.5	26	13.5
500	30	5,751	-13.2	-29.4	26	16.2
450	29	6,555	-18.2	-34.0	26	18.3
400	29	7,424	-24.7	-38.6	26	19.7
350	29	8,384	-32.1	-44.0	26	21.5
300	29	9,451	-40.4	-50.3	26	24.7
250	28	10,673	-49.7		26	28.4
200	27	12,103	-58.6		26	32.3
175	26	12,934	-61.3		26	30.9
150	26	13,887	-62.7		26	29.6
125	26	15,004	-65.6		26	25.4
100	26	16,355	-67.4		26	23.1
80	26	17,674	-68.4		26	17.6
70	26	18,497	-67.3		26	14.7
60	26	19,430	-65.3		26	12.0
50	26	20,547	-63.0		26	10.4
40	25	21,928	-59.4		26	11.2
30	25	23,746	-55.4		26	13.9
25	25	24,914	-53.5		26	15.9
20	25	26,359	-50.8		26	21.2
15	23	28,249	-49.2		26	26.0
10	22	30,923	-47.1		26	34.5
7	16	33,256	-46.2		27	46.3
5	8	35,447	-46.2			

• VANDENBERG AFB, CALIF.
1007 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	100	9.5	7.1	09	.6
1000	30	157	10.6	7.4	01	1.0
950	30	586	10.9	3.4	33	3.8
900	30	1,036	9.3	-1.4	32	4.8
850	30	1,508	7.1	-4.6	31	5.8
800	30	2,005	5.5	-8.3	30	6.8
750	30	2,531	3.5	-11.4	30	8.6
700	30	3,089	1.4	-14.3	29	11.5
650	30	3,682	-1.6	-17.2	29	13.5
600	30	4,315	-5.3	-20.1	28	15.2
550	30	4,993	-9.6	-23.1	28	16.8
500	30	5,722	-14.4	-27.7	27	18.8
450	30	6,513	-19.9	-32.4	27	19.7
400	30	7,376	-26.2	-37.3	27	21.3
350	29	8,328	-33.8	-44.0	27	21.4
300	28	9,392	-42.4		27	22.4
250	28	10,600	-51.4		27	23.9
200	28	12,019	-60.3		27	25.3
175	27	12,852	-62.6		26	27.1
150	27	13,802	-63.2		26	26.6
125	27	14,919	-64.6		26	22.6
100	27	16,278	-65.8		26	20.6
80	27	17,632	-65.6		26	16.1
70	27	18,446	-64.6		26	14.5
60	27	19,391	-63.0		26	11.8
50	27	20,517	-61.7		27	10.9
40	26	21,905	-60.4		27	12.2
30	26	23,710	-57.4		27	14.0
25	24	24,873	-55.2		27	18.1
20	22	26,304	-53.3		26	23.4
15	20	28,165	-51.7		26	29.7
10	14	30,815	-49.6		27	38.5
7	6	33,198	-47.5			
5						

VICTORIA, TEXAS
1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	33	16.8	15.5	12	1.0
1000	28	140	19.5	15.5	13	2.2
950	30	574	18.3	13.4	17	6.4
900	30	1,037	16.2	10.3	19	7.0
850	30	1,523	14.1	5.4	21	6.2
800	30	2,033	12.0	-.9	22	6.6
750	30	2,572	10.4	-7.9	23	6.7
700	30	3,143	7.7	-12.6	25	6.4
650	30	3,749	3.7	-16.2	26	6.5
600	30	4,394	-.3	-20.1	26	7.5
550	30	5,084	-4.9	-24.4	26	8.9
500	30	5,826	-10.0	-28.0	27	10.2
450	30	6,630	-15.7	-32.1	26	11.6
400	30	7,507	-22.3	-38.2	26	14.0
350	30	8,477	-29.4	-43.8	26	16.2
300	30	9,556	-37.9	-51.5	26	17.9
250	30	10,786	-47.5		26	20.7
200	30	12,229	-56.9		26	23.6
175	30	13,067	-61.3		25	25.9
150	30	14,015	-64.6		25	25.5
125	30	15,119	-68.2		26	23.6
100	30	16,446	-71.7		26	18.4
80	28	17,761	-73.3		27	11.9
70	28	18,546	-71.7		27	8.2
60	28	19,463	-68.2		27	5.7
50	28	20,573	-62.5		27	3.8
40	28	21,961	-59.0		26	3.7
30	28	23,792	-52.8		26	4.1
25	28	24,974	-50.9		27	4.1
20	27	26,437	-48.8		27	3.8
15	22	28,352	-44.9		27	5.8
10	14	31,069	-43.1		27	12.8
7	5	33,448	-42.5			
5						

• WAKE IS., PACIFIC AREA
1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	25.9	22.8	06	6.5
1000	30	124	25.1	20.5	06	7.2
950	30	573	21.3	19.1	07	8.0
900	30	1,041	17.9	15.6	07	6.7
850	30	1,529	15.5	9.8	07	6.2
800	30	2,043	14.7	.6	07	5.5
750	30	2,588	13.1	-4.7	06	5.3
700	30	3,165	10.5	-9.5	06	5.5
650	30	3,778	7.4	-12.2	06	6.2
600	30	4,432	3.5	-15.4	06	6.6
550	30	5,133	-.7	-19.4	05	7.1
500	30	5,887	-5.6	-24.1	05	6.8
450	30	6,704	-11.4	-29.6	04	6.9
400	30	7,596	-18.1	-35.2	04	6.3
350	30	8,582	-25.7	-40.8	03	6.0
300	30	9,678	-34.0	-48.0	01	8.8
250	30	10,930	-43.2		01	9.4
200	30	12,398	-53.9		36	9.9
175	30	13,243	-60.2		36	9.4
150	30	14,190	-66.8		36	8.4
125	29	15,278	-73.4		36	6.2
100	26	16,566	-79.2		03	4.0
80	24	17,831	-79.1		06	4.6
70	23	18,599	-76.1		07	5.2
60	23	19,503	-69.9		08	5.4
50	22	20,603	-64.1		09	5.5
40	21	21,982	-59.9		08	5.7
30	21	23,806	-53.4		12	4.6
25	20	24,988	-51.5		09	4.2
20	19	26,445	-49.3		07	4.1
15	16	28,352	-45.7		07	4.2
10	9	31,048	-42.7			
7						
5						

• WALLOPS IS., VA. NASA
1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	7.4	4.4	28	2.0
1000	29	159	9.2	2.6	28	3.7
950	30	578	7.9	-.4	28	7.5
900	30	1,022	6.0	-3.1	29	9.1
850	30	1,489	3.9	-4.8	29	9.9
800	30	1,981	2.8	-10.0	28	11.6
750	30	2,502	.7	-11.5	28	13.8
700	30	3,053	-1.8	-15.2	28	16.0
650	30	3,640	-4.7	-19.4	28	18.1
600	30	4,266	-8.1	-23.5	28	19.4
550	30	4,937	-11.8	-26.1	28	22.0
500	30	5,661	-16.4	-31.4	28	25.5
450	30	6,445	-22.1	-36.3	28	27.1
400	30	7,300	-28.2	-41.1	28	29.4
350	30	8,248	-35.2	-44.2	28	29.4
300	30	9,302	-43.0	-50.0	28	32.2
250	30	10,510	-50.8		29	35.7
200	30	11,938	-57.6		29	36.3
175	30	12,777	-59.7		28	34.5
150	29	13,732	-60.5		28	33.6
125	29	14,863	-62.6		28	29.9
100	29	16,232	-64.4		28	25.7
80	28	17,596	-64.3		28	21.1
70	28	18,414	-64.0		28	16.6
60	28	19,363	-61.8		28	14.7
50	28	20,501	-58.9		28	11.9
40	28	21,936	-57.4		28	10.1
30	27	23,738	-53.8		27	13.3
25	26	24,919	-52.2		27	16.5
20	25	26,371	-50.1		27	19.4
15	23	28,244	-49.6		27	26.3
10	21	30,902	-49.1		26	32.5
7	14	33,273	-47.2			
5	[illegible]	35,539	-44.5			

WASHINGTON DULLES INT. AP
1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	85	3.8	-.1	28	1.7
1000	26	171	5.7	-.1	28	2.2
950	30	574	6.9	-.8	28	6.1
900	30	1,017	4.8	-2.5	29	9.1
850	29	1,485	3.3	-5.1	29	11.6
800	29	1,975	1.9	-7.7	29	14.3
750	29	2,495	.5	-11.6	29	15.9
700	29	3,046	-2.3	-15.0	29	17.3
650	29	3,632	-5.5	-18.5	28	18.1
600	28	4,255	-8.9	-21.9	28	20.1
550	28	4,923	-13.2	-26.8	28	22.4
500	28	5,643	-17.5	-31.9	28	25.7
450	28	6,424	-22.6	-35.0	28	28.7
400	28	7,279	-28.6	-39.7	28	31.2
350	28	8,224	-35.6	-44.6	28	33.4
300	28	9,276	-43.4	-48.8	28	36.7
250	28	10,482	-51.2		28	40.7
200	28	11,908	-58.3		28	39.7
175	28	12,746	-59.4		28	39.1
150	28	13,710	-60.2		28	34.5
125	27	14,841	-61.6		28	29.1
100	27	16,217	-63.4		28	24.2
80	27	17,586	-63.6		28	18.9
70	27	18,409	-62.2		28	16.6
60	27	19,364	-61.1		28	13.8
50	26	20,500	-58.9		27	11.7
40	26	21,905	-57.0		27	12.0
30	26	23,735	-54.9		26	13.4
25	23	24,896	-52.4		26	19.8
20	23	26,349	-50.2		26	22.7
15	22	28,234	-49.4		26	30.8
10	9	30,952	-47.7			
7						
5						

WAYCROSS, GA.
1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	44	11.9	10.5	35	.2
1000	30	171	15.3	11.4	35	.2
950	30	607	14.9	8.7	22	2.3
900	30	1,064	13.0	5.2	24	3.9
850	30	1,543	11.2	-1.2	25	5.4
800	30	2,048	9.8	-6.5	27	5.5
750	30	2,582	7.9	-9.9	27	7.1
700	30	3,148	4.7	-13.2	27	8.4
650	30	3,749	1.9	-16.4	28	9.7
600	30	4,390	-1.5	-21.0	28	11.5
550	30	5,078	-5.6	-24.2	27	12.9
500	30	5,818	-10.6	-28.0	28	14.1
450	30	6,620	-16.4	-33.3	27	15.0
400	30	7,494	-23.2	-38.4	27	16.9
350	30	8,460	-30.7	-44.4	27	18.5
300	30	9,533	-39.1	-50.1	27	22.6
250	30	10,758	-48.5		27	25.4
200	30	12,195	-57.7		27	27.2
175	30	13,031	-60.9		27	29.0
150	30	13,984	-63.1		27	29.4
125	30	15,097	-66.4		27	28.3
100	30	16,435	-70.1		27	23.4
80	30	17,756	-71.2		27	14.8
70	30	18,549	-69.4		27	11.2
60	30	19,477	-65.5		27	8.0
50	30	20,598	-61.2		27	5.7
40	30	21,999	-56.7		27	4.3
30	29	23,845	-52.0		27	4.2
25	28	25,033	-49.9		26	3.9
20	28	26,499	-47.8		29	3.8
15	27	28,409	-45.3		25	8.5
10	18	31,133	-43.3		26	14.9
7						
5						

RAWINSONDE DATA

Average monthly values

NOVEMBER 1973

Standard pressure surface (mb)	WINNEMUCCA, NEV. 867 MB						WINSLOW, ARIZ. 852 MB						YAKUTAT, ALASKA 1008 MB					
	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	1,312	2.8	-2.8	20	1.8	30	1,487	1.3	-7.5	20	1.4	29	12	-5.4	-9.4	08	1.1
1000													20	143	-1.1	-11.0	07	1.4
950													29	486	-1.9	-10.1	08	3.3
900													29	914	-4.5	-11.3	07	2.1
850	29	1,476	3.2	-5.1	21	3.2	19	1,538	3.9	-7.4	18	1.5	29	1,361	-7.2	-13.6	07	1.3
800	29	1,966	.2	-5.9	23	6.3	30	2,000	6.2	-6.3	24	5.2	29	1,832	-9.8	-16.1	06	.8
750	29	2,480	-3.3	-8.1	24	9.8	30	2,527	3.5	-8.7	25	8.6	29	2,328	-12.1	-19.3	34	1.3
700	29	3,023	-6.6	-9.8	26	12.3	30	3,084	.6	-12.6	25	10.9	29	2,853	-15.1	-22.6	34	2.3
650	29	3,599	-10.0	-13.5	26	15.0	30	3,675	-2.6	-16.9	26	11.8	29	3,410	-18.2	-25.8	35	3.1
600	29	4,212	-13.4	-18.2	26	16.2	30	4,306	-6.0	-20.0	26	13.1	29	4,003	-21.8	-29.4	35	4.2
550	29	4,870	-17.4	-22.4	26	18.9	30	4,982	-10.5	-24.1	26	13.9	29	4,639	-25.6	-32.2	35	5.0
500	29	5,578	-22.0	-29.0	27	20.7	30	5,708	-15.7	-28.6	26	15.7	29	5,325	-29.8	-36.7	35	7.3
450	29	6,346	-26.6	-33.7	27	22.5	30	6,494	-21.4	-33.7	26	17.9	29	6,069	-34.5	-39.8	36	9.2
400	29	7,188	-31.9	-39.0	27	23.8	30	7,351	-27.8	-39.1	26	20.3	29	6,882	-40.2	-41.1	35	9.5
350	28	8,116	-38.8	-42.2	27	25.7	30	8,300	-34.6	-44.5	26	23.0	29	7,785	-45.6		35	12.8
300	28	9,155	-46.0		27	29.3	30	9,357	-42.3	-49.8	27	27.4	29	8,799	-50.1		35	15.9
250	28	10,349	-52.9		26	31.1	28	10,579	-50.7		26	29.7	29	9,984	-52.5		35	17.8
200	28	11,769	-57.8		27	29.0	28	12,005	-59.2		26	30.8	29	11,425	-52.4		34	16.0
175	27	12,608	-59.3		26	26.6	28	12,837	-61.3		26	30.9	29	12,288	-52.7		33	14.6
150	25	13,573	-60.0		26	25.5	28	13,792	-62.2		26	29.2	29	13,284	-52.5		33	14.1
125	25	14,711	-60.4		27	22.0	26	14,904	-64.1		26	26.5	29	14,460	-53.4		32	13.6
100	24	16,103	-61.0		26	17.1	25	16,260	-66.4		26	22.9	29	15,895	-53.9		32	13.3
80	24	17,486	-62.1		26	13.6	24	17,614	-66.3		26	18.8	29	17,325	-54.7		32	14.2
70	24	18,312	-61.7		27	12.5	23	18,421	-65.3		26	15.7	29	18,180	-54.9		32	13.4
60	23	19,271	-61.7		27	10.2	23	19,362	-64.3		27	12.7	29	19,163	-55.9		32	14.4
50	23	20,400	-61.2		26	8.5	21	20,477	-62.8		26	11.6	27	20,329	-56.6		32	15.6
40	18	21,796	-61.3		27	7.3	21	21,855	-61.7		26	12.5	27	21,743	-57.4		32	16.2
30	16	23,581	-60.0		28	10.0	19	23,661	-57.0		27	14.3	25	23,557	-58.9		32	18.6
25	15	24,720	-58.4		27	8.8	18	24,817	-55.6		26	17.5	21	24,692	-59.6		33	18.5
20	15	26,123	-58.8		27	12.0	16	26,252	-53.2		26	23.4	16	26,062	-60.7		32	20.2
15	8	27,919	-57.2				12	28,129	-52.0		26	34.2	9	27,812	-62.2			
10																		

Standard pressure surface (mb)	† YAP, CAROLINE IS. 1008 MB						YUCCA FLAT, NEV. 880 MB					
	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	14	28.2	24.3	09	3.9	30	1,198	-1.2	-7.4	30	.5
1000	30	82	26.8	23.6	09	4.9						
950	30	535	23.5	21.5	09	7.7						
900	30	1,007	20.8	17.4	09	8.1						
850	30	1,500	17.7	14.0	09	8.2	30	1,481	6.2	-5.8	24	1.6
800	30	2,019	15.7	9.2	09	7.6	30	1,976	4.1	-8.3	21	4.3
750	30	2,565	13.1	4.5	09	7.9	30	2,499	2.0	-10.4	23	5.3
700	30	3,143	9.9	-.3	09	8.2	30	3,054	-.3	-13.3	25	7.0
650	30	3,756	6.7	-3.1	09	9.2	30	3,643	-3.9	-16.2	26	8.7
600	30	4,409	3.0	-7.1	09	9.6	30	4,270	-7.9	-20.0	27	11.6
550	30	5,110	-.7	-11.9	09	10.2	30	4,941	-11.8	-24.5	27	14.6
500	30	5,866	-4.9	-18.4	09	9.8	30	5,665	-16.2	-28.1	27	17.0
450	30	6,668	-9.5	-23.7	09	10.4	29	6,452	-22.0	-33.1	27	19.3
400	30	7,588	-15.2	-28.9	10	11.6	29	7,308	-28.4	-38.4	27	20.9
350	30	8,568	-21.7	-34.8	09	10.2	29	8,255	-35.1	-43.7	27	23.2
300	30	9,702	-29.9	-42.2	09	8.5	29	9,310	-43.0	-50.3	27	24.1
250	30	10,974	-40.4	-50.7	09	7.2	29	10,516	-51.4		27	27.0
200	30	12,456	-52.5		09	5.5	29	11,938	-59.5		27	28.9
175	30	13,306	-59.4		09	4.7	29	12,769	-61.7		26	29.6
150	30	14,253	-67.2		08	6.1	29	13,723	-61.6		27	25.9
125	30	15,333	-74.9		07	6.3	29	14,850	-63.0		27	26.1
100	30	16,603	-81.5		09	9.1	29	16,219	-64.6		26	20.7
80	29	17,861	-79.3		09	8.3	29	17,585	-64.1		26	17.7
70	28	18,631	-73.7		08	3.1	29	18,402	-64.4		26	15.9
60	25	19,546	-68.0		33	1.1	29	19,347	-63.6		26	14.6
50	24	20,653	-63.2		30	1.5	29	20,470	-62.0		27	11.3
40	23	22,034	-60.0		08	1.4	29	21,853	-61.1		27	11.7
30	22	23,853	-54.8		10	7.5	27	23,647	-59.3		27	12.0
25	22	25,025	-52.7		10	9.8	25	24,797	-56.8		27	15.9
20	22	26,476	-49.3		09	14.4	25	26,219	-54.7		27	19.2
15	21	28,384	-45.0		09	18.9	22	28,060	-53.9		26	24.5
10	16	31,145	-39.7		09	22.9	12	30,683	-52.3			

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun.

ALBUQUERQUE, N. MEX.

Date	Sun's zenith distance A.M.				*	Sun's zenith distance P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
NOV.									
1-----	1.08	1.18	1.30	1.42	1.45	----	----	----	----
2-----	1.02	1.12	1.24	1.35	(1.37)	----	----	----	----
3-----	1.06	1.17	1.28	1.41	1.44	----	----	----	----
5-----	1.00	1.11	1.23	1.34	1.41	1.25	(.76)	(.53)	(.40)
6-----	1.05	1.14	1.26	1.39	1.43	(1.38)	(1.19)	(1.06)	(.97)
7-----	(1.05)	----	----	1.38	1.44	1.36	1.20	----	----
8-----	----	----	----	1.36	1.42	(1.34)	1.19	1.08	95
9-----	----	----	----	(1.36)	1.41	(1.32)	(1.19)	1.07	98
10----	92	1.02	1.14	1.30	----	----	----	----	----
11----	.93	1.05	1.17	1.33	1.37	1.28	(1.09)	(.97)	(.87)
12----	----	----	----	----	----	1.35	----	----	----
13----	----	(1.12)	1.22	----	----	----	----	----	----
14----	----	----	1.23	----	----	----	----	----	----
15----	1.07	(1.16)	(1.23)	----	----	1.35	----	1.12	96
16----	.95	1.04	----	----	----	----	----	----	----
17----	1.03	1.12	1.23	1.35	1.41	1.33	----	----	1.03
18----	1.05	1.15	1.26	(1.39)	(1.40)	1.38	1.22	1.07	96
20----	----	----	----	----	(1.38)	(1.36)	1.24	1.13	.99
22----	1.01	1.10	1.22	1.38	1.41	1.33	(.96)	(.70)	(.55)
23----	.96	1.07	1.20	1.30	1.40	1.33	----	----	----
24----	.99	1.10	1.23	1.41	(1.43)	(1.41)	1.24	1.11	1.01
25----	----	----	----	----	----	----	----	(.99)	----
27----	1.07	1.19	1.29	1.44	1.49	1.46	1.30	1.17	(1.07)
28----	1.08	1.18	1.29	1.45	1.48	1.43	1.28	1.14	1.01
29----	1.12	1.21	1.30	1.43	1.48	1.44	1.26	1.06	.89
30----	----	----	----	1.46	----	1.44	----	----	----
Averages	1.02	1.12	1.24	1.38	1.43	1.36	1.24	1.11	.98

OMAHA, NEBR

	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
					NO DATA RECEIVED				

MAUNA LOA OBSERVATORY, HAWAII

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Nov.									
1-----	1.30	1.34	1.40	1.47	----	----	----	----	----
2-----	1.32	1.36	1.42	1.48	1.54	----	----	----	----
3-----	1.36	1.41	1.47	1.51	1.56	----	----	----	----
6-----	----	----	----	----	1.58	----	----	----	----
7-----	1.20	1.27	1.36	1.48	1.55	----	----	----	----
11----	1.22	1.31	1.42	1.54	----	----	----	----	----
16----	1.34	1.42	1.53	1.65	1.75	----	----	----	----
17----	1.37	1.47	1.58	1.70	1.78	----	----	----	----
Averages	1.30	1.37	1.45	1.55	1.63	----	----	----	----

TUCSON, ARIZ.

Date	Sun's zenith distance A.M.				*	Sun's zenith distance P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	[illegible]	[illegible]
NOV.									
1-----	98	----	1.17	----	1.36	----	----	----	----
2-----	91	----	1.13	1.29	1.35	1.33	1.11	----	----
3-----	96	1.06	1.16	1.32	1.37	----	----	----	----
4-----	97	1.06	1.14	1.32	1.41	1.30	1.17	1.04	[illegible]
5-----	98	1.06	1.20	1.38	1.46	1.34	1.19	1.09	[illegible]
6-----	94	1.03	1.13	1.30	1.44	1.33	1.20	----	----
7-----	1.01	----	----	----	1.42	1.32	----	1.03	----
8-----	96	1.06	1.19	1.33	1.40	1.36	1.11	.95	.80
9-----	89	.97	1.12	----	----	----	1.08	88	.76
10----	----	----	----	----	1.31	1.26	[illegible]	80	[illegible]
11----	76	92	1.06	1.28	1.36	1.28	91	.81	71
12----	69	78	.92	1.13	1.27	1.22	1.03	.96	[illegible]
13----	91	1.00	1.14	1.30	1.38	----	----	----	----
14----	----	----	----	1.35	1.40	1.35	1.23	1.08	[illegible]
15----	1.04	1.11	1.22	1.36	1.50	1.39	1.18	1.03	.91
16----	1.00	1.08	1.26	1.41	1.40	1.38	1.23	1.01	.92
17----	1.00	1.09	1.22	1.39	1.46	1.36	1.18	1.06	.97
18----	----	----	1.29	----	1.49	1.40	1.21	1.06	96
19----	----	----	1.22	----	----	----	1.17	----	----
20----	94	1.06	1.20	1.36	1.41	----	1.22	----	----
21----	1.06	1.13	1.25	1.39	1.42	----	1.20	1.07	.97
22----	97	----	----	----	1.42	1.32	1.14	1.03	.91
23----	.90	1.03	1.17	1.34	----	----	----	----	----
24----	1.02	1.10	1.21	1.37	1.45	1.36	1.18	1.06	94
25----	----	----	----	----	1.40	----	----	----	----
26----	.99	1.07	1.18	----	----	----	----	----	----
27----	1.00	1.09	1.27	1.32	1.37	1.38	1.24	1.14	[illegible]
28----	1.06	1.17	1.26	1.44	1.49	1.42	1.28	1.19	1.07
29----	1.11	1.21	1.32	1.43	1.47	1.40	1.24	1.11	1.02
30----	.98	1.08	1.21	1.36	1.43	----	----	1.16	1.06
Averages	.96	1.06	1.19	1.34	1.41	1.34	1.16	1.03	92

MADISON, WIS.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	[illegible]	4.69
NOV.									
1-----	.96	----	----	----	----	----	----	----	----
5-----	S 90	S .97	----	----	S 1.31	S 1.30	S 1.14	S 1.00	S 93
9-----	.95	1.05	1.17	----	S 1.31	----	1.19	1.06	----
Averages	.94	1.01	1.17	----	1.31	1.30	1.17	1.03	93

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska NOVEMBER 1973

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	- 76	- 74	- 84	- 73	- 66	- 71	- 40	- 39	- 41	- 34	-124	- 96	-112	- 74	- 63	- 63	- 15	- 36	- 29	- 60	- 77	- 11	- 20	- 42	- 21	-100	-113	-106	-108	- 95		-65

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (< 3900 Å) at Ames, Iowa

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	2.46	4.69	4.22	4.57	7.04	3.28	1.29	2.58	6.92	6.22	2.58	5.40	5.63	.82	3.75	5.98	4.93	2.58	4.81	.82	2.34	5.28	5.04	3.40	4.81	1.64	1.87	5.16	5.04	4.34		3.98

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code $_{A}s\ \Omega\ \Omega\ \Omega$ defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units Milli-atmo-cms.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
														NO DATA RECEIVED																		

REFERENCE NOTES

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES: Dates in the table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

+	And also on an earlier date or dates.
D	Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch of water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA - METRIC UNITS: Data from airport unless otherwise specified.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile data can be evaluated.

B	Number of days maximum 21.1°C. or above for Alaskan Stations.
Y	Peak Gust.
+	And also on an earlier date or dates.
U	Indicates Urban site.
R	Indicates Rural site.
Ø	Station pressures apply to elevations shown in the "Elevations" table of the annual issue of this publication.

Conversion formulae to English Units are as follows:

1 foot = 0.3048 meters

$°F. = \frac{9}{5} \times °C + 32$

1 inch = 25.4 millimeters

1 mile per hour = 0.447 meters per second

HEATING DEGREE DAYS: Data from airport unless otherwise specified.

U	Indicates Urban site.
R	Indicates Rural site.

COOLING DEGREE DAYS: Data from airport unless otherwise specified.

U	Indicates Urban site.
R	Indicates Rural site.

STORM SUMMARY:

°	Includes crop damage.
C	Crop damage.
*	No occurrence of storms or unusual weather phenomena reported.
@	Includes heavy sleet storm.
#	Freezing drizzle and freezing rain, commonly known as glaze.
Ø	For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
‡	No Storm Data Report received for this State.
<>	Report Incomplete.
†	Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5 Million
7	$5 Million to $50 Million
8	$50 Million to $500 Million
9	$500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS:

1/	Flooding continued at the end of the month.
NA	Not available.

FLOOD STAGE DATA:

#	Highest Stage Observed
1/	Continued at end of month
___	Highest Stage of Record
E	Estimated
P	Provisional (Flood Stage)
U	Unknown

RAWINSONDE DATA (Average Monthly Values):

All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon. The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors. These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

*	Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.
+	Observations for these stations are scheduled at 0000 G.C.T.
†	Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION INTENSITIES: Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

()	Clouds Present	DM	Moderate Dust	HM	Moderate Haze	KS	Slight Smoke
*	Values corresponding to true solar noon	DS	Slight Dust	HS	Slight Haze	M	Moderate Haze-indeterminable
BD	Blowing Dust	F	Fog	I	Intense Haze-indeterminable		
BN	Blowing Sand	GF	Ground Fog	K	Smoke	N	Sand
D	Dust	H	Haze	KI	Intense Smoke	S	Slight Haze-indeterminable
DI	Intense Dust	HI	Intense Haze	KM	Moderate Smoke		

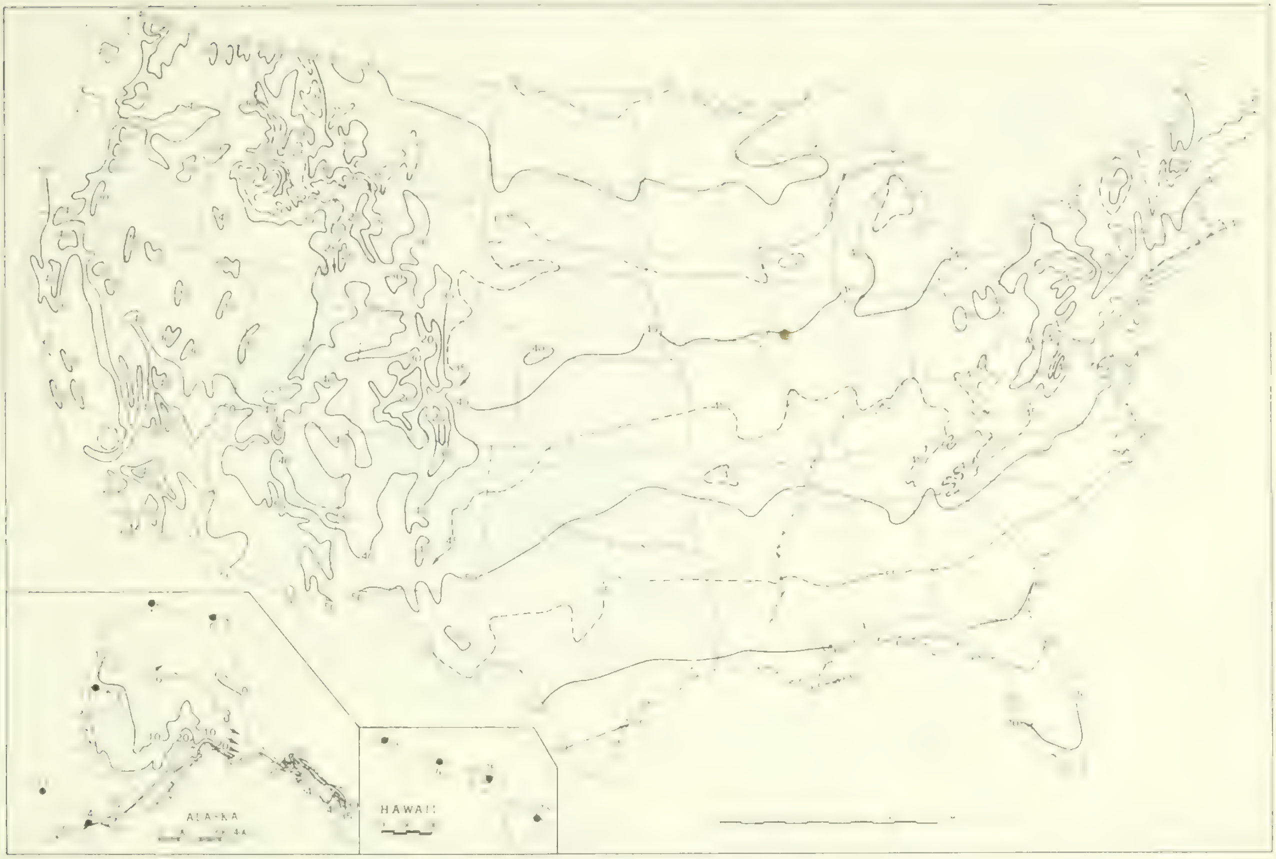
NET RADIATION: The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA: These data are from an U-V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder. This instrument has not been checked by the NOAA, National Weather Service.

TOTAL OZONE DATA: The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λs designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), November


ALASKA
HAWAII

B. Temperature Departure from 30 - Year Mean (°F 1931-60), November 1973

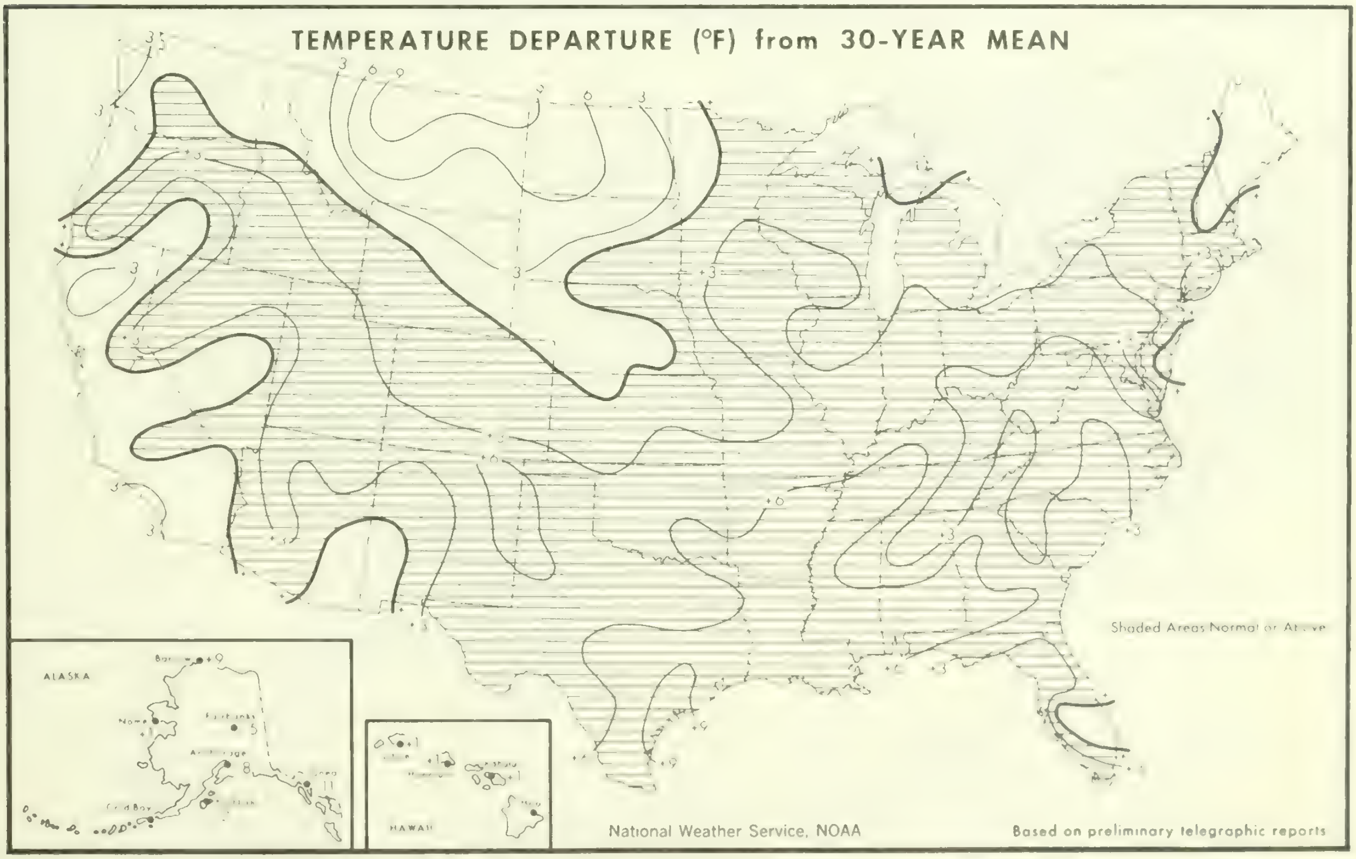
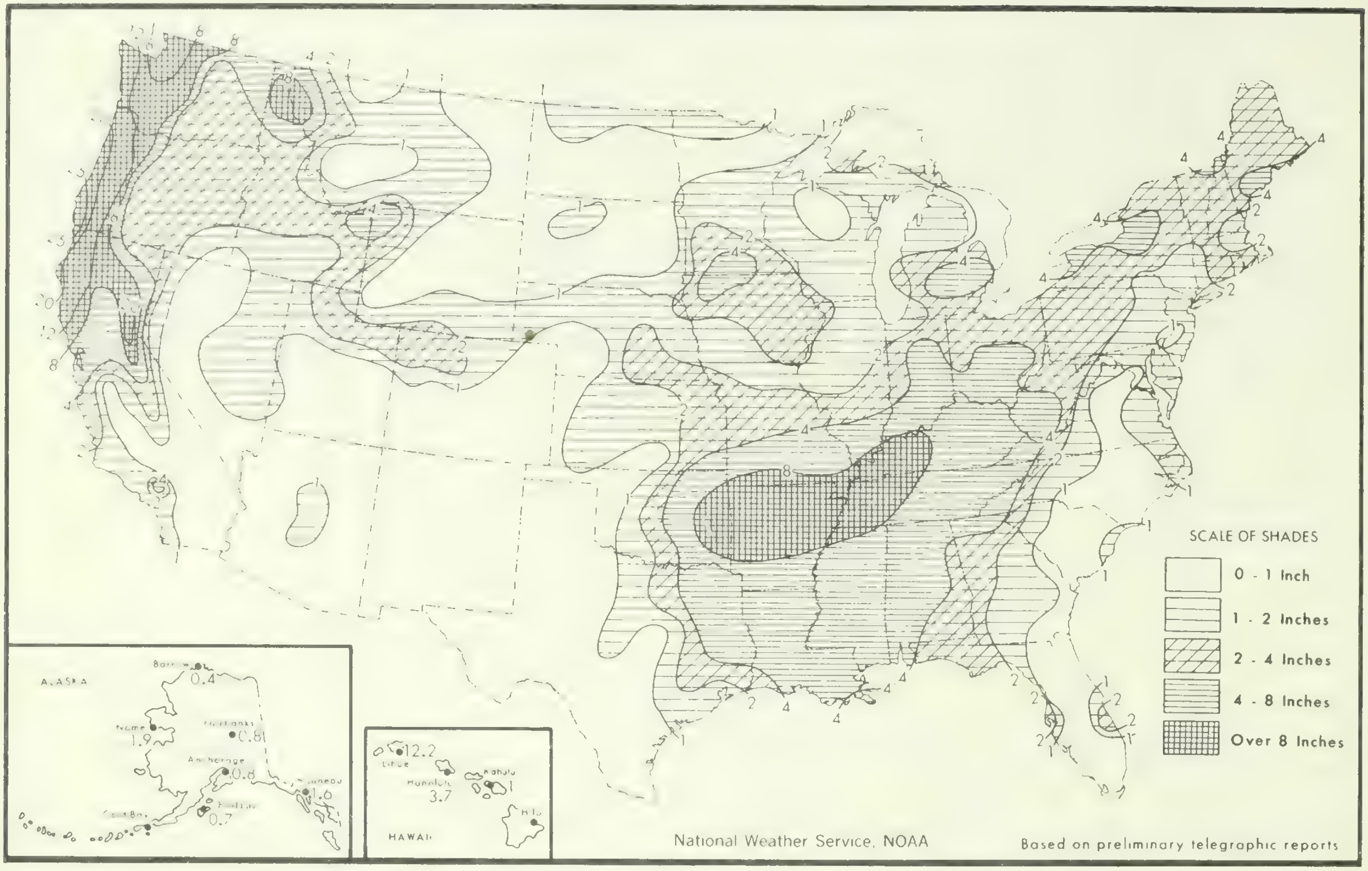

TEMPERATURE DEPARTURE (°F) from 30-YEAR MEAN
Shaded Areas Normal or Above
ALASKA
Fairbanks
Nome
Anchorage
Cold Bay
+9
5
8
11
HAWAII
+1
National Weather Service, NOAA
Based on preliminary telegraphic reports

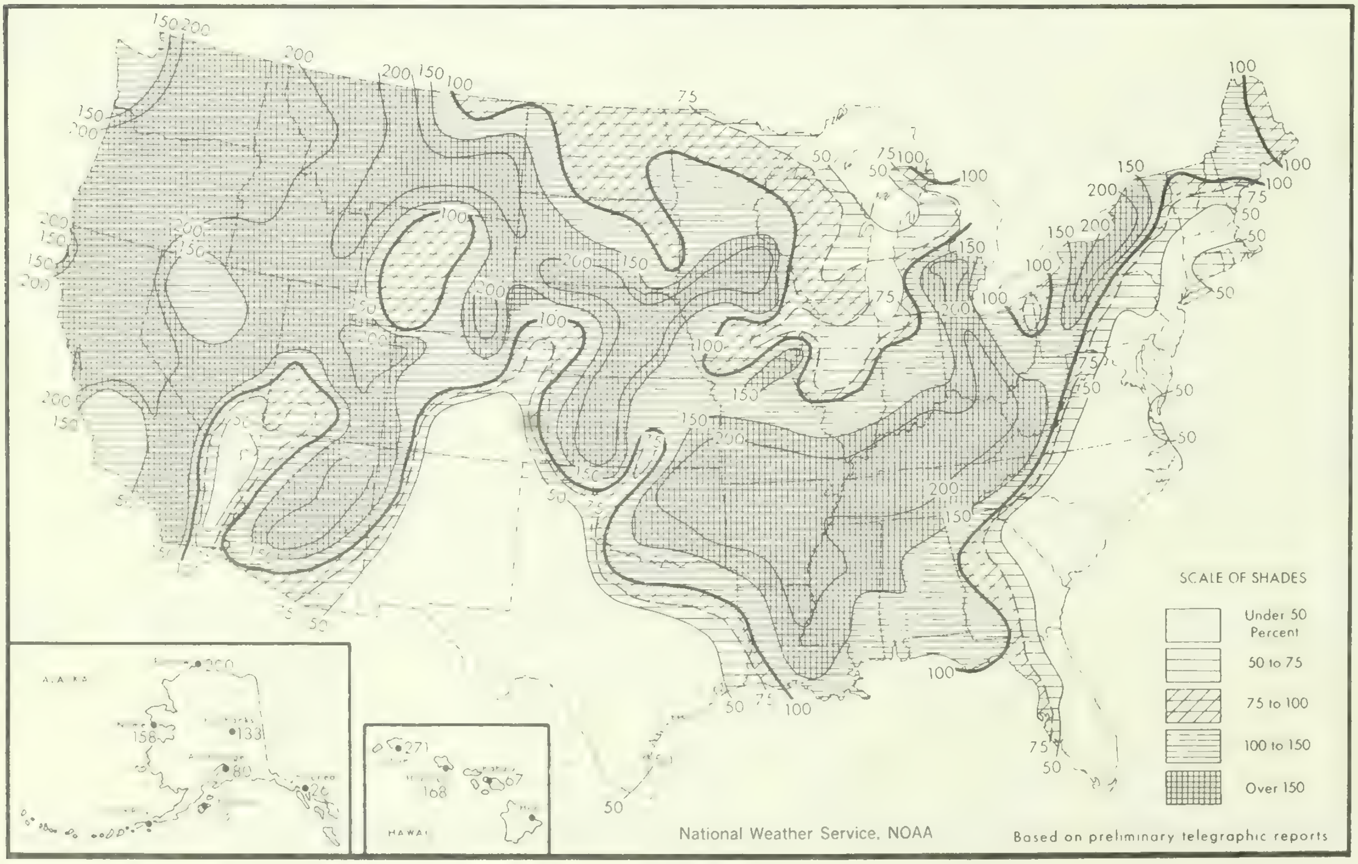
Chart II. A. Total Precipitation (Inches), November 1973


SCALE OF SHADES
0 - 1 Inch
1 - 2 Inches
2 - 4 Inches
4 - 8 Inches
Over 8 Inches
ALASKA
0.4
1.9
0.8
0.8
1.6
0.7
HAWAII
12.2
3.7
1

National Weather Service, NOAA

Based on preliminary telegraphic reports

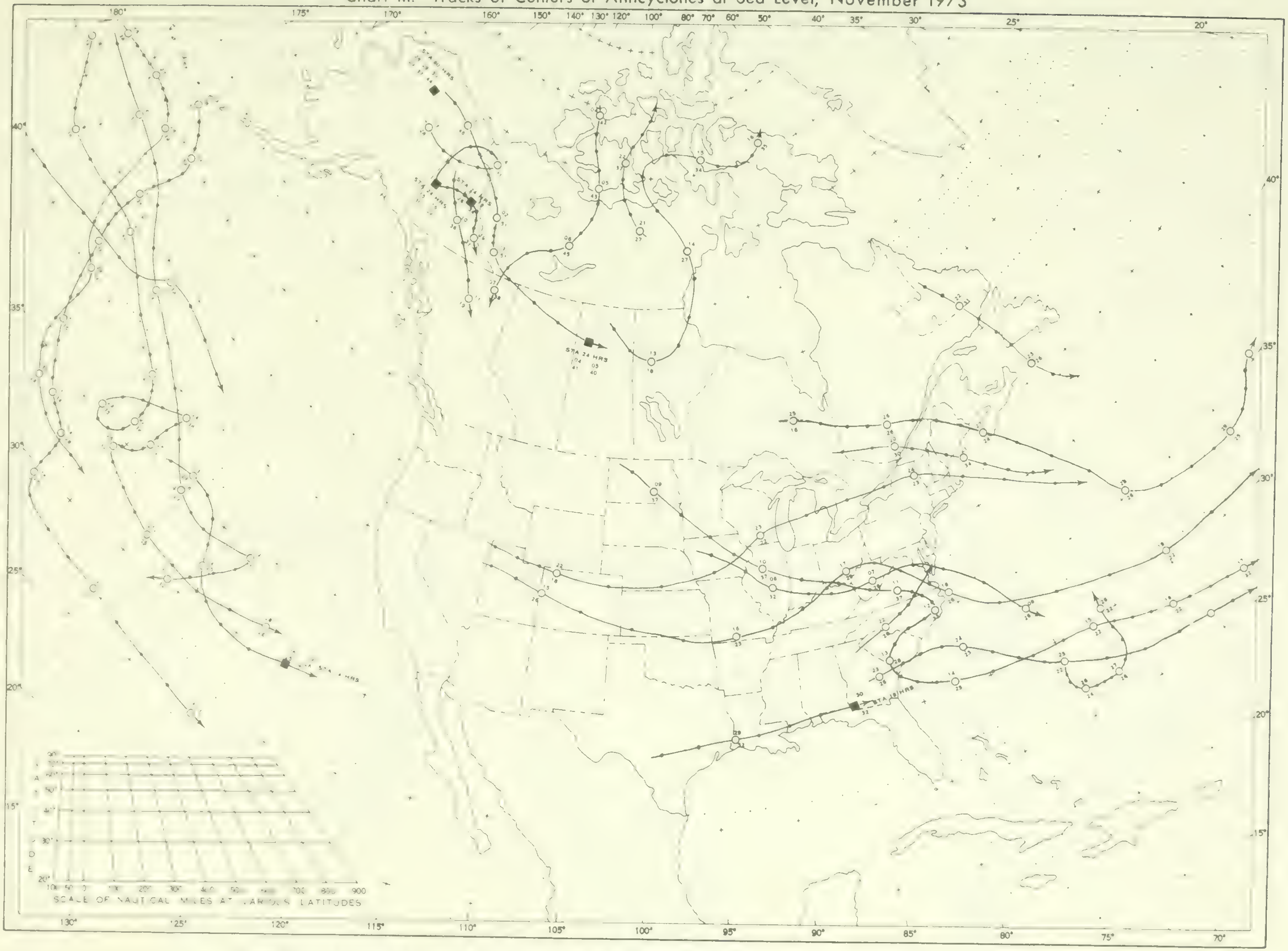
B. Percentage of Normal Precipitation, November 1973


SCALE OF SHADES
Under 50 Percent
50 to 75
75 to 100
100 to 150
Over 150
ALASKA
200
158
133
80
26
HAWAII
271
168
67

National Weather Service, NOAA

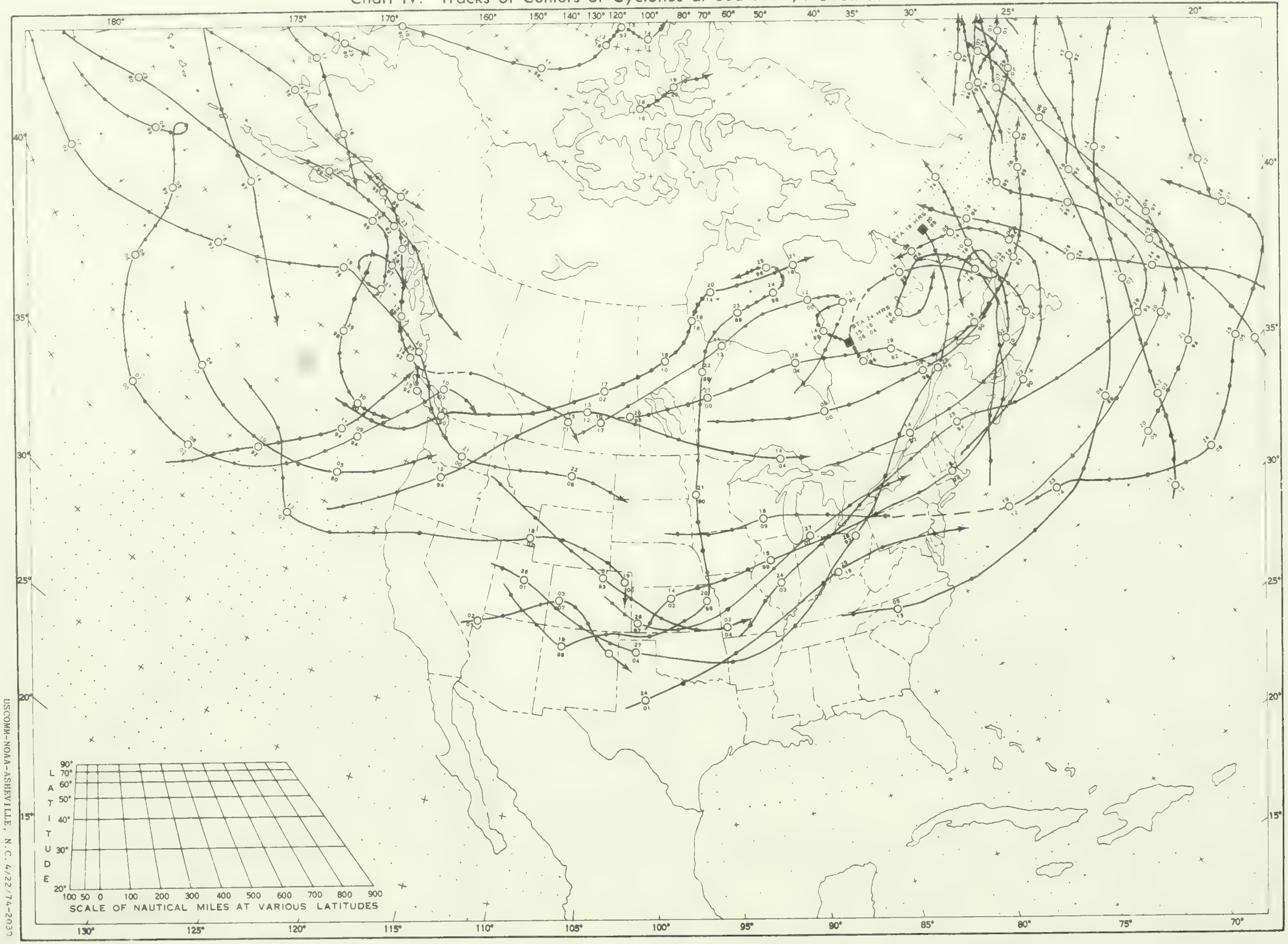
Based on preliminary telegraphic reports

Chart III. Tracks of Centers of Anticyclones at Sea Level, November 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
STA 24 HRS
STA 18 HRS
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES
100 200 300 400 500 600 700 800 900

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, November 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
STA 18 HRS
STA 24 HRS
LATITUDE
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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NATIONAL SUMMARY

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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

SUBSCRIPTION PRICE: $5.50 a year including annual summary; $1.00 additional for foreign mailing; 40¢ single copy; $1.00 annual summary. Make checks payable to Department of Commerce, NOAA; send payments and orders to: National Climatic Center, Federal Building, Asheville, N. C. 28801. Attn: Publications.

I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina, 28801.

William H. Haggard

Director, National Climatic Center

CLIMATOLOGICAL DATA

NATIONAL SUMMARY
DECEMBER 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

Dr. Richard E. Felch, Climatologist

HIGHLIGHTS:

1. The eastern and western thirds of the Nation were warmer than normal, while the central third was colder than average.
2. Precipitation was heavy in most of the East, Midwest, and Northwest, but very light in the Southwest.

TEMPERATURE: The eastern and western third of the Nation averaged warmer than normal in December, while the central third was below normal, particularly over the northern Plains and western Corn Belt. It was one of the warmest Decembers on record in parts of New England, and the Northwest. Portland, Maine, averaged 33.5°, 7.7° above normal, the warmest December since 1923.

The first decade was much warmer than usual in the East and Northwest. Temperatures averaged 6° or more above normal northeast of a line from Wilmington, North Carolina, to Chicago, Illinois. Burlington, Vermont, was 14° above normal during this period. Record highs were experienced in many eastern cities on several days during this period as a large high off the Atlantic Coast pushed warm air northward.

During the second decade the cold hand of winter took hold over much of the Nation except in the West and parts of New England, where temperatures remained above normal. The freeze line dropped well into Texas and Florida during the period as two distinct cold waves affected the areas. Initially, two lows over the Great Lakes and eastern Canada teamed up to push cold air to the Gulf. These storms were replaced by a massive high which extended from Canada into Mexico, bringing frigid Arctic air southward at the end of the decade. Early morning lows on the 21st included 26° at Mobile, Alabama, 24° at Lake Charles, Louisiana. Corpus Christi, Texas, reached a record-breaking 18°, the coldest December temperature ever recorded there.

Temperatures warmed markedly during the final decade and the month ended much warmer than usual except over the central and northern Plains. Overall, December weather favored the heating fuel situation as the most heavily populated areas averaged much above normal most of the month.

PRECIPITATION: Total precipitation for the month was highly variable, ranging from over 20 inches along the Washington-Oregon coast to no precipitation in much of Arizona, New Mexico, and Texas. Many new precipitation records were established; for example, Caribou, Maine, 7.97, and Pendleton, Oregon, 4.68.

Precipitation during the first decade was light to moderate in most areas except from Iowa to the Gulf and along the Atlantic Seaboard where 2 inches or more fell. A large low developed on the 3d, bringing severe winter weather to most of the Nation's midsection. Snow and sleet, driven by high winds, blanketed the Central Plains. To the east, 84 mph winds were clocked at Carbondale, Illinois. Most of the heavy rain along the coast was associated with a large storm which moved northward as the decade ended. Heavy rain fell from the Carolinas to New England, with snow over the Appalachians.

The period of the 10th-15th was fairly dry, but two major storms developed during the following 5 days bringing heavy precipitation, much of it as snow, to the eastern half of the Nation. On the 15th-16th a storm system moved up the Atlantic Coast bringing heavy rains to much of New England. Washington received 10 inches or more of snow. A second storm paralyzed traffic in the Central States.

The month ended relatively dry except in the Southeast and parts of California. From 1 to 4 inches fell from Louisiana to Tennessee and Georgia.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

DECEMBER 1973

STATE	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In
Alabama	Whatley	83	3	2 Stations	7	23	Enterprise	13.76	Autaugaville 3 N	2.85
Alaska	Cold Bay WSO AP	54	24	Kobuk	- 50	24	Little Port Walter	25.07	3 Stations	T
Arizona	Tucson Univ of Arizona	86	1	Hawley	- 8	25	Sunrise Mountain	.96	126 Stations	.00
Arkansas	2 Stations	78	12	Gravette	1	21	Stamps	8.06	Blytheville	2.33
California	Fontana Kaiser	89	10	Bridgeport	- 17	2	Elk Valley	23.33	24 Stations	.00
Colorado	Springfield 7 WSW	75	1	Taylor Park	- 40	31	Palmer Lake	7.02	Center 4 SSW	T
Connecticut	2 Stations	65	27	Falls Village	- 3	19	Colchester 2 W	11.33	Bridgeport WSO AP	6.33
Delaware	3 Stations	69	27	Middletown 1 WSW	4	19	Wilmington Porter Reservoir	8.47	Dover	5.51
Florida	Bradenton 5 ESE	89	31	Fountain 3 SSE	16	23	Niceville	9.36	Cornwell 4 NW	.80
Georgia	Nahunta	85	4	Blairsville Exp. Station	5	23	Clayton 1 SSW	12.36	Gibson	1.76
Hawaii	Mana 1026, Kauai	89	5	Mauna Loa Slope OBS, Hawaii	24	19	Mount Waialeale 1047, Kauai	25.79	Mauna Kea OBS, Hawaii	.40
Idaho	Grangeville 11 SE	61	16	Idaho Falls 46 W	- 17	31	Sandpoint Exp. Station	8.26	2 Stations	.59
Illinois	3 Stations	70	3+	Springfield WSO AP	- 17	21	Marshall 1 E	D 7.38	La Salle 1 S	1.77
Indiana	2 Stations	72	4	Covington 3 SW	- 13	22	Elkhart	6.15	Prairie Heights	2.30
Iowa	Keosauqua	69	2	Cherokee	- 25	31	Tipton	4.99	Sioux City 4 N	.33
Kansas	2 Stations	78	3	Goodland WSO AP	- 11	31	Mound Valley 3 WSW	5.63	Tribune 1 W	.15
Kentucky	2 Stations	72	3+	2 Stations	0	21	Hickman 1 E	6.35	La Grange	1.36
Louisiana	Saint Bernard	82	31+	Ashland 2 S	15	21	Sheridan Fire Tower	13.05	Jonesville Locks	2.79
Maine	Sanford 2 NNW	61	6	Middle Dam	- 14	20+	Farmington	14.40	Houlton FAA AP	5.84
Maryland	Cumberland	71	5	Millington	1	19	Elkton	8.74	Waldorf Police Barracks	1.71
Massachusetts	Chester 2	67	4	Chester 2	- 8	19	Chester 2	11.39	Chatham WSMO	5.19
Michigan	2 Stations	62	3	Stambaugh 1 S	- 32	31	Benton Harbor Airport	4.82	Port Inland	1.40
Minnesota	2 Stations	55	9+	Thorhult 1 S	- 41	31	High Landing 2 NW	3.15	Grand Marais	.33
Mississippi	5 Stations	80	4+	Fulton 3 W	10	22	Meridian WSO AP	14.79	Biloxi City	2.73
Missouri	New Florence	76	3	Steelville 2 N	- 18	21	Qulin	7.25	Chillicothe	1.46
Montana	Wyola	71	1	2 Stations	- 35	31+	Troy 18 N	6.94	Chester 30 N	.10
Nebraska	3 Stations	68	3+	Chadron FAA AP	- 25	31	Friend	3.58	Valentine WSO AP	.13
Nevada	Lathrop Wells 16 SSE	77	15+	Gibbs Ranch	- 14	26	Mount Rose Bowl	5.96	2 Stations	T
New Hampshire	3 Stations	62	6	2 Stations	- 20	20	Mount Washington	17.95	Jefferson 5 SSW	5.15
New Jersey	3 Stations	69	5	High Point Park	4	19	Jersey City	11.26	Burlington	4.66
New Mexico	2 Stations	80	3+	2 Stations	- 12	27+	Lake Maloya	3.24	63 Stations	.00
New York	Suffern Water Works	69	5	Canton 4 SE	- 32	24	Slide Mountain	14.20	Prattsburg 2 NW	1.69
North Carolina	4 Stations	79	31	2 Stations	- 1	18	Highlands 2 S	15.63	Hot Springs 2	4.61
North Dakota	Medora	54	11	Rugby	- 35	31	Tagus	1.26	2 Stations	.12
Ohio	Portsmouth	70	4	2 Stations	- 3	22	Wilmington	4.35	Middlebourne	1.25
Oklahoma	3 Stations	79	12	2 Stations	- 5	31	Vinita 3 NNE	6.39	2 Stations	T
Oregon	4 Stations	65	20+	Austin 3 S	- 3	26	Valsetz	35.12	Mc Dermitt 26 N	.25
Pennsylvania	Lewistown	72	6	Lawrenceville	- 13	19	Tobyhanna	10.78	Greenville	1.29
Puerto Rico & VI	Utuado 1 WSW	92	31	Adjuntas Substation	48	22	La Muda - Caguas	10.14	Vieques Is Esperanza	.10
Rhode Island	Providence WSO AP	67	5	North Scituate 4 W	3	19	North Scituate 4 W	9.67	Block Island WSO AP	6.66
South Carolina	Florence FAA AP	82	31	Ninety Nine Islands	10	22	Caesars Head 1 NE	15.99	Johnston 2 SSW	2.23
South Dakota	Fort Meade	74	1	Flandreau	- 34	31	Lead 1 E	2.13	Midland	.02
Tennessee	2 Stations	78	4	Mountain City 2	- 5	18	Dayton	10.90	Old Hickory Dam	2.43
Texas	Laredo 2	93	30	Perryton 5 NNE	- 2	31	Harleton	8.47	132 Stations	.00
Utah	2 Stations	70	1	2 Stations	- 20	31	Park City Summit House	4.99	8 Stations	.00
Vermont	2 Stations	63	6	Enosburg Falls	- 23	19	Searsburg Station	10.91	South Hero	5.05
Virginia	Boykins	76	4	2 Stations	- 3	19+	Meadows of Dan 5 SW	10.34	John W. Flannagan Lake	3.55
Washington	Kennewick	65	16	Winthrop 1 WSW	- 4	31	Cougar 6 E	31.17	Sequim	1.62
West Virginia	Moorefield 2 SSE	73	5	Seneca State Forest	- 5	18	Seneca State Forest	7.77	Cairo 3 S	1.78
Wisconsin	Darlington	61	2	Prentice 1 N	- 37	31	Milwaukee Mt Mary College	5.26	Port Wing 5 SW	.62
Wyoming	Albin	72	1	Bondurant 3 NW	- 34	31	Snake River	3.86	Lost Cabin	T

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation ground	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days sunrise to sunset: Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover tenths sunrise to sunset	Possible sunshine
ALABAMA	M	Mb	Mb	C.	C.	C.	C.	C.		C.				C.	%	Mm	Mm	Mm			Mm	Mm	M p.s		M p.s							
BIRMINGHAM	189	996.3	1019.1	12.9	1.4	7.2	- 1.3	21.1	3	- 9.4	22	0	14	2.2	73	193	65	88	8	4	T	T	0.7	21	15.2	SW	13	11	9	11	6.4	58
HUNTSVILLE	190	995.6	1019.2	11.6	1.1	6.3	- 0.1	19.4	3	- 8.9	22	0	14	1.1	71	214	90	148	9	4	T	T	0.3	20	13.9	23	26	9	5	17	6.3	
MOBILE	64	1011.6	1019.4	17.7	5.6	11.6	0.0	25.0	13	- 7.9	22	0	8	5.6	67	116	- 23	47	11	5	T	0	1.1	17	11.6	18	26	14	6	11	4.9	
MONTGOMERY	56	1012.2	1019.6	15.8	2.4	9.1	0.1	24.4	13	- 6.7	22	0	13	2.8	68	94	- 28	22	9	5	T	T	0.5	24	15.2	5	26	15	7	9	4.4	60
ALASKA																																
ANCHORAGE	35	995.9	1001.0	- 3.9	-11.3	- 7.6	2.7	5.6	26	-23.9	3	0	31	- 8.9	88	10	- 14	5	6	0	178	229	1.0	[illegible]	10.3	17	26	4	5	22	8.1	35
ANNETTE	34	1003.1	1007.1	4.6	0.0	2.3	0.1	9.4	18	- 4.4	31+	0	14	- 0.6	81	270	- 38	69	25	0	30	T	2.4	12	16.5	18	4	2	4	25	9.5	
BARROW	9	1013.2	1013.9	-18.0	-23.6	-20.8	3.2	- 1.1	30	-33.3	25	0	31	-23.3	[illegible]	2	- 2	1	4	0	43	229	1.3	7	24.6	24	31					
BARTER ISLAND	12	1012.2	1014.1	-18.1	-24.2	-21.2	2.4	2.8	31	-32.2	25+	0	31	-23.9	79	T	- 7	T	1	0	T	102	1.6	15	29.5	26	31					
BETHEL	38	993.6	999.3	- 9.7	-15.9	-12.8	2.3	5.0	26	-23.9	17	0	31	-16.7	71	3	- 23	1	6	0	43	76	2.5	4	19.7	18	30	5	6	20	7.4	
BETTLES	196			-13.4	-22.3	-17.9		1.1	31	-31.1	24+	0	31			10		6	4	0	114	508			13.0	9	6	10	7	14	6.0	
BIG DELTA	386			-11.8	-19.0	-15.4		1.1	26	-29.4	13+	0	31			T			0	0	T											
COLD BAY	29	991.2	995.0	1.3	- 3.5	- 1.1	0.7	12.2	24	-17.8	17	0	29	- 3.3	84	68	2	23	22	0	330	152	0.2	2	25.0	14	25	1	4	26	9.0	
FAIRBANKS	133	988.8	1006.8	-14.9	-24.4	-19.7	2.4	2.2	26	-33.9	[illegible]	0	31	-26.1	57	4	- 10	3	2	0	64	305	0.8	1	7.6	3	6	8	7	16	6.5	
GULKANA	479			-16.7	-24.7	-20.7		1.7	26	-39.4	4	0	31			10			6		122											
HOMER	19			- 1.2	- 7.1	- 4.1		5.0	27+	-18.3	3	0	29			51	- 16	15	13	0	152	33			13.0	9	26	3	4	24	9.0	
JUNEAU	4	1005.8	1006.4	0.3	- 4.7	- 2.2	- 0.2	5.0	19+	-18.9	1	0	29	- 2.8	93	58	- 49	13	12	0	399	456	2.1	10	16.1	13	6	3	0	28	9.0	16
KING SALMON	15	994.9	996.8	- 4.1	-11.7	- 7.8	2.6	6.7	26	-22.8	20	0	28	-11.1	75	28	2	9	13	0	323	305	1.9	5	16.5	11	25	2	9	20	9.0	
KODIAK	4	991.9	996.3	2.8	- 2.7	0.1	1.3	5.0	27+	-14.4	21	0	23	- 3.9	73	184	56	35	21	0	361	152	1.8	33	16.5	1	27	1	6	24	8.6	
KOTZEBUE	3	1005.8	1006.3	-13.1	-20.2	-16.7	3.1	2.2	31	-36.7	14	0	31	-21.1	67	6	- 2	2	5	0	140	533	2.9	9	21.9	9	26	11	5	15	5.6	
MC GRATH	105	990.2	1003.9	-15.6	-26.9	-21.3	0.4	5.0	31	-39.4	6	0	31	-23.3	80	9	- 17	5	7	0	173	635	0.4	29	11.6	1	26	6	6	19	6.9	
NOME	4	1001.7	1002.6	- 9.2	-18.2	-13.7	0.6	1.1	30	-30.0	17+	0	31	-16.7	73	24	- 1	10	10	0	328	279	2.7	7	18.3	15	30	11	3	17	6.0	14
ST. PAUL ISLAND	7	994.9	996.1	- 0.2	- 5.0	- 2.6	0.6	5.6	30	-12.8	21	0	30	- 5.0	81	56	10	18	28	0	315	127	2.4	2	23.2	[illegible]	28	2	10	19	9.1	
SUMMIT	732	914.7	1006.4	-10.2	-16.2	-13.2		2.2	26+	-28.9	3	0	31	-15.6	82	29		9	10	0	307	356	4.1	3	13.0	4	6	7	4	20	7.1	
TALKEETNA	105			- 4.4	-15.3	- 9.8	2.6	3.9	19	-31.7	3	0	31			19	- 22	9	5	0	411	737			8.9	3	26+	6	2	23	7.4	
UNALAKLEET	5			-11.2	-16.4	-13.8		3.3	31+	-29.4	14+	0	31			7		3	6	0	74	178			20.6	8	28	6	6	19	6.4	
YAKUTAT	9	1001.7	1002.8	1.8	- 4.2	- 1.2	1.0	7.8	19	-17.8	2+	0	24	- 3.9	82	231	- 81	54	22	0	528	457	1.9	9	16.5	12	19	2	5	24	8.5	
ARIZONA																																
FLAGSTAFF	2135	788.0	1020.0	8.2	- 7.1	0.6	1.4	15.6	17	-12.2	25+	0	31	- 7.8	59	3	- 30	3	1	0	30	102	0.8	26	15.0	NE	24	13	12	6	4.5	79
PHOENIX	340	978.7	1018.2	21.3	4.8	13.0	0.1	26.7	1	0.0	25	0	1	- 2.8	38	0	- 22	0	0	0	0	0	1.1	12	13.0Y	NE	14+	14	9	8	4.2	94
TUCSON	788	928.5	1017.4	19.3	3.2	11.3	0.2	28.3	1	- 2.2	25	0	5	- 6.7	32	0	- 23	0	0	0	0	0	1.4	14	15.2	SE	20	19	5	7	3.5	94
WINSLOW	1492	853.7	1022.3	10.4	- 7.3	1.6	1.3	20.0	1	-12.8	21+	0	31	- 8.3	56	1	- 12	1	1	0	T	T	1.2	15	18.4	32	30	14	7	10	4.9	
YUMA	59	1011.2	1018.5	21.8	6.5	14.2	1.4	25.6	11	2.2	25	0	0	- 1.7	38	0	- 8	0	0	0	0	0	2.0	35	11.6	NW	2	17	7	7	3.3	76
ARKANSAS																																
FORT SMITH	136	1003.7	1017.6	10.8	- 1.8	4.5	- 1.2	22.8	1	-11.7	31	0	21	- 1.7	70	96	24	43	6	4	46	51	1.0	36	14.8	NW	12	12	8	11	5.4	62
LITTLE ROCK	78	1008.5	1018.1	11.7	0.2	6.0	0.5	23.3	1	- 9.3	21	0	18	1.1	72	132	28	84	7	4	T	T	0.5	27	17.9	SE	3	11	9	11	5.6	55
CALIFORNIA																																
BAKERSFIELD	145	1004.7	1022.5	14.3	5.7	10.0	0.7	22.8	20	1.1	30	0	0	7.2	83	20	- 5	10	5	0	0	0	0.3	35	11.2	33	11	1	6	24	8.4	
BISHOP	1252	876.7		12.8	- 3.3	4.7	0.7	21.1	29+	- 9.4	19	0	27			15	- 15	8	4		36	51						7	6	18	6.5	
BLUE CANYON	1609	841.2		6.9	0.1	3.6	- 1.1	16.1	9	- 6.7	2	0	16			330	70	67	13		1144	838	1.6	18	15.6	15	21	5	2	24	8.1	
EUREKA U	18			13.8	7.6	10.7	1.3	20.6	11+	2.2	30	0	0			178	8	46	22		0	0			19.2	[illegible]	11	0	5	26	9.0	16
FRESNO	100	1010.5	1022.3	12.2	4.7	8.4	0.1	18.9	29+	0.6	20+	0	0	6.1	91	44	- 6	23	8	1	0	0	0.7	11	9.8	[illegible]	1	1	5	25	8.8	23
LONG BEACH	8	1018.6	1019.9	19.6	6.4	13.0	- 0.3	28.9	9	2.8	3	0	0	5.0	68	9	- 41	5	5	0	0	0	0.3	27	9.4	31	2	6	10	15	6.3	
LOS ANGELES	30	1015.6	1019.2	19.9	9.3	14.6	0.8	29.4	9	5.6	2	0	0	6.1	63	11	- 49	8	6	0	0	0	0.1	34	16.1*	NE	28	6	11	14	6.2	
LOS ANGELES U	82			20.8	10.2	15.5	0.7	29.4	9	6.7	4	0	0			17	- 56	10	3		0	0			8.0	NW	2	13	1	8	6.7	62
MT SHASTA R	1080	894.7	1021.3	5.9	- 0.8	2.6	0.4	14.4	10	- 5.6	2	0	23			136	- 22	48	15		66	178										
OAKLAND	2	1022.0	1022.3	14.3	4.9	9.6	- 0.1	15.6	21	2.8	1	0	0	7.8	93	101	10	56	12	1	0		0.7	14	10.3	22	11	7	7	17	6.9	
RED BLUFF	104	1008.8	1021.6	11.4	5.5	8.4	0.1	18.3	8	1.1	4	0	0	6.1	88	95	- 12	32	13	1	0	0	1.0	19	14.3	SE	12	3	3	25	8.6	19
SACRAMENTO	5	1021.3	1022.1	11.4	5.1	8.3	0.3	16.7	17	0.6	4	0	0	6.1	87	71	- 11	35	11	1	0		0.3	16	13.9	SW	29	2	4	25	8.5	15
SANDBERG R	1377	865.2		9.6	2.3	6.0	0.1	16.1	[illegible]	- 2.8	2	0	8	- 4.4	57	46	- 17	34	9		48	25	3.0	2	20.1	34	17					
SAN DIEGO	4	1018.3	1019.4	19.4	9.6	14.6	0.6	27.2	9	6.7	3	0	0	6.1	62	5	- 47	3	4	0	0		0.6	22	8.5	NW	22	9	10	12	5.7	75
SAN FRANCISCO	7	1021.0	1021.7	13.3	6.7	10.0	- 0.1	15.6	28+	4.4	31+	0	0	7.2	95	90	- 14	66	11	1	0	0	0.4	24	11.6	18	11	6	5	20	7.5	
SAN FRANCISCO U	16			13.4	8.8	11.1	- 0.3	16.7	18	6.1	1	0	0			93	- 16	40	12													52
SANTA MARIA	72			17.1	4.2	10.7	- 0.7	25.0	8	1.7	2+	0	0			77	12	30	6		0	0						9	9	13	6.5	
STOCKTON	7	1021.3	1022.2	11.9	5.3	8.6	0.9	17.8	29	0.6	4	0	0	6.7	88	98	31	35	13	1	0		1.4	25	14.7	25	29	[illegible]	[illegible]	24	8.7	
COLORADO																																
ALAMOSA	2297	769.1		4.2	-16.8	- 6.3	0.8	13.3	1	-23.9	27	0	31			5	- 2	2	4		79	25						12	9	10	4.8	

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover tenths (sunrise to sunset)	Possible sunshine
COLORADO	M	Mb	Mb	C.	C.	C.	C.	C.		C.				C.	%	Mm	Mm	Mm			Mm	Mm	M p s		M p s							
COLORADO SPRINGS	1873	808.0	1017.5	6.7	- 7.6	- 0.4	- 0.3	21.7	1	-19.4	31	0	29	-11.1	51	16	10	7	7	0	231	102	3.0	36	18.3	35	24	9	10	12	5.9	
DENVER	1610	833.7	1015.6	7.2	- 7.7	- 0.2	0.0	22.8	1	-21.7	31	0	30	- 8.3	59	72	60	35	9	0	782	330	1.1	25	21.9	NW	12	10	6	15	5.8	65
GRAND JUNCTION	1476	854.4	1022.5	4.2	- 6.3	- 1.1	0.6	17.8	1	-11.1	26	0	30	- 7.2	67	16	1	6	5	0	145	51	0.6	8	14.3	S	1	7	10	14	6.5	54
PUEBLO	1428	853.4	1016.5	8.1	- 8.1	0.0	- 0.7	20.0	17+	-25.6	31	0	31	- 8.9	58	21	13	11	4	0	206	102	1.5	35	28.6	NW	12	9	9	13	5.8	54
CONNECTICUT																																
BRIDGEPORT	2	1018.0	1018.7	7.3	- 1.0	3.2	2.5	17.2	27	-10.0	19+	0	21	- 1.1	73	166	77	39	12	1	5	25	2.2	31	19.7	6	9	11	6	14	6.1	
HARTFORD	52	1011.2	1018.0	5.2	- 4.2	0.5	2.2	16.7	5+	-16.1	19	0	25	- 3.9	71	211	123	79	12	1	79	51	1.8	31	12.1	5	9	6	7	18	7.2	41
DELAWARE																																
WILMINGTON	23	1015.6	1018.8	7.7	- 1.4	3.2	1.4	18.3	27	-11.7	19	0	24	- 1.1	73	186	109	46	12	0	155	152	1.5	33	13.4	6	9	5	9	17	7.0	
DIST.OF COLUMBIA																																
WASHINGTON DULLES	88	1006.8	1019.0	6.4	- 2.8	1.8		19.4	4	-11.1	18	0	26	- 1.7	77	145		46	11	0	272	254	1.2	31	11.6	32	17	6	7	18	6.9	
WASHINGTON NATIONAL	3	1016.6	1019.0	9.4	1.6	5.5	2.1	20.6	4	- 6.7	18	0	11	- 1.7	63	153	83	40	12	0	279	203	1.4	33	14.3	N	17	8	5	18	6.9	40
FLORIDA																																
APALACHICOLA U	4			16.9	7.9	12.4	- 0.8	23.3	15+	- 1.1	22	0	2			77	2	31	7	4	0	0			10.7	S	26	13	7	11	4.5	79
DAYTONA BEACH	9	1019.0	1020.4	20.8	8.5	14.7	- 1.1	27.8	31	- 1.1	22	0	5	10.0	75	65	15	23	9	2	0	0	1.1	25	11.2	27	21	13	6	12	5.5	
FORT MYERS	5	1019.6		23.4	10.7	17.1	- 1.3	29.4	4	0.0	23	0	1	11.7	75	44	11	22	4	2	0	0	0.8	8	11.2	33	16	12	11	8	4.8	
JACKSONVILLE	8	1019.3	1020.3	19.2	5.2	12.2	- 1.2	27.8	31	- 3.9	22	0	6	6.7	74	110	53	40	9	1	0	0	1.0	27	18.3	W	26	11	6	14	5.4	63
KEY WEST	1	1018.3	1019.0	23.9	18.7	21.3	- 0.1	27.8	6	11.1	22+	0	0	15.6	72	82	39	64	9	2	0	0	2.1	8	13.4	W	16	13	10	8	4.5	82
LAKELAND U	65			20.6	10.7	15.6	- 1.3	27.2	31	- 1.1	22	0	1			55	8	23	9		0	0						12	9	10	5.0	59
MIAMI	2	1019.3	1019.4	23.4	15.4	19.4	- 0.6	27.2	7+	3.9	22	0	0	12.8	67	62	20	38	5	2	0	0	0.9	10	13.0	31	16	14	12	5	4.2	
ORLANDO	33	1015.6	1020.1	21.8	9.7	15.8	- 0.3	28.3	31	- 0.6	22	0	2	10.0	74	65	17	25	8	2	0	0	0.7	26	13.4	26	16	11	9	11	5.2	
PENSACOLA	34	1015.2	1019.7	17.8	6.6	12.2	- 0.2	24.4	31+	- 3.9	22	0	5	6.1	68	195	88	67	12	5	0	0	0.1	3	10.7	34	16	14	5	12	4.9	
TALLAHASSEE	17	1017.6	1020.1	18.9	3.4	11.2	- 1.1	26.1	30	- 8.3	23	0	12	6.1	75	189	102	78	8	5	0	0	0.5	20	10.3	17	26+	12	9	10	4.9	
TAMPA	6	1020.0	1020.3	20.9	10.3	15.6	- 1.2	27.8	4	- 1.1	18	0	3	10.0	72	140	92	46	10	2	0	0	0.7	8	10.7	32	16	11	8	12	5.2	58
WEST PALM BEACH	5	1019.0	1019.6	24.2	14.0	19.1	- 1.0	28.9	6	2.2	22	0	0	11.7	64	55	- 11	27	7	2	0	0	0.8	14	11.6	28	21+	11	15	5	4.9	
GEORGIA																																
ATHENS	244	989.5	1019.2	12.5	1.1	6.8	- 0.2	23.3	31	- 9.4	22	0	16	1.1	72	177	62	54	13	4	25	25	0.8	28	10.3	24	29	12	7	12	5.3	
ATLANTA	308	981.0	1018.7	12.1	1.4	6.8	- 0.3	21.1	13	- 8.3	22	0	17	0.6	68	206	95	61	9	4	T	T	0.8	29	15.2	SW	13	10	8	13	5.9	56
AUGUSTA	41	1013.9	1019.1	15.1	1.3	8.2	- 0.2	25.6	31	- 9.4	22	0	16	1.7	69	71	- 13	17	11	3	T	0	0.8	24	12.5	22	20	12	6	13	5.3	
COLUMBUS	117	1005.1		15.7	3.0	9.4	0.7	23.9	13	- 6.7	22	0	12	4.4	76	181	66	86	9	4	T	0	0.5	28	12.5	16	26	16	4	11	4.6	
MACON	108	1006.4	1019.6	16.2	3.2	9.7	0.2	26.1	4	- 7.8	22	0	11	3.3	70	71	- 32	19	10	4	0	0	0.7	26	12.1	SW	13	12	5	14	5.5	54
ROME	194			11.5	- 0.2	5.7	- 0.1	21.7	26	- 8.3	22	0	21			172	42	54	9		15	25										
SAVANNAH	14	1018.3	1020.0	17.1	4.2	10.7	- 0.1	26.7	31	- 6.7	22	0	8	5.0	72	83	11	29	9	0	0	0	1.0	26	13.0	W	21+	9	9	13	5.9	52
HAWAII																																
HILO	8	1014.6	1015.9	28.1	18.3	23.2	1.3	31.1	11	15.6	16+	0	0	17.8	75	208	-178	117	13	1	0	0	0.6	19	13.4	NW	8	9	11	11	5.8	53
HONOLULU	2	1015.2	1015.8	27.4	18.9	23.2	0.1	29.4	12+	14.4	18	0	0	17.8	74	100	24	32	10	2	0	0	2.1	6	12.5	NE	9	8	13	10	5.6	50
KAHULUI	15	1013.2	1015.5	27.3	18.0	22.7	0.1	29.4	12+	13.3	19	0	0			88	20	43	9	2	0	0	2.2	6	13.9	NE	9	16	6	9	4.6	67
LIHUE	31	1011.5	1016.5	25.8	19.6	22.7	0.4	27.2	29+	15.6	18	0	0	18.9	81	174	42	94	17	2	0	0	1.3	3	14.8	NE	10	5	14	12	6.1	45
IDAHO																																
BOISE	865	918.4	1020.7	6.9	0.2	3.6	3.4	12.8	1	- 5.0	31	0	14	- 2.2	69	57	23	14	18	0	114	76	2.1	13	15.2	NW	29	3	3	25	8.5	17
LEWISTON	431			7.3	0.9	4.1	2.5	13.9	7	-13.9	31	0	10			76	41	14	16		168	102			21.5Y		24	2	3	26	8.7	
POCATELLO	1358	865.2	1022.1	3.1	- 5.8	- 1.3	1.2	12.8	1	-16.7	31	0	30	- 5.6	76	21	- 4	6	12	0	150	76	2.9	22	21.0	SW	30	3	7	21	8.4	40
ILLINOIS																																
CAIRO U	96			6.6	- 0.8	2.9	- 1.3	18.3	2	-13.9	21	0	19			147	53	41	13		91	76			21.0	SW	4					26
CHICAGO O HARE	201	992.2	1017.5	1.4	- 5.8	- 2.2	0.4	17.8	2	-16.7	31+	0	26	- 5.0	79	94	48	29	17	1	478	305	0.6	23	14.3	16	4	1	8	22	8.3	
CHICAGO MIDWAY	185	994.6	1017.9	1.0	- 6.1	- 2.5	- 0.9	16.7	2	-18.9	22	0	25	- 5.6	78	110	61	30	18	1	660	229	0.6	20	13.4	N	13	1	9	21	8.3	26
MOLINE	177	995.6	1018.1	- 0.6	- 8.7	- 4.6	- 1.8	18.3	2	-23.9	21	0	27	- 7.8	76	95	53	36	13	1	290	152	0.4	34	14.8	SE	4	7	5	19	7.2	40
PEORIA	199	993.2	1018.1	0.1	- 8.1	- 4.0	- 2.4	17.8	2	-24.4	21	0	27	- 6.1	84	104	55	40	16	1	480	330	0.3	20	14.3	SW	4	6	3	22	7.5	35
ROCKFORD	221	989.8	1017.9	- 0.1	- 8.7	- 4.4	- 0.8	16.7	2	-22.2	21	0	26	- 6.7	82	84	41	33	14	0	508	254	0.8	34	15.6	6	4	5	6	20	7.4	
SPRINGFIELD	179	995.3	1018.1	1.9	- 6.4	- 2.2	- 2.2	18.9	3	-27.2	21	0	25	- 4.4	85	98	50	39	16	0	577	381	0.5	22	20.1	SW	4	5	5	21	7.6	32
INDIANA																																
EVANSVILLE	116	1004.1	101[illegible].5	5.3	- 3.1	1.2	- 1.1	18.9	4	-17.2	22+	0	23	- 2.2	77	98	20	26	15	0	264	127	0.3	28	14.8	S	4	4	4	23	8.0	23

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation ground	Pressure		Temperature								No of days			Average relative humidity	Precipitation			No of days		Snow, Ice pellets		Wind		Fastest mile 1.6 kilometers			No of days sunrise to sunset			Sky cover tenths sunrise to sunset	Poss ble sunshine
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear 0 3	Partly cloudy 4 7	Cloudy 8 10		
INDIANA	M	Mb	Mb	C	C.	C	C	C		C				C.	%	Mm	Mm	Mm			Mm	Mm	M p.s		M p.s							
FORT WAYNE	241	987.5	1019.4	1.1	- 6.4	- 2.7	- 0.7	16.1	3	-20.6	22	0	29	- 5.6	78	100	47	29	16	0	516	330	0.5	20	15.2	SW	5	2	4	25	8.5	39
INDIANAPOLIS	241	988.2	1018.2	3.6	- 4.9	- 0.6	- 0.1	19.4	3	-20.6	22	0	26	- 3.9	81	108	40	31	20	0	699	356	0.5	19	13.9	SW	5+	2	6	23	8.3	30
SOUTH BEND	236	988.5	1017.4	1.9	- 5.1	- 1.6	0.3	16.1	4+	-16.1	22	0	26	- 5.0	78	109	54	27	17	0	574	279	1.4	18	10.7	15	4	1	8	22	8.4	
IOWA																																
BURLINGTON	211			- 0.3	- 8.6	- 4.4	- 2.4	18.3	2	-21.7	21	0	29	- 7.2	78	72	31	30	12	0	284	254	0.4	33	14.8	21	29	8	5	18	7.1	
DES MOINES	286	982.1	1018.3	- 1.7	- 9.3	- 5.5	- 1.8	19.4	2	-22.8	31	0	29	- 8.3	79	67	38	37	10	1	244	152	1.2	36	13.9	NE	4	4	8	19	7.6	47
DUBUQUE	322	977.3		- 2.7	-10.2	- 6.4	- 1.7	16.1	2	-22.8	31	0	29			61	13	33	12		170	102										
SIOUX CITY	334	977.3	1019.1	- 1.7	-10.1	- 5.8	- 1.9	14.4	8	-26.7	31	0	31	-10.0	72	18	- 1	11	5	0	178	102	1.4	36	16.1	NW	9	1	11	19	7.8	[illegible]
WATERLOO	265	985.1	1018.5	- 1.4	-11.6	- 6.5	- 1.6	18.3	2	-25.0	31	0	28	-10.6	71	57	29	31	7	0	213	102	0.7	2	12.5	33	6	6	6	19	7.3	
KANSAS																																
CONCORDIA	448	962.8	1017.4	1.4	- 7.1	- 2.8	- 2.8	19.4	2	-20.0	31	0	29	- 5.0	85	78	60	42	10	0	287	127	1.1	34	13.9	N	19+	3	10	18	7.4	53
DODGE CITY	787	923.5	1016.5	5.5	- 5.6	0.0	- 1.5	23.3	3	-19.4	31	0	26	- 6.7	67	50	38	34	8	1	262	102	1.6	32	17.0	N	19	8	10	13	6.3	58
GOODLAND	1114	885.9	1016.4	5.7	- 8.1	- 1.2	- 3.3	21.1	2	-23.9	31	0	31	- 7.2	69	23	12	10	6	0	328	127	3.0	33	18.3	32	12	7	10	14	6.5	
TOPEKA	267	984.8	1017.7	3.4	- 5.8	- 1.2	- 1.9	20.6	2	-22.2	31	0	27	- 4.4	79	109	74	65	12	0	386	229	1.0	33	15.6	SW	2	5	10	16	6.9	48
WICHITA	403	967.8	1017.1	4.6	- 4.7	- 0.1	- 2.2	18.9	2	-19.4	31	0	29	- 3.9	78	71	47	34	9	2	221	127	1.1	36	17.0	NW	13	6	10	15	6.2	57
KENTUCKY																																
COVINGTON	265	985.8	1018.2	4.9	- 3.2	0.9	0.2	16.7	4+	-12.8	21	0	22	- 3.3	74	68	- 2	25	14	1	51	25	0.8	21	17.9	21	26	3	6	22	8.3	
LEXINGTON	294	982.4	1018.6	7.0	- 2.2	2.4	0.3	18.9	3	-13.9	22	0	21	- 1.7	74	87	- 1	30	12	1	109	51	1.4	19	14.3	21	26	2	8	21	8.0	
LOUISVILLE	145	1000.0	1018.2	6.7	- 1.1	2.8	0.4	18.9	2	-10.6	22	0	20	- 2.8	68	67	- 15	30	18	0	114	51	0.8	24	20.1	SW	26	4	4	23	8.2	[illegible]
LOUISIANA																																
ALEXANDRIA	28	1014.6	1018.8	16.4	2.7	9.6	- 1.1	26.1	29	- 6.7	21	0	13			124	- 22	59	8	3	T	T	0.5	25	12.1	19	12	15	7	9	4.5	
BATON ROUGE	20	1016.6	1019.2	18.3	4.9	11.6	- 0.4	27.2	3	- 3.3	22+	0	9	5.6	68	211	81	100	10	6	T	0	0.3	22	11.2	23	12	16	5	10	4.5	
LAKE CHARLES	3	1018.0	1018.9	17.6	5.1	11.3	- 1.2	25.0	13+	- 4.4	21	0	7	6.7	76	122	- 24	60	5	5	0	0	0.4	8	14.3	31	3	13	7	11	4.5	
NEW ORLEANS	1	1018.3	1019.2	18.3	6.3	12.3	- 0.7	27.2	31+	- 4.4	22	0	8	7.2		211	107	123	11	6	T	0	0.4	22	20.6	28	26	16	4	11	4.4	49
SHREVEPORT	77	1008.8	1019.3	15.4	1.1	8.2	- 1.6	26.7	12	- 7.8	21	0	14	3.3	74	162	36	80	7	3	T	T	0.8	24	11.6	21	23	15	10	6	4.3	81
MAINE																																
CARIBOU	190	992.2		0.7	- 9.7	- 4.5	4.7	12.2	21	-21.6	19	0	29			202	141	71	21		594	229						4	3	24	8.3	
PORTLAND	13	1014.9	1017.3	5.3	- 3.7	0.8	4.3	13.3	6	-15.0	19	0	25	- 2.8	79	243	145	79	17	0	183	102	1.4	29	17.0	SE	9	8	8	15	6.6	48
MARYLAND																																
BALTIMORE	45	1013.2	1019.1	7.2	- 1.3	2.9	0.8	17.2	4	- 9.4	18	0	22	- 3.2	70	162	86	39	11	0	211	127	1.5	31	15.2	N	17	8	5	18	6.8	43
MASSACHUSETTS																																
BLUE HILL OBSR	192			6.3	- 2.8	1.8	2.9	15.6	5	-15.6	19	0	23			209	108	84	13		10	T			20.0	S	21					43
BOSTON	5	1016.6	1017.7	8.2	0.2	4.2	3.5	17.2	6+	-11.7	19	0	16	- 2.2	65	183	91	70	13	0	T	T	2.2	28	19.2	S	21	9	4	18	6.6	40
WORCESTER	301	979.0		4.7	- 4.8	- 0.1	2.6	15.6	6+	-16.7	19	0	27		75	250	158	66	13	0	23	25	2.1	28	14.8	26	28	4	10	17	6.9	
MICHIGAN																																
ALPENA	210	991.5	1018.0	- 1.2	- 8.9	- 5.1	0.7	12.2	3	-24.4	19	0	28	- 8.3	76	55	8	17	13	0	615	279	0.2	34	13.9	S	4	1	5	25	9.0	24
DETROIT	189			1.9	- 3.3	- 0.7	0.5	16.1	3	-11.1	16	0	24	- 5.6	71					0			1.2	27	14.8	22	5					
DETROIT METRO	195	992.9	1017.8	1.2	- 4.9	- 1.8	- 0.1	15.0	3	-13.3	22	0	28	- 4.4	83	89	40	22	14	0	417	305	0.8	27	13.0	SW	5	2	7	22	8.5	29
FLINT	235	988.5	1017.2	0.7	- 4.9	- 2.1	0.3	15.6	3	-18.3	18	0	27	- 5.0	80	71	25	16	13	0	465	330	0.8	25	11.2	29	29	1	6	24	8.6	
GRAND RAPIDS	239	987.5	1017.8	0.3	- 6.7	- 3.2	- 1.4	13.3	3	-20.6	17	0	28	- 6.7	76	83	32	33	15	0	[illegible]	305	0.4	16	15.6	SW	25	3	4	24	8.4	36
HOUGHTON LAKE	350	973.9	1017.7	- 1.4	- 8.7	- 5.1	- 0.3	10.6	5	-20.6	17	0	29	- 7.2	81	46	4	16	14	0	330	127	0.3	27	13.0	8	4	3	5	23	8.5	
LANSING	256	984.8	1017.7	0.5	- 6.6	- 3.0	- 0.5	15.0	3	-19.4	17	0	27	- 5.6	83	78	28	15	16	0	599	330	0.9	24	11.6	NW	29+	1	9	21	8.4	25
MARQUETTE	206			- 2.4	- 7.6	- 5.0	- 0.6	6.1	3	-17.2	31+	0	29			62	13	22	21		[illegible]	381			13.9	S	8	2	2	27	9.0	11
MUSKEGON	191	994.2	1018.1	0.1	- 5.8	- 2.8	- 1.7	12.8	2	-17.8	17	0	28	- 7.2	73	74	23	19	16	0	643	152	0.4	13	11.2	29	29+	3	1	27	9.7	
SAULT STE MARIE	220	990.2	1017.9	- 3.2	-10.9	- 7.1	- 0.9	5.6	3	-23.3	18	0	30	-10.0	79	64	6	16	15	0	488	330	1.6	8	10.7	NW	29+	7	3	21	7.5	40
MINNESOTA																																
DULUTH	435	965.1	1019.2	- 7.2	-15.4	-11.3	- 1.3	1.1	2	-30.6	31	0	31	-13.3	82	18	- 12	3	14	0	399	279	0.7	34	16.1	NW	9	7	4	20	7.3	40
INTERNATIONAL FALLS	359	974.6	1020.1	- 8.6	-17.6	-13.1	- 0.9	1.7	2	-34.4	31	0	31	-17.8	65	15	- 6	7	12	0	229	178	0.4	5	10.3	34	9	7	4	20	7.2	
MINNEAPOLIS	254	987.5	1019.3	- 4.9	-12.1	- 8.5	- 0.8	4.4	2	-31.1	31	0	30	-11.7	75	28	6	7	13	0	455	229	0.6	2	13.0	SW	8	9	3	19	6.7	47
ROCHESTER	395	968.8	1018.9	- 5.4	-13.6	- 9.5	- 2.1	7.8	2	-31.1	31	0	30	-11.1	84	25	1	10	9	0	414	229	0.2	36	14.8	18	8	7	6	18	7.0	
ST CLOUD	313	980.4		- 5.5	-14.4	- 9.9	- 1.4	4.4	9	-31.1	31	0	30			19	0	6	12		226	178						7	5	19	6.9	

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation ground	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C.	C.	C	C.	C.		C.				C.	%	Mm	Mm.	Mm			Mm	Mm	M p s		M p s							%
MISSISSIPPI																																
JACKSON	94	1006.8	1019.0	15.7	3.4	9.6	-0.1	26.7	3	-5.0	22+	0	12	3.3	68	170	36	99	10	5	8	T	0.6	18	14.8	SE	24	14	7	10	4.5	57
MERIDIAN	88	1008.1	1019.3	16.9	2.9	9.9	0.9	26.1	29	-6.1	22+	0	12	2.8	65	376	241	207	10	5	5	T	0.3	16	10.3	27	26	16	5	10	4.5	
MISSOURI																																
COLUMBIA REGIONAL	270	984.1	1017.4	3.4	-4.8	-0.7	-1.1	20.0	2	-21.7	31	0	26	-4.4	78	116	66	52	14	0	452	279	0.4	24	17.0	SW	4	5	8	18	7.3	43
KANSAS CITY	309	978.3	1016.5	2.7	-4.9	-1.1	-1.8	19.4	2	-22.2	31	0	26	-5.6	74	66	27	35	11	1	203	102	0.5	33	15.2	N	4	5	7	19	7.2	56
ST JOSEPH	247			2.8	-5.4	-1.3	-1.0	13.9	2	-21.7	31	0	27	-6.1	71	68	34		8		0		1.2	34	14.3	25	4	5	8	18	7.2	
ST LOUIS	163	997.0	1018.2	3.6	-5.8	-1.1	-2.7	21.1	3	-21.1	21	0	26	-2.8	88	111	61	37	17	0	668	305	0.4	25	17.9	S	4	4	9	18	7.4	40
SPRINGFIELD	386	970.5	1017.0	6.8	-3.8	1.5	-1.1	20.6	2+	-18.9	31	0	24	-3.9	70	116	61	57	12	0	251	127	1.0	20	17.4	S	4	4	11	16	6.7	40
MONTANA																																
BILLINGS	1087	889.6	1016.6	3.6	-4.3	-0.3	1.7	15.6	1	-25.6	31	0	25	-8.9	56	51	36	20	7	0	378	229	3.8	25	17.4	NW	25	3	9	19	8.0	38
GLASGOW	696	932.6	1018.1	-4.3	-13.8	-9.1	-1.1	5.0	21+	-31.1	30	0	31	-11.7	78	20	8	8	14	0	269	152	1.1	7	14.3	29	8	2	4	25	8.5	
GREAT FALLS	1116	886.2	1017.3	2.6	-6.0	-1.7	0.9	13.9	16	-26.1	31	0	26	-7.8	66	35	20	17	8	0	325	127	5.4	22	17.9	SW	3	1	5	25	8.6	26
HAVRE	788	921.8	1016.9	-0.9	-11.3	-6.1	0.1	8.3	21+	-23.9	5	0	30	-8.9	77	18	6	8	8	0	274	127	1.2	26	14.8	NW	8	1	6	24	8.5	29
HELENA	1167	879.8	1018.8	2.2	-6.4	-2.1	2.2	13.3	16	-27.8	31	0	30	-7.2	68	16	3	9	9	0	183	178	1.9	27	16.1	NW	12	0	9	22	8.5	31
KALISPELL	904	911.3	1018.6	1.4	-4.7	-1.7	2.2	7.2	16	-23.3	31	0	27	-3.9	83	47	14	11	19	0	269	76	0.7	21	10.3	22	3	1	2	28	9.1	
MILES CITY	801	921.1	1017.3	-0.1	-10.2	-5.1	-0.2	8.9	12+	-23.3	31	0	31	-8.9	77	21	11		10	0	218		1.0	31								
MISSOULA	972	904.8	1019.5	1.9	-3.9	-0.9	3.8	6.7	3	-22.2	31	0	27	-2.8	89	41	14	15	19	0	353	203	0.0	28	10.3	SE	31	0	2	29	9.4	19
NEBRASKA																																
GRAND ISLAND	561	949.5	1018.3	-0.3	-9.9	-5.1	-2.4	13.3	11	-28.9	31	0	30	-9.4	73	53	38	18	9	0	660	457	2.1	33	14.3	34	12+	3	10	18	7.7	
LINCOLN	360	973.9	1018.3	-0.7	-10.6	-5.7	-3.1	17.8	2	-28.9	31	0	30	-7.8	84	55	36	23	8	1	503	279	1.8	35	15.6	NW	9	3	7	21	7.9	46
NORFOLK	471			-1.1	-10.0	-5.5	-1.7	13.3	8	-26.1	31	0	31			20	1	9	6		277	203						2	6	23	8.1	
NORTH PLATTE	846	917.0	1018.5	1.4	-11.2	-4.9	-2.3	15.6	11	-26.7	31	0	31	-8.9	76	29	19	9	8	0	358	229	1.7	34	17.9	NW	12	3	9	19	7.7	36
OMAHA	298	981.4	1018.2	-0.8	-9.6	-5.2	-3.1	19.4	2	-22.8	31	0	31	-7.8	80	42	22	15	13	0	272	152	1.7	36	15.2	NW	9+	3	9	19	7.8	43
SCOTTSBLUFF	1206	877.8	1018.3	4.0	-11.2	-3.6	-1.7	16.7	11	-26.7	31+	0	31	-9.4	69	31	21	19	10	0	300	229	2.0	33	12.5	32	12	8	2	21	7.3	
VALENTINE	789			1.4	-10.6	-4.6	-0.7	17.2	2	-27.2	31	0	31			3	-5	2	2		76	51			18.8	NW	9+	5	6	20	7.7	42
NEVADA																																
ELKO	1539	846.6	1021.6	3.4	-5.3	-0.9	2.2	8.3	11+	-16.1	26	0	27	-7.2	64	33	7	13	11	0	300	127	0.7	26	13.4	26	11	3	6	22	7.9	
ELY	1906	809.7	1021.3	5.1	-10.7	-2.8	0.1	11.7	17	-18.3	26+	0	31	-7.2	75	19	2	6	9	1	201	76	1.7	21	17.9	SE	11	4	7	20	7.4	46
LAS VEGAS	659	942.8	1020.7	14.8	0.9	7.9	0.6	22.2	1	-2.8	31+	0	11	-7.8	35	T	-10	T	1	0	0	0	1.6	28	15.6	SW	1	11	6	14	5.4	74
RENO	1342	868.3	1020.4	9.6	-2.7	3.5	3.6	18.9	16	-6.7	19	0	27	-3.9	64	32	5	23	9	0	173	102	0.8	23	20.6	W	29	3	8	20	7.7	85
WINNEMUCCA	1311	871.3	1021.2	8.4	-3.7	2.4	3.6	17.2	7	-10.6	4	0	25	-3.3	69	30	6	11	10	0	117	T	0.8	19	21.0	SW	11	4	2	25	7.8	40
NEW HAMPSHIRE																																
CONCORD	104	1004.7	1017.8	3.7	-7.2	-1.7	2.2	15.6	6+	-18.9	25+	0	29	-4.4	80	191	108	45	13	0	168	102	1.7	30	12.5	NW	22	8	4	19	6.8	39
MT WASHINGTON OBS	1909			-3.6	-13.4	-8.5	4.4	5.6	5	-28.9	18	0	30			456	296	81	27	0	1407	229			51.0Y	NW	22	4	5	22	8.1	31
NEW JERSEY																																
ATLANTIC CITY	20	1015.9	1018.4	9.6	-0.9	4.4	1.8	19.4	27	-11.1	19	0	23	-0.6	69	139	57	49	13	0	T	T	1.7	28	13.4	20	5	8	5	18	6.7	43
ATLANTIC CITY U	3			8.5	1.3	4.9	1.4	16.1	27	-7.2	18+	0	15			133	44	51	14						20.6	NE	9					
NEWARK	2	1017.3	1018.2	8.0	0.2	4.1	2.6	18.3	5+	-8.3	19	0	16	-1.7	67	184	102	54	11	0	53	51	2.0	31	13.0	28	22+	6	9	16	7.0	
TRENTON U	17			7.8	-0.2	3.8	2.1	17.8	5+	-9.4	19	0	17			177	104	45	13		109	76			16.5	NW	21	8	5	18	6.9	41
NEW MEXICO																																
ALBUQUERQUE	1619	838.5	1019.5	9.3	-7.1	1.1	-1.7	17.2	29+	-14.4	27	0	30	-9.4	50	1	-11	1	2	0	T	T	1.4	33	17.0	NW	30	10	10	11	5.2	80
CLAYTON	1515			9.4	-6.3	1.6	-0.6	21.1	22+	-17.2	31	0	28			19	10	16	7		203	127						11	9	11	5.1	
ROSWELL	1112	889.6	1016.1	15.6	-4.6	5.5	0.1	23.9	12+	-13.3	20	0	25	-10.6	37	1	-11	1	1	0	T	T	1.2	31	19.2	NE	18	19	8	4	3.3	75
NEW YORK																																
ALBANY	84	1007.8	1018.9	2.6	-6.8	-2.1	0.9	16.1	5+	-25.0	19	0	28	-5.6	76	171	105	47	13	0	480	279	1.6	28	13.4	NW	30	4	6	21	8.0	31
BINGHAMTON	485	957.3	1018.1	2.1	-5.4	-1.7	1.2	17.8	4	-18.9	19	0	26	-5.0	80	148	83	40	18	0	683	356	1.4	25	12.5	W	30	2	5	24	8.6	24
BUFFALO	215	991.5	1018.0	1.6	-4.9	-1.7	0.7	15.6	5	-16.1	19	0	25	-5.0	79	124	48	37	23	2	587	152	1.2	27	17.0	W	6	2	2	27	9.0	23
NEW YORK U	40	1014.9	1018.2	7.5	0.3	3.9	1.7	18.9	4	-8.3	19+	0	16	-2.2	67	253	171	67	12	1	71	76	1.2	30	13.4	NE	9					48
NEW YORK KENNEDY	4	1017.3	1018.1	6.6	-0.8	2.9	1.3	15.0	27	-9.4	19	0	17	-1.1	75	151	69	35	13	0	13	25	2.0	30	15.6	28	21	9	7	15	6.4	
NEW YORK LA GUARDIA	3	1017.6	1018.6	7.6	0.6	4.1	1.7	17.8	4	-8.3	19	0	12	-2.2	66	196	109	50	13	1	56	51	1.7	31	17.9	NE	9	6	9	16	6.8	
ROCHESTER	167	997.6	1018.6	3.1	-4.1	-0.4	1.4	18.9	5	-19.4	19	0	23	-3.9	80	92	31	18	19	2	594	254	1.8	27	17.4	W	29	2	5	24	8.6	30
SYRACUSE	125	1002.7	1018.3	2.7	-5.6	-1.4	0.9	16.1	5	-21.7	19	0	25	-3.9	84	111	31	31	16	0	620	356	0.9	28	13.4	W	30	1	3	27	8.7	26

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation of ground	Pressure		Temperature								No of days			Average relative humidity	Precipitation			No of days		Snow, Ice pellets		Wind					No of days sunrise to sunset			Sky cover tenths sunrise to sunset	Possible sunshine
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Fastest mile (1.6 kilometers) Speed	Direction	Date	Clear 0-3	Partly cloudy 4-7	Cloudy 8-10		
NORTH CAROLINA	M	Mb	Mb	C.	C	C	C	C		C.				C.	%	Mm	Mm	Mm			Mm	Mm	M p s		M p s							%
ASHEVILLE	652	941.1	1018.8	10.0	- 1.3	4.3	1.1	19.4	3+	-11.1	22	0	21	- 0.6	76	215	123	68	14	2	76	25	1.2	33	14.3	34	21+	10	9	12	5.6	50
CHARLOTTE	224	991.2	1019.0	10.7	0.1	5.4	- 0.6	22.8	4	-10.0	22	0	17	0.6	73	216	100	90	13	2	T	0	2.1	30	17.0	4	8	10	9	12	5.7	50
GREENSBORO	273	986.8	1019.4	8.5	- 1.6	3.4	- 0.9	20.6	4	-13.9	18	0	23	- 1.1	74	135	43	28	14	3	137	51	0.3	33	13.0	SW	5	10	6	15	6.0	57
CAPE HATTERAS R	2	1019.0	1019.2	16.6	6.3	11.4	2.4	24.4	5	- 3.9	23	0	5	7.2	77	164	84	39	15	2	211	152	0.8	30	12.5	NW	21	8	7	16	6.7	54
RALEIGH	132	1002.7	1019.0	12.1	- 0.4	5.8	0.3	23.9	5+	-12.2	18	0	19	1.1	73	162	85	47	13	1	71	76	0.5	26	9.4	27	21	10	7	14	6.0	52
WILMINGTON	9	1018.0	1019.2	16.2	3.9	10.1	1.1	26.1	31	- 5.0	23	0	9	5.6	75	142	55	54	14	2	10	T	0.6	27	13.0	SW	13	12	6	13	5.8	63
NORTH DAKOTA																																
BISMARCK	502	956.3	1019.6	- 7.0	-17.7	-12.3	- 4.4	5.6	7	-33.9	31+	0	31	-13.9	83	21	12	8	7	0	292	203	0.7	35	20.1	NW	8	7	3	21	7.4	45
FARGO	273	985.4	1020.1	- 8.4	-15.9	-12.2	- 2.4	1.7	7	-32.8	31	0	31	-13.9	94	26	11	11	13	0	312	152	0.8	36	17.9	NW	9	6	4	21	7.6	28
WILLISTON	579	947.2	1019.0	- 5.6	-15.6	-10.6	- 1.8	5.6	7	-33.3	30	0	31	-12.8	81	14	2	3	12	0	140	152	0.2	28	22.8	SW	8	5	5	21	7.8	26
OHIO																																
AKRON	368	972.2	1018.1	4.1	- 3.1	0.5	1.3	17.2	5+	-10.0	18	0	25	- 5.0	69	60	3	22	15	1	224	102	1.1	23	12.1	17	25+	2	5	24	8.5	
CINCINNATI ABBE OB	232			4.8	- 2.0	1.4	- 0.4	17.2	3+	-10.0	11	0	22			65	- 5	23	10						11.2	SW	26					33
CLEVELAND	237	988.2	1018.0	4.3	- 1.7	1.3	2.1	17.8	3	- 7.8	22	0	23	- 3.3	72	90	30	25	21	1	351	152	1.4	22	15.6	SW	5	1	5	25	8.9	26
COLUMBUS	247	987.8	1018.6	4.7	- 2.8	0.9	1.2	16.7	5+	-11.1	18	0	23	- 3.3	74	69	9	21	13	1	163	102	0.6	22	17.0	SW	26	3	8	20	7.7	26
DAYTON	305	981.0	1018.2	3.4	- 4.6	- 0.6	- 0.2	17.2	4	-16.4	22	0	27	- 5.6	71	80	20	20	15	1	295	203	0.9	19	21.0	S	26	4	5	22	8.0	40
MANSFIELD	395			4.1	- 3.3	0.4	0.9	17.2	3	-12.2	22+	0	24	- 7.8	79	72	5	20	18	2	279	152	1.7	22	11.2	21	22+	2	6	23	8.4	
TOLEDO	204	992.2	1018.3	1.1	- 6.2	- 2.5	- 0.4	17.2	3	-16.7	22	0	28	- 6.1	76	81	31	16	13	[illegible]	351	203	0.9	26	13.4	SW	27	1	7	23	8.2	26
YOUNGSTOWN	359	973.9	1018.0	2.6	- 3.3	- 0.3	1.1	15.6	3	-11.1	18	0	26	- 4.4	73	77	9	29	19	1	178	76	1.1	23	16.1	22	26	1	4	26	9.0	
OKLAHOMA																																
OKLAHOMA CITY	392	969.1	1016.7	10.5	- 2.4	4.1	- 0.6	22.8	12	-11.7	31	0	23	- 2.8	67	12	- 24	10	3	0	15	25	0.5	30	17.4	N	19	12	7	12	5.1	62
TULSA	198	992.2	1017.3	9.1	- 2.3	3.4	- 0.8	21.7	1	-13.9	31	0	20	- 1.7	73	86	45	43	6	3	46	51	0.6	22	15.2	S	23	13	8	10	5.0	58
OREGON																																
ASTORIA	2	1014.2	1015.1	10.2	4.4	7.3	1.2	13.9	15	- 1.1	8	0	3	4.4	91	400	53	66	28	1	T	0	1.9	16	13.4	18	20+	0	4	27	9.2	
BURNS U	1265			4.3	- 3.9	0.2	1.8	[illegible]	7	-11.1	31		28			62	26	12	17		297	102						3	3	25	9.4	
EUGENE	109	1003.4	1017.2	9.4	3.2	6.3	0.9	13.3	15	- 1.7	30+	0	5	5.0	88	300	132	47	25	0	T	0	2.3	17	13.0	20	11	0	1	30	9.7	
MEACHAM	1234	876.1	1018.7	0.9	- 3.2	- 1.1	0.1	5.6	7	-13.3	31	0	30			228	113	34	22		1219				[illegible]	27	24	2	2	27	9.2	
MEDFORD	396	970.9	1019.4	9.9	2.9	6.4	3.7	15.0	19	- 0.6	31+	0	3	2.8	79	77	- 9	20	17	0	T	T	0.0	33	12.5	14	20	1	1	29	9.3	
PENDLETON	452	963.4	1018.0	8.8	1.8	5.3	2.8	15.6	15	- 6.7	31	0	9	0.0	70	119	81	24	18	0	135	76	1.5	24	14.3	26	24	4	1	26	8.6	
PORTLAND	6	1015.2	1016.6	9.8	4.3	7.1	1.9	13.3	7	- 1.1	9	0	3	4.4	83	252	90	36	24	0	0	0	2.9	15	13.0	[illegible]	11	0	4	27	9.2	15
SALEM	60	1009.1	1016.6	9.6	3.1	6.3	1.1	13.9	15	- 3.3	31	0	7	3.9	85	281	94	52	23	0	0	0	3.1	18	13.4	19	11	0	2	29	9.3	
SEXTON SUMMIT R	1169	883.5	1018.4	4.3	- 0.6	1.9	- 0.8	11.1	9	- 6.1	31	0	21			235	114	42	24		749	356	6.1	19	24.1	19	11	3	0	28	9.2	
PACIFIC AREA																																
GUAM TAGUA R	110			29.2	23.0	26.1	0.2	30.6	28+	20.0	26+	0	0			136	- 19	29	26		0	0			[illegible]	E	21					41
JOHNSTON	2	1012.9	1013.6	26.9	23.2	25.1	- 0.5	27.8	29+	20.6	30+	0	0	20.6	75	114	37	70	16	0	0	0	6.3	8	15.6	NE	10	10	16	5	6.0	72
KOROR R	29			31.7	24.2	27.9	0.8	33.3	9+	23.3	30+	16	0			251	- 47	56	22	3	0	0			13.3	SE	19	0	10	21	8.5	39
KWAJALEIN	2	1008.1	1008.9	30.1	25.3	27.7	0.6	31.1	3	23.3	21+	0	0	23.3	78	132	- 95	45	20		0	0	7.0	7	11.6	7	9	9	8	14	6.4	
MAJURO	3			29.3	25.2	27.3	0.4	30.6	7	22.2	17	0	0			184	- 99	36	23		0	0			17.0	E	18	2	13	16	7.3	70
PAGO PAGO	4	1009.5	1009.7	29.6	23.7	26.7		31.1	11+	21.7	21	0	0	23.3	83	378		79	25	2	0	0	2.2	5	15.2	NW	3	1	12	18	7.5	49
PONAPE R	37			30.6	24.0	27.3	0.5	32.2	17+	22.8	21+	5	0			461	- 5	67	29	2	0	0			15.6	NE	31	0	8	23	8.5	[illegible]
TRUK MOEN ISLAND	2			30.4	24.9	27.7	0.6	31.7	10+	23.3	31+	0	0			447	111	132	25	1	0	0			11.2	SE	22	0	3	28	9.4	51
WAKE	3	1014.9	1015.1	29.0	22.8	25.9	- 0.1	30.6	3	21.1	22+	0	0	20.6	76	24	- 23	6	10	0	0	0	6.8	7	13.0	ENE	14+	17	9	5	4.3	
YAP R	13			30.4	23.5	26.9	- 0.3	31.1	21+	18.3	17	0	0			179	- 80	34	20	4	0	0			11.2	E	21	2	15	14	7.0	52
PENNSYLVANIA																																
ALLENTOWN	118	1004.4	1018.7	5.7	- 2.3	1.7	2.1	17.2	5	-12.2	18	0	25	- 2.8	73	200	117	62	12	0	183	152	1.7	31	12.5	28	21	7	7	17	7.1	
ERIE	223	990.9	1018.3	2.7	- 3.1	- 0.2	1.6	15.6	3	- 9.4	18+	0	26	- 3.9	76	88	22	24	20	1	274	76	1.9	20	12.5	16	25	1	2	28	9.4	
HARRISBURG	103	1005.8	1018.7	5.9	- 1.3	2.3	1.8	20.0	5	- 7.2	18	0	22	- 4.4	64	166	92	41	14	0	389	254	1.1	32	12.5	NW	17	5	9	17	7.1	33
PHILADELPHIA	2	1017.3	1018.4	7.9	- 0.6	3.7	2.6	17.8	5	- 8.3	17	0	19	- 2.2	69	161	86	35	14	1	117	76	1.4	31	14.3	NW	28	8	6	17	6.9	36
PITTSBURGH	347	973.2	1018.4	3.9	- 2.6	0.7	1.4	17.2	4	-11.1	18	0	23	- 3.9	70	55	- 6	12	14	0	122	25	1.0	25	13.9	24	26	2	3	26	9.7	17
SCRANTON	283	983.1	1018.4	4.5	- 4.3	- 0.4	1.1	17.2	5	-13.9	19	0	26	- 5.0	72	154	91	58	16	0	406	229	1.3	29	13.0	S	[illegible]	3	6	22	8.0	32
WILLIAMSPORT	160	999.3	1019.1	3.2	- 3.6	- 0.2	0.7	17.2	5	-13.3	18	0	26	- 4.4	76	187	110	50	14	1	396	254	1.2	30	9.8	27	30+	5	6	20	7.6	
RHODE ISLAND																																
BLOCK ISLAND	34			8.1	0.4	4.2	2.1	15.0	6+	-10.0	19	0	17			169	78	67	11		T	T						7	8	16	6.8	
PROVIDENCE	16	1015.6	1017.9	8.5	- 1.5	3.5	3.5	19.4	5	-12.2	19	0	21	- 1.1	73	194	102	75	15	0	T	T	1.3	29	14.3	19	21	8	8	15	6.9	46

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation ground	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Ice pellets: Total	Snow, Ice pellets: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths, sunrise to sunset	Possible sunshine
	M	Mb	Mb	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm	Mm			Mm	Mm	M p.s		M p s							%
SOUTH CAROLINA																																
CHARLESTON	12	1017.6	1019.7	16.7	4.7	10.7	0.7	24.4	5+	- 6.1	22	0	8	5.6	72	116	44	32	11	2	T	0	1.1	24	18.8Y	SW	13	11	6	14	5.7	53
CHARLESTON U	3			15.3	7.0	11.2	0.2	23.9	5	- 2.8	22	0	4			115	45	33	13		0	0			16.1	SE	26					
COLUMBIA	65	1011.2	1019.4	16.8	2.6	9.7	1.7	27.2	31	- 7.8	22	0	13	3.9	74	169	80	45	12	2	T	0	0.8	27	9.8	28	10	11	8	12	5.5	61
GRNVLLE-SPRTNBRG	292	983.7	1019.0	10.9	- 0.1	5.4	- 1.0	22.2	4	-11.1	22	0	15	- 0.6	69	192	89	52	14	3	T	T	0.6	34	11.6	S	5	13	7	11	5.2	62
SOUTH DAKOTA																																
ABERDEEN	395	970.5	1019.9	- 6.8	-15.2	-11.0	- 3.3	4.4	8	-31.7	31	0	31	-12.8	83	11	- 4	7	9	0	272	178	1.4	36	15.6	31	8	8	2	21	7.1	
HURON	390	970.5	1019.3	- 4.2	-13.1	- 8.6	- 1.3	8.9	8	-30.6	31	0	31	-11.7	76	14	0	6	5	0	269	127	1.0	35	16.5	NW	9	6	8	17	7.3	40
RAPID CITY	964	903.2	1017.6	1.8	- 9.2	- 3.7	- 1.0	21.7	1	-27.8	31	0	30	- 9.4	67	14	6	9	6	0	142	127	2.5	34	20.1	NW	12	5	6	20	7.2	42
SIOUX FALLS	432	965.5	1019.4	- 3.5	-13.1	- 8.3	- 2.2	11.7	8	-32.2	31	0	31	-11.7	75	12	- 7	7	6	0	295	229	1.0	35	13.9	30	8	5	7	19	7.6	
TENNESSEE																																
BRISTOL	459	963.1	1018.5	9.0	- 0.9	4.1	0.6	19.4	26+	-12.2	18	0	17	- 1.1	72	129	47	38	15	1	84	25	0.6	29	13.0	29	13	8	6	17	6.9	
CHATTANOOGA	203	993.9	1019.1	10.8	- 0.3	5.3	- 0.6	21.1	26	- 9.4	22	0	18	0.0	70	212	80	98	8	3	5	T	0.6	28	14.8	SW	26	8	7	16	6.4	41
KNOXVILLE	299	982.7	1018.4	10.2	- 0.1	5.1	- 0.3	21.1	26	- 9.4	22	0	16	- 0.6	69	187	80	75	12	2	51	25	0.9	33	17.0	W	13	6	9	16	6.8	42
MEMPHIS	79	1008.1	1018.5	10.9	1.6	6.3	0.4	21.7	3	- 8.9	21	0	13	1.1	70	136	11	45	9	1	5	T	0.8	20	13.0	13	24+	7	8	16	6.6	47
NASHVILLE	180	996.3	1018.4	10.1	- 0.6	4.7	- 0.5	21.1	3	-12.2	22	0	17	- 0.6	72	82	- 24	34	10	2	61	51	1.1	21	16.5	SW	26	5	7	19	7.4	33
OAK RIDGE R	276			9.1	- 1.1	4.1	- 0.4	20.0	26	-11.1	22	0	21			226	76	117	8		15	T			18.3Y		26	8	7	16	6.8	
TEXAS																																
ABILENE	544	952.9	1016.7	16.0	0.4	8.2	0.4	27.2	12	- 9.4	20	0	16	- 2.8	51	T	- 32	T	1	0	T	T	2.6	23	17.0	NW	18	18	9	4	3.4	84
AMARILLO	1098	889.3	1014.9	11.7	- 4.4	3.7	- 0.4	23.9	1	-13.9	31+	0	27	- 6.1	57	4	- 15	4	2	0	38	51	2.6	29	21.0	N	18	14	11	6	4.1	71
AUSTIN	182	995.9	1018.4	18.6	4.1	11.3	- 0.2	30.0	12	- 5.6	21	0	5	2.2	58	19	- 45	17	3	1	0	0	0.9	32	15.6	NW	19	19	9	3	3.3	77
BROWNSVILLE	6	1017.3	1017.8	23.7	10.7	17.2	0.1	29.4	13	- 2.8	21	0	2	11.7	71	13	- 30	11	4	1	0	0	1.4	16	16.1	NW	19	14	9	8	4.4	61
CORPUS CHRISTI	12	1016.6	1018.2	22.9	7.8	15.4	0.3	30.0	30+	- 7.8	21	0	2	8.3	67	3	- 50	3	1	0	0	0	1.2	11	17.0	S	23+	15	11	5	4.1	66
DALLAS	147			16.3	3.1	9.7	0.7	28.3	12	- 6.1	31	0	9	0.6	59	21	- 46	9	3	1			1.3	22	15.6	18	18	16	10	5	3.7	
DEL RIO	313	981.0	1017.7	20.0	3.3	11.7	0.4	29.4	12	- 5.0	21	0	4	- 0.6	50	T	- 21	T	0	0	0	0	0.8	4	14.8	34	19+	21	7	3	2.8	
EL PASO	1194	883.5	1017.2	16.9	- 1.7	7.6	0.9	26.7	2	-12.2	22	0	20	- 9.4	30	T	- 12	T	0	0	0	0	2.3	29	20.1	NW	29+	16	13	2	3.2	95
FORT WORTH	164	997.3	1018.2	16.1	2.1	9.1	0.4	28.3	12	- 6.1	20	0	11	1.1	64	21	- 39	10	3	2	0	0	1.3	24	13.0	34	19+	16	9	6	3.9	
GALVESTON U	2			17.6	10.5	14.1	0.1	24.4	3	- 1.1	20	0	3			67	- 32	30	4		0	0			17.4	NW	19+					61
HOUSTON INTERCON	29	1015.2	1019.1	19.7	4.2	11.9	0.1	26.7	30+	- 6.1	21	0	7	6.7	74	63	- 52	31	5	4	0	0	0.1	22	15.6	31	19	15	7	9	4.5	71
LUBBOCK	992	902.8	1015.7	14.3	- 3.0	5.7	0.7	23.3	22+	-13.3	20	0	23	- 7.8	43	T	- 17	T	0	0	T	0	2.5	30	20.6	4	18	19	9	3	3.3	84
MIDLAND	869	916.7	1016.0	16.5	- 0.2	8.2	0.4	25.0	12	-11.7	20	0	16	- 6.7	39	0	- 17	0	0	0	0	0	2.3	25	17.9	35	18	19	11	1	2.4	
PORT ARTHUR	5	1018.3		18.1	4.6	11.3	- 1.3	25.6	29	- 6.7	21	0	9	7.8	81	74	- 56	33	6	2	0	0	0.3	17	21.9	NW	19	15	7	9	4.3	58
SAN ANGELO	580	949.9	1017.4	18.3	1.0	9.7	0.9	27.8	12	- 7.8	20	0	15	- 2.2	50	T	- 22	T	0	0	0	0	2.2	25	13.4	27	23	18	12	1	2.9	
SAN ANTONIO	240	989.8	1018.3	19.8	2.6	11.2	- 0.8	28.9	12	- 8.3	21	0	8	1.7	59	4	- 40	4	1	0	0	0	1.3	33	15.2	NW	19	19	9	3	3.2	79
VICTORIA	32	1014.2	1018.3	21.8	6.0	13.9	- 0.1	28.9	12	- 4.4	21	0	3	7.2	71	29	- 38	21	4	2	0	0	0.2	1	23.2Y	N	19	15	10	6	3.9	
WACO	153	999.7	1018.2	16.9	3.1	10.0	- 0.2	27.2	12	- 5.0	20	0	6	1.7	62	19	- 50	19	2	2	T	T	1.4	22	14.3	32	19	15	10	6	3.9	
WICHITA FALLS	303	980.0	1017.3	14.9	- 0.7	7.1	0.1	27.2	12	- 6.9	20	0	19	- 1.1	63	2	- 35	1	2	1	13	25	1.6	25	16.5	27	12	18	7	6	3.5	
UTAH																																
MILFORD	1533	848.3		5.8	- 7.6	- 0.9	1.2	14.4	17+	-16.7	4	0	31			11	- 7	7	8		165	102			23.7	SW	1	6	11	14	6.7	52
SALT LAKE CITY	1286	874.7	1022.0	5.1	- 3.6	0.8	1.8	16.1	1	-15.6	31	0	29	- 3.9	74	57	26	17	13	0	498	127	1.2	17	16.5	NW	11	4	5	22	8.1	
WENDOVER	1291	873.7	1022.1	4.7	- 3.9	0.4	1.6	13.3	1	-19.0	26	0	30	- 5.0	70	7	0	5	5		36	25						6	7	18	7.2	
VERMONT																																
BURLINGTON	101	1005.8	1018.6	1.2	- 6.3	- 2.6	3.3	16.1	5	-23.9	19	0	25	- 7.2	73	151	97	48	19	0	612	279	0.4	28	14.8	W	30	3	3	25	8.5	22
VIRGINIA																																
LYNCHBURG	279	984.1		7.6	- 1.7	2.9	- 0.7	21.1	4	-13.3	18	0	21			182	102	55	13		168	152			13.4	NE	9	6	8	17	6.8	40
NORFOLK	7	1017.6	1018.8	12.6	3.2	7.9	2.1	23.3	4	- 4.4	23	0	11	1.7	67	148	78	46	14	1	36	25	0.4	31	10.7	2	17	9	5	17	6.1	
RICHMOND	50	1012.5	1019.0	10.7	- 0.9	4.9	0.6	23.3	5+	-16.1	18	0	19	0.0	73	180	104	57	13	1	251	127	0.4	32	12.5	SW	5	8	5	18	6.8	44
ROANOKE	350	976.3	1019.1	7.8	- 0.9	3.4	- 0.1	21.1	5	- 8.3	18	0	21	- 2.8	68	142	67	37	14	0	201	127	1.2	29	12.5	33	21+	6	8	17	7.0	
WALLOPS ISLAND	3			10.6	2.1	6.3		20.0	4	- 6.1	19					119		26	14		71	51			20.6Y	NE	8					
WASHINGTON																																
OLYMPIA	59	1007.5	1014.8	7.9	1.6	4.7	- 0.1	13.3	20	- 3.3	31	0	11	3.3	90	295	65	37	28	0	66	51	2.1	19	14.3	18	11	0	5	26	9.4	
QUILLAYUTE	55	1005.8	1013.2	8.7	2.7	5.7	0.6	11.1	20+	- 1.1	30+	0	6	4.4	90	505	78	98	26	3	T	0	1.5	14	13.4	SE	15	1	3	27	9.1	12
SEATTLE	6			9.1	4.4	6.8	0.4	13.3	20	- 1.1	31	0	1			243	114	36	24		0	0			20.6Y	SSE	11					
SEATTLE-TACOMA	122	998.3	1015.0	9.2	4.6	6.9	2.0	13.9	20	- 1.1	31	0	1	3.3	80	212	52	34	22	0	8	T	1.7	15	18.3	SE	11	0	3	28	9.5	09
SPOKANE	718	931.6	1017.1	2.9	- 1.6	0.7	1.8	7.8	16+	-15.6	31	0	18	- 1.7	86	96	34	12	21	0	231	152	2.1	18	15.6	SW	11	1	2	28	9.1	11

CLIMATOLOGICAL DATA

METRIC UNITS

Station	Elevation of ground	Pressure		Temperature								No. of days				Precipitation				No. of days	Snow, Ice pellets		Wind		Fastest mile (1.6 kilometers)			No. of days (sunrise to sunset)				
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 °C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover tenths sunrise to sunset	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C.				C.		Mm	Mm	Mm			Mm	Mm	M p s		M p s							
WASHINGTON																																
STAMPEDE PASS R	1206	876.4		- 0.6	- 3.3	- 1.9	0.8	4.4	16	-12.2	31	0	30			406	- 5	58	27		3203	2896						0	1	30	9.7	
WALLA WALLA	289			8.4	2.4	5.4	2.2	17.8	16	- 5.6	31	0	10			108	61	24	18		244	178			12.5	SW	15	1	5	25	9.1	12
YAKIMA	321	978.7	1018.0	6.8	- 2.4	2.2	2.4	14.4	7	-17.2	31	0	21	- 1.1	81	56	28	18	16	0	472	305	1.3	27	13.9	30	7	4	6	21	8.1	
WEST INDIES																																
SAN JUAN P.R.	4	1014.9	1017.2	28.4	22.6	25.5	0.9	31.1	1	20.0	14	0	0	17.8	64	106	- 33	24	23	1	0	0	3.7	8	17.9	NE	30	2	26	3	5.5	56
WEST VIRGINIA																																
BECKLEY	763	927.9	1018.9	5.2	- 2.9	1.2	0.1	17.2	5+	-15.0	18	0	23	- 2.8	78	117	36	37	18	0	488	178	1.6	19	12.5	19	5	2	6	23	8.3	
CHARLESTON	286	983.7	1018.6	8.1	- 1.4	3.3	0.5	22.0	26	-11.7	18	0	20	- 1.7	72	93	11	22	14	0	165	76	0.8	24	16.5	24	6	1	12	18	8.0	
ELKINS	594	945.8		5.6	- 4.9	0.3	- 0.2	20.0	5	-18.3	11	0	25			115	37	31	17		635	254						2	3	26	8.7	
HUNTINGTON	252	987.5	1018.3	7.2	- 1.0	3.1	0.1	19.4	4+	-11.7	18	0	20	- 1.7	73	57	- 15	17	13	0	51	25	0.8	25	17.3	26	26	4	5	22	8.3	
PARKERSBURG R	187			6.6	- 1.3	2.6	0.5	18.3	5	-10.0	18	0	22			47	- 25	12	12		64	25			13.4	SW	27					43
WISCONSIN																																
GREEN BAY	208	991.9	1018.6	- 2.5	- 9.9	- 6.2	- 0.6	10.0	2	-25.6	31	0	30	- 8.3	81	61	31	22	14	0	394	178	1.6	34	18.8	NE	4	5	2	24	7.3	30
LA CROSSE	198	993.9	1019.7	- 3.0	-11.6	- 7.3	- 1.6	10.6	2	-27.8	31	0	28	- 9.4	81	35	6		10	0	249		0.3	34								
MADISON	262	985.1	1017.9	- 1.5	-10.2	- 5.8	- 0.3	15.0	2	-23.9	31	0	27	- 8.3	83	50	17	25	14	0	277	102	0.8	33	13.0	NE	13	6	6	19	7.2	33
MILWAUKEE	205	991.9	1017.9	- 0.4	- 6.8	- 3.6	0.5	13.3	2	-18.3	31	0	26	- 7.2	75	97	55	43	18	0	498	229	1.3	27	17.4	NE	13	5	4	22	8.1	27
WYOMING																																
CASPER	1627	835.1	1017.4	2.2	- 8.1	- 2.9	- 0.3	16.1	1	-23.9	31	0	26	- 8.9	65	14	2	3	9	0	244	76	5.5	22	24.1	21	1	6	6	19	7.2	
CHEYENNE	1867	806.7	1016.4	3.8	- 6.7	- 1.4	- 0.1	17.8	1	-21.1	31	0	26	-11.1	51	27	15	13	9		363	152	4.8	30	21.5	W	27+	8	4	19	6.5	43
LANDER	1696	827.1	1016.6	2.6	- 9.7	- 3.6	1.4	13.3	1	-21.7	31	0	30	-10.0	65	16	6	6	5	0	315	127	0.8	21	15.2	[illegible]	1	8	5	18	6.8	58
SHERIDAN	1208	876.7	1017.8	4.3	- 9.7	- 2.7	0.4	21.1	1	-32.8	31	0	30	- 8.3	68	20	5	10	9		272	178	3.1	31	19.2	NW	12	3	9	19	7.4	47

HEATING DEGREE DAYS

(Base 65°F.)

DECEMBER 1973

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	[illegible]	976	1148
HUNTSVILLE	[illegible]	[illegible]	1312
MOBILE	[illegible]	[illegible]	[illegible]
MONTGOMERY	[illegible]	758	911
ALASKA			
ANCHORAGE	[illegible]	[illegible]	[illegible]
ANNETTE	[illegible]	3510	[illegible]
BARROW	2186	7775	8607
BARTER ISLAND	[illegible]	8015	8436
BETHEL	[illegible]	[illegible]	[illegible]
BETTLES	[illegible]	[illegible]	7167
BIG DELTA	[illegible]	6334	6267
COLD BAY	[illegible]	[illegible]	4242
FAIRBANKS	[illegible]	6259	[illegible]
GULKANA	2180		
HOMER	[illegible]	4768	[illegible]
JUNEAU	[illegible]	[illegible]	[illegible]
KING SALMON	[illegible]	4740	5116
KODIAK	[illegible]	4223	3848
KOTZEBUE	[illegible]	6720	[illegible]
MCGRATH	2214	6681	6543
NOME	[illegible]	6278	6132
ST. PAUL ISLAND	1157	4677	4709
SUMMIT	1756	6771	6519
TALKEETNA	1566	[illegible]	5290
UNALAKLEET	[illegible]	[illegible]	6077
YAKUTAT	1081	[illegible]	4157
ARIZONA			
FLAGSTAFF	987	2570	2883
PHOENIX	291	[illegible]	587
TUCSON	[illegible]	629	[illegible]
WINSLOW	[illegible]	1896	1892
YUMA	227	[illegible]	[illegible]
ARKANSAS			
FORT SMITH	764	1186	1302
LITTLE ROCK	[illegible]	1004	[illegible]
CALIFORNIA			
BAKERSFIELD	461	[illegible]	861
BISHOP	751	1683	1693
BLUE CANYON	816	[illegible]	1952
EUREKA	419	2036	2006
FRESNO	544	998	[illegible]
LONG BEACH	292	[illegible]	[illegible]
LOS ANGELES	[illegible]	391	571
LOS ANGELES U	174	339	371
MT SHASTA R	872	[illegible]	[illegible]
OAKLAND	[illegible]	1239	1107
RED BLUFF	542	1081	998
SACRAMENTO	553	1014	1061
SANDBERG R	681	1621	1479
SAN DIEGO	[illegible]	343	[illegible]
SAN FRANCISCO	459	1219	1145
SAN FRANCISCO U	[illegible]	1390	1244
SANTA MARIA	421	[illegible]	1146
STOCKTON	533	968	[illegible]
COLORADO			
ALAMOSA	1366	3443	3566
COLORADO SPRINGS	1041	2400	2512
DENVER	1029	[illegible]	[illegible]
GRAND JUNCTION	1075	2121	2241
PUEBLO	1017	[illegible]	[illegible]
CONNECTICUT			
BRIDGEPORT	[illegible]	1545	1840
HARTFORD	[illegible]	2047	2354
DELAWARE			
WILMINGTON	839	1502	[illegible]
DIST.OF COLUMBIA			
WASHINGTON DULLES	917	[illegible]	1904
WASHINGTON NATIONAL	[illegible]	1214	1570
FLORIDA			
APALACHICOLA	331	[illegible]	498
DAYTONA BEACH	239	264	[illegible]
FORT MYERS	147	[illegible]	[illegible]
JACKSONVILLE	357	465	497
KEY WEST	24	24	[illegible]
LAKELAND U	198	223	228
MIAMI	93	94	[illegible]
ORLANDO	193	212	233
PENSACOLA	[illegible]	456	[illegible]
TALLAHASSEE	409	557	611
TAMPA	200	230	240
WEST PALM BEACH	[illegible]	106	[illegible]
GEORGIA			
ATHENS	634	1023	1188
ATLANTA	639	1021	[illegible]
AUGUSTA	561	920	1025
COLUMBUS	496	751	[illegible]
MACON	[illegible]	725	904
ROME	[illegible]	1185	1363
SAVANNAH	[illegible]	[illegible]	[illegible]
IDAHO			
BOISE	817	2011	2321
LEWISTON	787	2038	2221
POCATELLO	1089	2699	2787
ILLINOIS			
CAIRO U	853	1335	1472
CHICAGO O HARE	1139	2142	2424
CHICAGO MIDWAY	1158	2146	2251
MOLINE	1274	2343	[illegible]
PEORIA	1237	2215	2305
ROCKFORD	1260	2387	2578
SPRINGFIELD	1140	1939	2101
INDIANA			
EVANSVILLE	954	1584	1794
FORT WAYNE	1166	2136	[illegible]
INDIANAPOLIS	1052	1835	2126
SOUTH BEND	1102	2006	2399
IOWA			
BURLINGTON	1264	2226	2313
DES MOINES	1325	2321	2513
DUBUQUE	1375	2616	2769
SIOUX CITY	1343	2499	2649
WATERLOO	1380	2670	[illegible]
KANSAS			
CONCORDIA	1176	2140	2132
DODGE CITY	1018	1907	1934
GOODLAND	1082	2419	2372
TOPEKA	1082	1934	2006
WICHITA	1021	1779	[illegible]
KENTUCKY			
COVINGTON	964	1792	1921
LEXINGTON	880	1564	1813
LOUISVILLE	860	1467	1787
LOUISIANA			
ALEXANDRIA	482	698	865
BATON ROUGE	384	488	643
LAKE CHARLES	385	474	551
NEW ORLEANS	355	453	546
SHREVEPORT	557	761	838
MAINE			
CARIBOU	1270	3462	3714
PORTLAND	970	2503	2785
MARYLAND			
BALTIMORE	852	1621	1765
MASSACHUSETTS			
BLUE HILL OBS R	916	2149	2272
BOSTON	782	1737	1971
WORCESTER	1017	2403	2518
MICHIGAN			
ALPENA	1298	2951	3192
DETROIT	1054	2140	2247
DETROIT METRO	1119	2205	2372
FLINT	1132	2344	2615
GRAND RAPIDS	1196	2402	2513
HOUGHTON LAKE	1298	2920	3172
LANSING	1182	2461	2564
MARQUETTE U	1296	2885	3087
MUSKEGON	1171	2408	2516
SAULT STE MARIE	1413	3325	3453
MINNESOTA			
DULUTH	1651	3762	[illegible]
INTERNATIONAL FALLS	1751	3877	4157
MINNEAPOLIS	1493	2947	3175
ROCHESTER	1546	3013	[illegible]
ST CLOUD	1572	3259	3397
MISSISSIPPI			
JACKSON	486	720	896
MERIDIAN	464	687	972
MISSOURI			
COLUMBIA REGIONAL	1052	1844	1920
KANSAS CITY	1077	1881	[illegible]
ST JOSEPH	1087	1956	[illegible]
ST LOUIS	1077	1828	1801
SPRINGFIELD	933	1565	1752
MONTANA			
BILLINGS	1035	2772	2796
GLASGOW	1522	3578	[illegible]
GREAT FALLS	1111	3044	2950
HAVRE	1359	3473	3493
HELENA	1136	3319	3297
KALISPELL	1107	3265	3565
MILES CITY	1301	3015	3061
MISSOULA	1070	3039	3289
NEBRASKA			
GRAND ISLAND	1304	2582	2457
LINCOLN	1333	2486	2361
NORFOLK	1324	2641	2663
NORTH PLATTE	1290	2818	2643
OMAHA	1302	2396	[illegible]
SCOTTSBLUFF	1216	2804	2650
VALENTINE	1270	2786	2813
NEVADA			
ELKO	1064	2690	3014
ELY	1170	3112	3072
LAS VEGAS	576	967	1045
RENO	819	2197	2430
WINNEMUCCA	881	2358	2669
NEW HAMPSHIRE			
CONCORD	1112	2758	2786
MT WASHINGTON OBS	1495	5561	5884
NEW JERSEY			
ATLANTIC CITY	[illegible]	1601	1794
ATLANTIC CITY U	742	1397	1566
NEWARK	787	1450	1787
TRENTON U	803	1553	1785
NEW MEXICO			
ALBUQUERQUE	955	1861	1733
CLAYTON	928	1875	2005
ROSWELL	710	1277	1552
NEW YORK			
ALBANY	1136	2522	2562
BINGHAMTON	1109	2464	2721
BUFFALO	1107	2340	2508
NEW YORK U	800	1484	1681
NEW YORK KENNEDY	856	1722	1777
NEW YORK LA GUARDIA	785	1467	1596
ROCHESTER	1040	2176	2432
SYRACUSE	1094	2339	2405
NORTH CAROLINA			
ASHEVILLE	772	1457	1695
CAPE HATTERAS R	389	666	882
CHARLOTTE	715	1202	1280
GREENSBORO	823	1459	1521
RALEIGH	690	1130	1386
WILMINGTON	459	722	911
NORTH DAKOTA			
BISMARCK	1709	3861	3483
FARGO	1698	3680	3542
WILLISTON	1608	3798	3574
OHIO			
AKRON	988	1907	2328
CINCINNATI ABBE OB	935	1603	1843
CLEVELAND	[illegible]	1870	2253
COLUMBUS	963	1809	2188
DAYTON	1045	1898	2130
MANSFIELD	995	1866	2171
TOLEDO	1157	2265	2410
YOUNGSTOWN	1037	2149	2396
OKLAHOMA			
OKLAHOMA CITY	787	1285	1409
TULSA	824	1286	1402
OREGON			
ASTORIA	611	2248	2136
BURNS U	1002	2786	2899
EUGENE	666	1850	1888
MEACHAM	1079	3262	3116
MEDFORD	654	1615	1972
PENDLETON	721	1873	2116
PORTLAND	624	1680	1914
SALEM	665	1908	1923
SEXTON SUMMIT R	913	2899	2426
PENNSYLVANIA			
ALLENTOWN	922	1879	2179
ERIE	1022	2157	2483
HARRISBURG	887	1695	1984
PHILADELPHIA	810	1531	1775
PITTSBURGH	978	1938	2274
SCRANTON	1036	2256	2371
WILLIAMSPORT	1027	2193	2263
RHODE ISLAND			
BLOCK ISLAND	782	1730	1894
PROVIDENCE	819	1912	2143
SOUTH CAROLINA			
CHARLESTON	428	620	832
CHARLESTON U	397	552	[illegible]
COLUMBIA	477	739	[illegible]
GRNVLLE-SPRTNBRG	712	1232	1259
SOUTH DAKOTA			
ABERDEEN	1630	3445	[illegible]
HURON	1499	3106	3071
RAPID CITY	1223	2873	2777
SIOUX FALLS	1481	2925	3010
TENNESSEE			
BRISTOL	792	1456	1711
CHATTANOOGA	722	1242	1412
KNOXVILLE	734	1252	1388
MEMPHIS	665	984	1263
NASHVILLE	753	1161	1451
OAK RIDGE R	789	1354	1573
TEXAS			
ABILENE	557	850	1002
AMARILLO	813	1443	1609
AUSTIN	387	478	643
BROWNSVILLE	130	146	185
CORPUS CHRISTI	204	224	307
DALLAS	480	650	960
DEL RIO	362	446	612
EL PASO	592	1025	1133
FORT WORTH	509	728	877
GALVESTON U	249	273	379
HOUSTON INTERCON	364	446	512
LUBBOCK	703	1173	1391
MIDLAND	561	909	1029
PORT ARTHUR	384	480	561
SAN ANGELO	476	680	889
SAN ANTONIO	391	480	584
VICTORIA	254	280	423
WACO	460	600	763
WICHITA FALLS	621	921	1106
UTAH			
MILFORD	1063	2566	2529
SALT LAKE CITY	975	2181	2365
WENDOVER	997	2303	2356
VERMONT			
BURLINGTON	1160	2748	2916
VIRGINIA			
LYNCHBURG	851	1500	1650
NORFOLK	575	1011	1256
RICHMOND	744	1326	1510
ROANOKE	826	1495	1672
WALLOPS ISLAND			
WASHINGTON			
OLYMPIA	749	2413	2278
QUILLAYUTE	701	2686	2461
SEATTLE	637	1908	1772
SEATTLE-TACOMA	632	1948	2101
SPOKANE	978	2714	2798
STAMPEDE PASS R	1124	4124	3936
WALLA WALLA U	714	1900	1956
YAKIMA	895	2379	2509
WEST VIRGINIA			
BECKLEY	951	[illegible]	2226
CHARLESTON	833	1596	1794
ELKINS	996	2201	2379
HUNTINGTON	845	1525	1795
PARKERSBURG U	869	1649	1841
WISCONSIN			
GREEN BAY	1363	2826	3051
LA CROSSE	1424	2666	2805
MADISON	1342	2747	2945
MILWAUKEE	1218	2456	2751
WYOMING			
CASPER	1181	2959	2931
CHEYENNE	1098	2870	[illegible]
LANDER	1211	3090	3119
SHERIDAN	1169	3088	3010

MONTHLY AND SEASONAL COOLING DEGREE DAYS

(Base 65°F)

State and Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total for Season	Normals Jan.- Dec.
ALABAMA														
BIRMINGHAM	0	0	24	28	132	333	452	385	376	129	28	0	1887	
HUNTSVILLE	0	0	8	29	93	344	454	[illegible]	[illegible]	138	11	0	1849	
MOBILE	0	1	[illegible]	98	[illegible]	[illegible]	598	518	[illegible]	[illegible]	110	10	2981	
MONTGOMERY	0	0	54	64	212	438	551	499	438	166	45	0	2467	
ALASKA														
ANCHORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANNETTE	0	0	0	0	0	0	0	0	0	0	0	0	0	
BARROW	0	0	0	0	0	0	0	0	0	0	0	0	0	
BARTER ISLAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
BETHEL	0	0	0	0	0	0	0	0	0	0	0	0	0	
BETTLES	0	0	0	0	0	0	0	0	0	0		0	0	
BIG DELTA	0	0	0	0	0	3	11	2	0	0	0		16	
COLD BAY	0	0	0	0	0	0	0	0	0	0		0	0	
FAIRBANKS	0	0	0	0	0	13	24	2	0	0	0		39	
GULKANA	0	0	0	0	0	0	0					0		
HOMER	0	0			0	0	0	0	0	0	0		0	
JUNEAU	0	0	0	0	0	0	0	0	0	0	0	0	0	
KING SALMON	0	0	0	0	0	0	0	3	0	0	0	0	3	
KODIAK	0	0	0	0	0	0	0	0	0	0	0			
KOTZEBUE	0	0	0	0	0	0	0	0	0	0		0	0	
MC GRATH	0	0	0	0	0	2	0	2	0	0		0	4	
NOME	0	0	0	0	0	0	0	0	0	0	0		0	
ST. PAUL ISLAND	0	0	0	0	0	0	0	0	0	0	0	0	0	
SHEMYA	0	0	0											
SUMMIT	0	0	0	0	0	0	0	0	0	0		0	0	
TALKEETNA	0	0	0	0	0	0	0	0	0	0		0	0	
UNALAKLEET	0	0	0	0					0	0	0	0		
YAKUTAT	0	0	0	0	0	0	0	0	0	0	0	0	0	
ARIZONA														
FLAGSTAFF	0	0	0	0	0	34	69	40	0	0	0	0	143	
PHOENIX	0	0	0	109	499	701	894	885	598	302	36	0	4024	
TUCSON	0	0	0	21	272	495	603	617	445	206	26	0	2685	
WINSLOW	0	0	0	0	38	165	343	310	93	2	0	0	951	
YUMA	0	0	0	140	493	709	865	841	587	325	54	0	4014	
ARKANSAS														
FORT SMITH	0	0	0	42	86	297	472	457	299	80	8	0	1741	
LITTLE ROCK	0	0	14	41	135	415	506	485	330	147	17	0	2090	
CALIFORNIA														
BAKERSFIELD	0	0	0	79	371	528	624	580	355	137	18		2692	
BISHOP	0	0	0	1	86	230	385	281	80	0	0	0	1063	
BLUE CANYON	0	0	0	0	38	86	171	142	33	0	0	0	470	
EUREKA U	0	0	0	0	0	1	0	0	0	0	0	0	1	
FRESNO	0	0	0	32	264	419	484	423	218	47	4	0	1891	
LONG BEACH	0	0	0	3	57	203	254	267	112	86	6	1	989	
LOS ANGELES	1	0	0	4	14	70	99	134	83	52	2	8	467	
LOS ANGELES U	9	2	0	25	64	220	236	272	157	133	9	21	1148	
MT SHASTA R	0	0	0	0	36	73	206	96	19	0			430	
OAKLAND	0	0	0	0	13	66	25	1	25	6	0	0	136	
RED BLUFF	0	0	0	29	231	413	551	412	247	26		0	1909	
SACRAMENTO	0	0	0	19	156	295	373	293	181	34	0	0	1351	
SANDBERG R	0	0	0	3	59	223	283	269	92	36	0	0	965	
SAN DIEGO	0	0	0	10	17	97	133	176	121	70	8	1	633	
SAN FRANCISCO	0	0	0	0	7	64	18	2	37	1		0	129	
SAN FRANCISCO U	0	0	0	2	5	43	8	0	34	15	0	0	107	
SANTA MARIA	0	0	0	0	18	61	4	0	24	8	4		119	
STOCKTON	0	0	0	28	213	371	375	303	160	41	0	0	1491	
COLORADO														
ALAMOSA	0	0	0	0	0	14	30	8	0	0	0	0	52	
COLORADO SPRINGS	0	0	0	0	0	104	145	180	13	0		0	442	
DENVER	0	0	0	0	2	138	199	270	21	1	0	0	631	
GRAND JUNCTION	0	0	0	0	35	222	410	393	101	6	0	0	1167	
PUEBLO	0	0	0	0	29	219	328	363	83	2		0	1024	
CONNECTICUT														
BRIDGEPORT	0	0	0	0	6	177	324	342	131	21	0	0	1001	
HARTFORD	0	0	0	11	19	221	318	362	99	8	0	0	1038	
DELAWARE														
WILMINGTON	0	0	0	19	42	332	416	413	183	29	0	0	1434	
DIST.OF COLUMBIA														
WASHINGTON DULLES	0	0	0	20	30	281	344	358	168	15	0	0	1216	
WASHINGTON NATIONAL	0	0	2	21	47	371	448	469	288	57	3	0	1706	
FLORIDA														
APALACHICOLA U	7	0	46	93	280	498	568	536	490	269	103	10	2900	
DAYTONA BEACH	45	14	148	148	324	450	527	482	483	326	156	40	3143	
FORT MYERS	131	27	221	220	416	517	545	538	533	393	271	83	3895	
JACKSONVILLE	23	0	105	73	278	451	533	488	434	221	80	18	2704	
KEY WEST	249	93	339	364	479	545	582	571	549	483	400	201	4855	
LAKELAND U	70	14	168	145	357	477	529	490	475	306	188	54	3273	
MIAMI	212	81	301	324	459	499	531	516	511	394	343	163	4334	
ORLANDO	88	28	207	198	421	548	602	529	501	341	199	58	3720	
PENSACOLA	0	0	65	91	318	510	607	547	473	288	115	22	3036	
TALLAHASSEE	15	0	101	69	247	453	557	496	420	269	72	15	2714	
TAMPA	75	15	188	158	374	510	574	529	510	348	205	55	3541	
WEST PALM BEACH	177	60	279	296	446	509	539	526	517	397	311	154	4211	
GEORGIA														
ATHENS	0	0	13	15	87	332	450	393	320	62	11		1683	
ATLANTA	0	0	11	15	78	322	438	388	323	79	20	0	1674	
AUGUSTA	0	0	28	23	149	379	505	436	382	85	11	4	2002	
COLUMBUS	0	0	41	51	160	416	539	469	426	146	27	2	2277	
MACON	0	0	53	47	189	439	562	500	446	136	30	6	2408	
ROME	0	0	13	27	86	393	464	391	311	68	11	0	1764	
SAVANNAH	0	0	63	63	275	434	540	473	429	177	52	13	2519	

MONTHLY AND SEASONAL COOLING DEGREE DAYS

(Base 65°F)

State and Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total for Season	Normals Jan.- Dec.
HAWAII														
HILO	233	180	239	222	253	294	341	358	345	340	321	278	3404	
HONOLULU	252	219	353	322	382	432	485	512	484	455	367	279	4542	
KAHULUI	160	139	302	253	266	335	402	425	390	396	321	248	3637	
LIHUE	191	199	328	292	326	377	435	445	424	406	321	252	3996	
IDAHO														
BOISE	0	0	0	0	51	177	341	269	51	1	0	0	890	
LEWISTON	0	0	0	0	60	144	382	316	79	0	0	0	981	
POCATELLO	0	0	0	0	7	94	194	174	14	0	0	0	483	
ILLINOIS														
CAIRO U	0	0	3	20	71	403	503	424	281	91	3	0	1799	
CHICAGO O HARE	0	0	0	5	3	189	308	301	108	32	0	0	946	
CHICAGO MIDWAY	0	0	0	5	2	243	357	368	137	39	0	0	1151	
MOLINE	0	0	0	2	2	226	312	323	103	27	0	0	995	
PEORIA	0	0	0	7	3	211	315	306	121	35	0	0	998	
ROCKFORD	0	0	0	5	1	178	272	263	84	25	0	0	828	
SPRINGFIELD	0	0	0	12	12	251	350	348	184	64	0	0	1221	
INDIANA														
EVANSVILLE	0	0	0	23	35	331	438	396	265	76	3	0	1567	
FORT WAYNE	0	0	0	8	2	240	291	244	124	19	0	0	928	
INDIANAPOLIS	0	0	0	11	20	256	349	302	172	44	1	0	1155	
SOUTH BEND	0	0	0	7	1	226	297	292	126	29	0	0	978	
IOWA														
BURLINGTON	0	0	0	0	10	221	323	300	108	37	0	0	999	
DES MOINES	0	0	0	2	19	267	358	378	98	30	0	0	1152	
DUBUQUE	0	0	0	0	0	133	233	236	65	18	0	0	685	
SIOUX CITY	0	0	0	0	38	232	308	381	50	19	0	0	1028	
WATERLOO	0	0	0	0	8	197	268	283	60	12	0	0	828	
KANSAS														
CONCORDIA	0	0	0	1	21	298	399	414	86	29	0	0	1248	
DODGE CITY	0	0	0	0	15	352	467	521	114	56	0	0	1525	
GOODLAND	0	0	0	0	13	171	281	338	34	0	0	0	837	
TOPEKA	0	0	0	13	21	304	394	384	115	52	0	0	1283	
WICHITA	0	0	0	7	39	360	482	468	149	47	0	0	1552	
KENTUCKY														
COVINGTON	0	0	4	13	7	228	310	278	170	36	0	0	1046	
LEXINGTON	0	0	12	18	21	266	342	314	245	51	0	0	1269	
LOUISVILLE	0	0	7	29	28	325	422	380	280	71	2	0	1544	
LOUISIANA														
ALEXANDRIA	0	2	39	68	196	390	512	436	375	186	62	2	2268	
BATON ROUGE	0	2	92	113	292	486	607	499	455	282	128	15	2971	
LAKE CHARLES	0	1	65	92	248	453	555	461	418	257	136	2	2688	
NEW ORLEANS	0	9	96	99	247	507	607	524	448	289	136	24	2986	
SHREVEPORT	0	2	16	64	223	412	504	417	305	145	66	0	2154	
MAINE														
CARIBOU	0	0	0	0	0	67	126	97	17	0	0	0	307	
PORTLAND	0	0	0	0	1	71	189	201	40	0	0	0	502	
MARYLAND														
BALTIMORE	0	0	0	15	29	263	344	376	173	19	0	0	1219	
MASSACHUSETTS														
BLUE HILL OBS R	0	0	0	1	14	126	208	249	65	1	0	0	664	
BOSTON	0	0	0	7	18	180	296	316	84	3	0	0	904	
WORCESTER	0	0	0	1	11	118	201	224	62	0	0	0	617	
MICHIGAN														
ALPENA	0	0	0	0	0	50	72	150	60	5	0	0	337	
DETROIT	0	0	0	4	4	244	324	275	115	13	0	0	979	
DETROIT METRO	0	0	0	3	2	156	241	261	104	11	0	0	778	
FLINT	0	0	0	4	0	97	182	214	84	6	0	0	587	
GRAND RAPIDS	0	0	0	10	0	157	238	255	96	12	0	0	768	
HOUGHTON LAKE	0	0	0	1	0	58	119	155	60	2	0	0	395	
LANSING	0	0	0	7	0	106	176	264	92	12	0	0	657	
MARQUETTE U	0	0	0	0	0	25	127	172	59	6	0	0	389	
MUSKEGON	0	0	0	4	0	67	194	220	75	13	0	0	573	
SAULT STE MARIE	0	0	0	0	0	9	33	129	49	0	0	0	220	
MINNESOTA														
DULUTH	0	0	0	0	0	1	72	84	18	0	0	0	175	
INTERNATIONAL FALLS	0	0	0	0	0	59	136	127	12	0	0	0	334	
MINNEAPOLIS	0	0	0	1	4	158	280	271	47	8	0	0	769	
ROCHESTER	0	0	0	0	1	123	196	192	37	11	0	0	560	
ST CLOUD	0	0	0	0	1	78	141	186	34	2	0	0	442	
MISSISSIPPI														
JACKSON	1	0	51	77	210	498	583	477	382	181	81	5	2546	
MERIDIAN	0	0	49	73	193	426	526	445	399	191	76	2	2380	
MISSOURI														
COLUMBIA REGIONAL	0	0	0	8	21	261	401	361	170	53	2	0	1277	
KANSAS CITY	0	0	0	4	30	291	368	382	110	46	0	0	1231	
ST JOSEPH	0	0	0	11	38	341	400	387	96	33	0	0	1306	
ST LOUIS	0	0	1	17	25	294	435	375	187	57	4	0	1395	
SPRINGFIELD	0	0	0	11	26	240	382	388	216	66	4	0	1333	
MONTANA														
BILLINGS	0	0	0	0	13	107	219	235	16	0	0	0	590	
GLASGOW	0	0	0	0	13	91	165	259	10	0	0	0	538	
GREAT FALLS	0	0	0	0	14	87	213	226	30	0	0	0	570	
HAVRE	0	0	0	0	9	73	166	199	15	0	0	0	462	
HELENA	0	0	0	0	4	45	151	108	3	0	0	0	311	
KALISPELL	0	0	0	0	1	26	118	100	13	0	0	0	258	
MILES CITY	0	0	0	0	15	128	250	312	19	0	0	0	724	
MISSOULA	0	0	0	0	0	43	165	124	15	0	0	0	347	

MONTHLY AND SEASONAL COOLING DEGREE DAYS

(Base 65°F)

State and Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total for Season	Normals Jan.- Dec.
NEBRASKA														
GRAND ISLAND	0	0	0	0	19	238	345	401	53	9	0	0	1065	
LINCOLN	0	0	0	2	23	258	318	387	53	14	0	0	1055	
NORFOLK	0	0	0	0	24	218	326	395	31	9	0	0	1003	
NORTH PLATTE	0	0	0	0	11	121	260	278	29	3	0	0	702	
OMAHA	0	0	0	3	23	257	332	395	74	22	0	0	1106	
SCOTTSBLUFF	0	0	0	0	4	138	228	250	21	0	0	0	641	
VALENTINE	0	0	0	0	18	136	285	373	24	1	0	0	837	
NEVADA														
ELKO	0	0	0	0	3	74	192	152	2	0	0	0	423	
ELY	0	0	0	0	0	38	77	85	0	0	0	0	200	
LAS VEGAS	0	0	0	54	382	612	833	708	424	134	9	0	3155	
RENO	0	0	0	0	13	75	173	117	3	0	0	0	381	
WINNEMUCCA	0	0	0	0	18	124	248	180	15	0	0	0	585	
NEW HAMPSHIRE														
CONCORD	0	0	0	3	2	145	184	242	67	2	0	0	645	
MT WASHINGTON OBS	0	0	0	0	0	0	0	0	0	0	0	0	0	
NEW JERSEY														
ATLANTIC CITY	0	0	0	10	21	233	321	345	113	20	0	0	1063	
ATLANTIC CITY U	0	0	0	3	9	131	278	319	168	29	0	0	937	
NEWARK	0	0	0	20	26	296	432	459	205	28	0	0	1466	
TRENTON U	0	0	0	14	26	270	379	384	159	19	0	0	1251	
NEW MEXICO														
ALBUQUERQUE	0	0	0	0	48	267	422	409	124	0	0	0	1270	
CLAYTON	0	0	0	0	21	143	254	273	51	5	0	0	747	
ROSWELL	0	0	0	2	118	316	434	400	174	25	0	0	1469	
NEW YORK														
ALBANY	0	0	0	7	6	164	248	255	71	2	0	0	753	
BINGHAMTON	0	0	0	4	0	92	175	180	50	0	0	0	501	
BUFFALO	0	0	0	6	2	126	233	230	78	3	0	0	678	
NEW YORK U	0	0	0	20	23	260	390	401	171	22	2	0	1289	
NEW YORK KENNEDY	0	0	0	9	7	145	287	324	137	14	0	0	923	
NEW YORK LA GUARDIA	0	0	0	14	16	242	372	397	164	24	0	0	1229	
ROCHESTER	0	0	0	15	6	194	267	269	96	4	0	0	851	
SYRACUSE	0	0	0	7	0	177	249	281	79	2	0	0	795	
NORTH CAROLINA														
ASHEVILLE	0	0	0	1	16	190	288	292	163	19	0	0	969	
CAPE HATTERAS R	0	1	5	25	128	352	394	434	334	126	25	9	1833	
CHARLOTTE	0	0	11	25	72	292	426	373	296	39	0	0	1534	
GREENSBORO	0	0	6	11	46	319	363	343	229	25	0	0	1342	
RALEIGH	0	0	24	26	81	310	363	365	254	48	7	0	1478	
WILMINGTON	1	0	31	34	174	354	465	472	372	116	24	8	2051	
NORTH DAKOTA														
BISMARCK	0	0	0	0	1	47	125	227	11	0	0	0	411	
FARGO	0	0	0	0	0	76	140	219	13	0	0	0	448	
WILLISTON	0	0	0	0	7	72	125	250	13	0	0	0	467	
OHIO														
AKRON	0	0	0	9	5	188	259	252	104	5	0	0	822	
CINCINNATI ABBE OB	0	0	5	19	17	279	336	326	225	58	0	0	1265	
CLEVELAND	0	0	0	13	7	168	244	273	119	17	0	0	841	
COLUMBUS	0	0	3	14	17	236	295	292	160	25	0	0	1042	
DAYTON	0	0	0	15	18	260	343	306	191	39	0	0	1172	
MANSFIELD	0	0	0	11	8	210	272	282	129	19	0	0	931	
TOLEDO	0	0	0	5	3	163	237	222	103	9	0	0	742	
YOUNGSTOWN	0	0	0	4	2	137	204	210	81	0	0	0	638	
OKLAHOMA														
OKLAHOMA CITY	0	0	0	19	119	312	465	462	216	83	11	0	1687	
TULSA	0	0	0	35	124	357	508	452	249	101	5	0	1831	
OREGON														
ASTORIA	0	0	0	0	0	0	6	0	7	0	0	0	13	
BURNS U	0	0	0	0	17	63	206	106	15	0	0	0	407	
EUGENE	0	0	0	0	2	38	119	50	26	0	0	0	235	
MEACHAM	0	0	0	0	6	25	108	65	18	0	0	0	222	
MEDFORD	0	0	0	0	64	132	323	233	92	0	0	0	844	
PENDLETON	0	0	0	0	63	137	327	232	72	0	0	0	831	
PORTLAND	0	0	0	0	34	65	178	81	45	0	0	0	403	
SALEM	0	0	0	0	6	34	115	47	29	0	0	0	231	
SEXTON SUMMIT R	0	0	0	0	24	28	117	54	48	0	0	0	271	
PACIFIC AREA														
GUAM TAGUAC R	331	341	417	444	478	463	470	456	439	434	442	442	5157	
JOHNSTON	330	298	345	358	400	436	467	490	458	463	411	386	4842	
KOROR R	506	470	530	525	555	536	531	548	523	529	522	547	6322	
KWAJALEIN	509	477	574	538	533	520	526	533	513	520	534	529	6306	
MAJURO	498	476	523	494	490	480	500	493	464	484	479	505	5886	
PAGO PAGO	525	500	561	522	513	464	469	450	465	436	446	483	5834	
PONAPE R	504	447	541	486	520	495	519	500	473	485	505	507	5982	
TRUK MOEN ISLAND	520	463	540	509	540	529	523	529	507	503	523	527	6213	
WAKE	367	309	421	407	475	502	572	504	520	505	455	432	5469	
YAP R	461	457	525	535	538	509	500	502	476	472	495	487	5957	
PENNSYLVANIA														
ALLENTOWN	0	0	0	3	7	212	322	331	103	4	0	0	982	
ERIE	0	0	0	6	0	84	163	167	76	1	0	0	497	
HARRISBURG	0	0	0	8	13	266	334	352	148	9	0	0	1130	
PHILADELPHIA	0	0	0	16	35	294	404	435	193	23	0	0	1400	
PITTSBURGH	0	0	0	10	5	185	264	269	108	5	0	0	846	
SCRANTON	0	0	0	4	0	132	212	223	72	7	0	0	650	
WILLIAMSPORT	0	0	0	4	0	186	205	213	83	1	0	0	692	
RHODE ISLAND														
BLOCK ISLAND	0	0	0	0	2	48	184	225	73	4	0	0	536	
PROVIDENCE	0	0	0	8	17	181	272	318	94	3	0	0	893	

MONTHLY AND SEASONAL COOLING DEGREE DAYS

(Base 65°F)

State and Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total for Season	Normals Jan.- Dec.
SOUTH CAROLINA														
CHARLESTON	1	0	50	42	233	412	554	501	445	184	56	10	2488	
CHARLESTON U	0	0	25	58	264	416	524	474	428	193	46	4	2432	
COLUMBIA	0	0	28	33	143	375	494	490	413	116	32	6	2130	
GRNVLLE SPRTNBRG	0	0	6	21	92	297	414	375	291	36	0	0	1532	
SOUTH DAKOTA														
ABERDEEN	0	0	0	2	10	129	252	335	33	0	0	0	761	
HURON	0	0	0	0	4	98	233	331	22	3	0	0	691	
RAPID CITY	0	0	0	0	7	80	202	295	15	0	0	0	599	
SIOUX FALLS	0	0	0	0	13	143	300	370	38	8	0	0	872	
TENNESSEE														
BRISTOL	0	0	0	5	26	249	309	267	212	32	1	0	1101	
CHATTANOOGA	0	0	1	22	79	350	443	400	334	79	1	0	1709	
KNOXVILLE	0	0	4	19	56	298	369	355	282	60	2	0	1445	
MEMPHIS	0	0	4	48	143	486	571	458	350	156	19	0	2235	
NASHVILLE	0	0	14	25	61	339	432	412	351	128	8	0	1770	
OAK RIDGE R	0	0	2	16	34	277	374	325	254	56	0	0	1338	
TEXAS														
ABILENE	0	0	0	44	224	379	508	550	277	111	32	0	2125	
AMARILLO	0	0	0	3	53	310	414	435	173	67	1	0	1456	
AUSTIN	1	0	34	78	277	407	557	550	447	205	93	4	2653	
BROWNSVILLE	19	21	178	242	404	490	585	519	504	365	309	74	3710	
CORPUS CHRISTI	13	14	149	179	381	489	629	560	511	353	265	48	3591	
DALLAS	0	0	25	81	250	433	589	569	363	184	45	2	2541	
DEL RIO	0	0	68	170	410	460	550	586	463	207	69	0	2983	
EL PASO	0	0	0	7	152	355	459	448	340	44	7	0	1812	
FORT WORTH	1	0	6	60	230	435	593	559	342	146	33	0	2405	
GALVESTON U	1	0	41	93	296	454	576	533	476	354	191	15	3030	
HOUSTON INTERCON	1	4	41	111	253	434	564	458	401	225	151	12	2655	
LUBBOCK	0	0	0	19	153	364	387	401	197	71	2	0	1594	
MIDLAND	0	0	0	18	178	368	414	437	229	88	5	0	1737	
PORT ARTHUR	0	2	38	84	244	440	524	459	426	242	137	6	2602	
SAN ANGELO	0	0	6	67	274	425	573	554	314	104	49	0	2366	
SAN ANTONIO	8	0	69	129	310	431	570	536	437	242	114	0	2846	
VICTORIA	3	10	109	138	358	477	638	556	476	313	201	15	3294	
WACO	0	0	12	60	225	375	587	611	429	182	72	0	2553	
WICHITA FALLS	0	0	3	21	155	351	559	570	298	132	35	0	2124	
UTAH														
MILFORD	0	0	0	0	0	102	239	241	16	0	0	0	598	
SALT LAKE CITY	0	0	0	0	38	226	370	367	44	3	0	0	1048	
WENDOVER	0	0	0	0	69	244	393	397	61	1	0	0	1165	
VERMONT														
BURLINGTON	0	0	0	3	0	149	187	243	68	0	0	0	650	
VIRGINIA														
LYNCHBURG	0	0	3	16	34	260	308	330	188	24	0	0	1163	
NORFOLK	0	0	16	27	112	363	420	424	307	64	17	1	1751	
RICHMOND	0	0	13	42	91	338	391	395	231	32	9	2	1544	
ROANOKE	0	0	3	15	29	269	331	346	192	23	0	0	1208	
WALLOPS ISLAND	0	0	0	4	35	231	307	351	241		2	0		
WASHINGTON														
OLYMPIA	0	0	0	0	6	14	35	7	5	0	0	0	67	
QUILLAYUTE	0	0	0	0	2	2	7	0	1	0	0	0	12	
SEATTLE	0	0	0	0	7	20	69	22	13	0	0	0	131	
SEATTLE TACOMA	0	0	0	0	16	19	67	17	21	0	0	0	140	
SPOKANE	0	0	0	0	31	67	216	177	39	0	0	0	530	
STAMPEDE PASS R	0	0	0	0	0	4	15	7	4	0	0	0	30	
WALLA WALLA U	0	0	0	0	81	154	375	290	79	0	0	0	979	
YAKIMA	0	0	0	0	34	84	245	181	41	0	0	0	585	
WEST INDIES														
SAN JUAN P.R.	438	379	428	458	562	553	578	570	539	579	475	406	5965	
WEST VIRGINIA														
BECKLEY	0	0	1	6	9	130	172	173	81	2	0	0	574	
CHARLESTON	0	0	4	22	34	256	304	305	181	22	2	0	1130	
ELKINS	0	0	0	3	11	98	147	125	41	3	0	0	428	
HUNTINGTON	0	0	4	14	40	284	357	344	212	41	0	0	1296	
PARKERSBURG U	0	0	9	17	35	270	321	313	169	27	0	0	1161	
WISCONSIN														
GREEN BAY	0	0	0	2	0	112	220	228	63	13	0	0	638	
LA CROSSE	0	0	0	0	4	174	283	239	59	28	0	0	787	
MADISON	0	0	0	0	2	112	215	207	58	19	0	0	613	
MILWAUKEE	0	0	0	0	0	140	216	247	84	6	0	0	693	
WYOMING														
CASPER	0	0	0	0	1	65	147	182	5	0	0	0	400	
CHEYENNE	0	0	0	0	0	65	112	116	0	0	0	0	293	
LANDER	0	0	0	0	4	92	152	163	1	0	0	0	412	
SHERIDAN	0	0	0	0	1	73	129	168	5	0	0	0	376	

STORM SUMMARY

DECEMBER 1973

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				@ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				Ø ALL OTHER			
								†DAMAGE				DAMAGE				†DAMAGE				†DAMAGE				DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS
Alabama	9	4		39	6						10	5														2		[illegible]	
Alaska *																													
Arizona *																													
Arkansas	2	2		7	5					1	23	6																	
California *																													
Colorado											3	5								4									
Connecticut																								6				?	
Delaware																		1	?	?			?	?					
Florida	3	2		9	6							4																	
Georgia	7	5		21	6																								
Hawaii										1																		°5	C
Idaho *																													
Illinois	5	1		3	?						4	[illegible]	[illegible]																
Indiana	1	1		1	4																								
Iowa																				[illegible]				7					
Kansas												5								[illegible]				7	5				
Kentucky										[illegible]	?	6											7	[illegible]					
Louisiana	3	2		31	6						[illegible]	6																	
Maine																										2	?	[illegible]	
Maryland																3			[illegible]	?			?	[illegible]		3			
Massachusetts																								6				[illegible]	
Michigan *																													
Minnesota																								4					
Mississippi	4	1		6	5					1	2	5																[illegible]	C
Missouri	3	2			4							5	1																
Montana												4																	
Nebraska																		1		4		1		6					
Nevada												4																	
New Hampshire																						2						6	
New Jersey																[illegible]						3	[illegible]	[illegible]		[illegible]	?		
New Mexico *																													
New York																		[illegible]	?	[illegible]		6	[illegible]	[illegible]		[illegible]	[illegible]	?	
North Carolina																		1		3									
North Dakota *																													
Ohio	2	1		4	5						10	6																	
Oklahoma																[illegible]			?	[illegible]									
Oregon												[illegible]																	
Pacific Area *																													
Pennsylvania												3				?			45	4		1	2	3		2		5	
Puerto Rico *																													
Rhode Island																								6				4	
South Carolina	6	1	3	29	7			4	3			3	3							4	1								
South Dakota *																													
Tennessee	2	1		4	5							5																5	
Texas	4	3			5						1	5	?			4													
Utah												5							1	5									
Vermont																		?	[illegible]				?			?	?	5	
U.S. Virgin Is. *																													
Virginia																		3	?	[illegible]								[illegible]	
Washington											3	6																	
West Virginia																												6	
Wisconsin *																													
Wyoming *																													

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

DECEMBER 1973

Herbert J. Thompson and Ray J. Haley,
Office of Hydrology

Major flooding occurred during the month along several streams in New England, along the Upper James River in Virginia, and the Tombigbee, Pascagoula, and Pearl Rivers in Alabama and Mississippi. Record flooding was reported along the Greenbrier River in West Virginia with a record crest stage observed at Alderson. Damaging floods also occurred in New Jersey; Atlanta, Georgia; the Wabash Basin in Indiana, the Tennessee and Cumberland Rivers in Kentucky and Tennessee, the lower Ohio River, the White, Red, and Arkansas River Basins, Southeast Texas, the Upper Sacramento River, and the Willamette Basin in Oregon.

In the Upper Midwest and Northeast ice jam flooding was reported at several locations. The most damaging of these floods was in the Rock River Basin in Illinois.

Flooding occurred in the upper reaches of the Lower Mississippi River, and stages continued abnormally high as in November, setting the stage for serious flooding in January and February.

Hydrologic events of unusual significance or involving loss of life or property damage are discussed in more detail below:

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	ST. LAWRENCE DRAINAGE		
Otter Creek Basin (Vermont)	Heavy rains of up to 3 inches produced flooding on the 21st-22d and additional rain on the 26th-27th caused further flooding. In both cases the flooding was aggravated by ice jams. Damage was mainly to roads and residences with one trailer park evacuated.	0	75
	ATLANTIC SLOPE DRAINAGE		
Coastal Streams in New England	There were three periods of rainfall and subsequent flooding on various streams in New England during the month. Rainfall on the 17th-18th averaged 2 to 4 inches over Massachusetts and Rhode Island, 1.5 to 2.5 inches over New Hampshire and Vermont, 1.5 to 3 inches over Connecticut, and 3 to 4.5 inches over Maine. There was serious flooding along the Kennebec River in Maine as a result of this storm with damage estimated at $2.2 million to residences, roads, and merchandise. There was also considerable urban flooding. During the storm of the 21st-22d rainfall averaged 2 to 4 inches over the Connecticut River Basin, 1 to 3 inches over southern Maine, and 1 to 2 inches over the remainder of New England. This was the most serious period of flooding of the month with flash floods on nearly all streams in the area, and major stream flooding in Maine and New Hampshire. The flooding was aggravated by ice jams on Maine streams. This was the second greatest flood since 1936 on the Kennebec River at Skowhegan and the Andrascoggin River at Livermore Falls, both in Maine. Damage in Maine was estimated at $3.2 million with two flood-related fatalities.	3	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	ATLANTIC SLOPE DRAINAGE-Cont'd		
	In Vermont four bridges were washed out, and a number of families were evacuated. There was one flood-related death. No estimate of damage has been made. In New Hampshire major flooding occurred at Holderness and Plymouth on the Pemigawasset River and in Keene from Beaver Brook. Damage was estimated at more than $2 million in Cheshire and Grafton counties. Substantial damage was aslo reported along the lower Housatonic River in Connecticut.		
	The third period of rain, the 26th-27th, averaged about 1 inch over southern New England and resulted in minor flooding along the lower Connecticut River.		
Mohawk-Hudson River Basin	Rainfall of 1 to 2 inches on the 26th-27th combined with snowmelt and ice jams to produce flood or near flood conditions over much of the basin. The sudden break-up of an ice jam upstream caused flooding in low areas of Schenectady on the 27th. Damage was mainly residential. Some main roads were closed for a time around Schenectady.	0	N.A.
Passaic, Rahway and Raritan River Basins	Rainfall of 2 to 3 inches on the 20th-21st, falling on ground saturated from previous storms, caused significant flooding on several streams in northern New Jersey. Among the communities affected were Wayne,where 250 families were evacuated, Lodi, Garfield, Elmwood Park, Fairfield, and Oakland where 250 families were also evacuated. About 50 families were evacuated in Cranford on the Rahway River.	0	N.A.
Schuylkill River Basin	The storm of the 20th-21st discussed above caused flooding along Perkiomen Creek, a tributary of the Schuylkill River near Philadelphia, Pennsylvania, where 150 families were evacuated. Only minor flooding occurred along the Schuylkill.	0	N.A.
James River Basin	Moderate to heavy rainfall on the 20th-21st combined with a considerable amount of snowmelt to produce moderate to serious flooding in portions of the basin. Serious flooding occurred along the Jackson River in the area of Covington and Clifton Forge, Virginia. The crest stage at Falling Spring, Virginia was reported to be the second highest since the record flood of 1936.	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

DECEMBER 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	EAST GULF OF MEXICO DRAINAGE		
Chattahoochee River Basin	Flash flooding occurred along Peachtree Creek in Atlanta, Georgia, on the 31st. Damage was estimated at $65,000 by the Corps of Engineers.	0	65
Choctawhatchee River Basin	Minor flooding occurred late in the month. Damage estimates by the Corps of Engineers include $70,400 along the main stem of the Choctawhatchee and $5,200 on the Pea River.	0	76
Alabama and Tombigbee River Basins	On the 24th-25th rain averaging more than 5 inches fell over the central portion of the Tombigbee Basin and the headwaters of the Black Warrior River, a tributary of the Tombigbee. The greatest 24 hour rainfall amount reported was the 10.42 inches at Smith Dam, Alabama. Most of the damage was agricultural and more than 60 percent ($679,000) occurred along the Black Warrior River which had crest stages of up to 11.5 feet over flood stage. Damage along the Tombigbee was estimated at $275,600 by the Corps of Engineers. Minor flood damage occurred in the Alabama Basin including $600 on the Cahaba, $39,300 on the Tallapoosa, and $45,300 along the main stem of the Alabama River.	0	1,041
Pascagoula River Basin	Heavy rains of 4 to 10 inches during the last ten days of the month brought significant flooding to streams in the basin. Crest stages of up to 8 feet over flood stage were reported on tributaries of the Pascagoula, including the Chickasawhay and Leaf Rivers and Tallahala Creek. Several families were evacuated at Laurel, Mississippi, when Tallahala Creek flooded part of the town. Flooding on these streams continued into January. Damage estimates by the Corps of Engineers for the total flood period include $112,600 along the Chickasawhay, $447,600 along the Leaf, and $80,700 along the Pascagoula River.	0	641
Pearl River	Minor flooding was in progress at the beginning of the month from the November rains and at some points the river did not go below flood stage during the month. Heavy rains of 4 to 10 inches the last ten days of the month caused more serious flooding which extended into January. At Jackson, Mississippi, the crest stage of 32.90 feet nearly 15 feet above flood stage, reflected the discharge	0	1,500

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	EAST GULF OF MEXICO DRAINAGE-Cont'd		
	from the Ross Barnett Reservoir. Several families were evacuated from low areas of Jackson. Damage along the Pearl River was about 50 percent agricultural, 40 percent highway and railroad and 10 percent urban.		
	UPPER MISSISSIPPI BASIN		
Rock River Basin	Rain averaging about 1.5 inches, fell over the Upper Rock Basin early in December causing sharp rises on most streams and minor flooding on the Kishwaukee River at Perryville, Illinois. On the 25th an ice jam formed near the mouth of the Rock River backing water upstream more than seven miles. Damage was more than $500,000.	0	500
	MISSOURI BASIN		
Platte River	A heavy run of slush ice caused major fluctuations in stage and some overflow in the vicinity of Kearney and Odessa, Nebraska. No damage was reported.	0	0
Kansas River Basin	Rain averaging 2 to 3 inches, fell over much of the lower Kansas Basin on the 4th-5th. Flooding of agricultural land was reported along Mill Creek and the Wakarus River. Street flooding occurred in Easton, Kansas, from Stranger Creek. There was no damage at this season of the year.	0	0
Lower Missouri Basin	Heavy rains on the 4th-5th caused rises on the lower Missouri main stem and many of its tributaries in northwestern Missouri. Crests ranged from less than 1 foot to more than 5 feet over flood stage with little damage at this season of the year.	0	0
	OHIO BASIN		
Greenbrier River	Record flooding occurred in the basin on the 26th-27th as a result of rainfall averaging about 1.5 inches combined with unseasonably warm air temperatures which caused considerable snowmelt. The snowpack prior to the storm was well over a foot in depth. The crest stage of 20.35 feet for the Greenbrier River at Alderson, West Virginia, was the highest in the 15 years of record at that point. The previous record stage was 19.4 feet in 1967. Flooding was reported to be the worst in 55 years in Greenbrier County. Other counties affected were Pochantas, Summers, and Monroe. Numerous people were evacuated	0	196

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

DECEMBER 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	OHIO BASIN-Cont'd		
	from the affected areas, including several in Alderson. Low lying sections of Marlington were covered by 6 to 8 feet of water. A crest 6 feet over flood stage at Roncervert did considerable damage to business properties and homes.		
Wabash River Basin	Heavy snow fell during the month with depths ranging from 12 to 18 inches over much of the middle and upper portions of the basin. This was followed by warmer temperatures and moderate rain on the 25th and 27th. Rapid snowmelt resulted, and many points on the White and Wabash River systems went over flood stage with general bottomland flooding. Crest stages ranged up to more than 6 feet over flood stage. Damage was minimal at this season of the year and limited to scattered winter wheat acreage. This flooding continued into January on the lower reaches with crests occurring in January at some points.	0	N.A.
Cumberland and Tennessee River Basins	A low pressure center moved northeastward from Louisiana through Tennessee into Kentucky on the 26th. The Cumberland Basin received 2.5 to 3 inches of rain with minor flooding at Barbourville and Williamsburg,Kentucky. Heavy rains fell over eastern Tennessee with flash flooding at Morristown and La Folette and in the Knoxville area. More than 3 inches fell over the upper Duck and Elk River Basins with the Elk River cresting 3.3 feet over flood stage at Fayetteville. Significant flooding began on the lower Tennessee River at Florence, Alabama, and Gilbertsville, Kentucky which extended into January.	0	N.A.
Lower Ohio River	The lower Ohio River main stem was above flood stage the first one to two weeks of the month as a result of heavy November rains. It then receded to below flood stage but was in flood again at the end of the month and into January due to heavy runoff from the Wabash, Cumberland, and Tennessee Rivers.	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

DECEMBER 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	WHITE BASIN		
White, Black and Cache River Basins	These streams were above flood stage from November rains, but receding, at the beginning of the month. Rains of 2 to 5 inches on the 3d-4th caused rises which kept portions of these streams above flood stage the entire month. Crests were not as high as those of the April 1973 floods. There was probable damage to soybean and cotton crops not yet harvested.	0	N.A.
	ARKANSAS BASIN		
Central Arkansas Basin	Rains of up to 2 inches following the heavy rains during the latter part of November caused minor to moderate flooding on several of the lesser tributaries of the Arkansas. Streams affected included Cow Creek and the Poteau, Little Caney, Spring, Illinois, Fourche La Fave, and Neosho Rivers.	0	N.A.
	RED RIVER		
Ouachita River	The Ouachita River At Camden, Arkansas, was above flood stage from the heavy November rains at the beginning of the month. Additional rains of 2 to 5 inches on the 3d-4th augmented the crest at Camden and caused minor flooding on the Little Missouri River and moderate flooding on the Saline River, both tributaries of the Ouachita. Probable damage occurred to soybeans and cotton crops not yet harvested.	0	N.A.
Sulphur River	Moderate flooding continued from November at Naples, Texas, during the first two weeks of the month. Three short periods of minor flooding occurred at Hagansport. Texas.	0	(See Nov. report)
Red River	The Red River continued high with two crests during the month. The first crest was the result of November rains. The second came within a foot of flood stage at several points.	0	0
	LOWER MISSISSIPPI BASIN		
Mississippi River Tributaries	Minor flooding occurred early in the month on several tributaries including the St. Francis, Tallahatchie, and Big Black Rivers. Heavy rains of 4 to 10 inches occurred during the last ten days of the month resulting in serious flooding on the Tallahatchie, Yazoo, and Big Black Rivers in January.	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS-Continued

DECEMBER 1973

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	LOWER MISSISSIPPI BASIN-Cont'd		
Mississippi River Main Stem	The rise which began in November crested in the upper reach slightly more than a foot above flood stage at New Madrid and Caruthersville, Missouri, then receded sharply until the last week of the month when a rise generated by the Tennessee and Ohio Rivers began. Downstream crests within two feet of flood stage occurred during the middle of the month at points below Natchez, Mississippi. The flow of the Mississippi continued well above normal in December as in November setting the stage for major flooding in January.	0	0
	WEST GULF OF MEXICO DRAINAGE		
Southeast Texas Streams	Three distinct periods of rainfall occurred during the month over southeast Texas. Amounts ranged from 1 to 4 inches and averaged 2 to 3 inches on the 3d-4th; general rains of about 1 inch occurred on the 19th; and 1 to 5 inches fell on the 23d-24th. Minor to moderate flooding was reported along the Upper Neches and the Sabine Rivers with minor flooding on the Angelina, Navasota, and Upper Trinity Rivers. The only significant damage reported was on the Sabine River and its tributaries. Estimates by the Corps of Engineers were $42,500 on Lake Fork Creek, $13,900 on Big Sandy Creek, and $88,900 on the Sabine itself.	0	145
	PACIFIC SLOPE DRAINAGE		
Sacramento River Basin	Flood stage was exceeded on the 1st at Tehama Bridge and Vina Woodson Bridge from heavy rain at the end of November. Two other periods of heavy rainfall occurred on the 20th-21st and 28th-29th. Downstream there were no crests over flood stage but warning stage was exceeded at most points on all three occasions with Tisdale Weir over warning stage the entire month.	0	N.A.
Coast and Willamette River Basins in Oregon	Persistently wet conditions continued through December with precipitation totaling more than 200 percent of normal at some stations. The greatest monthly total was observed near Nehalem, Oregon, and amounted to 28.46 inches. Most stations recorded 24 hour totals of 1 to 3 inches on the 7th, 12th, 16th, 20th, and 27th. Along the coast minor flooding occurred on the Nahalem and Wilson Rivers with damages estimated at $3,000. In the Willamette Basin flooding occurred on several streams with extended periods over flood stage on the Tualatin River, where a crest more than 4 feet over flood	0	80

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
	PACIFIC SLOPE DRAINAGE-Cont'd.		
	stage was reported. Damage in the Willamette Basin was estimated at $77,000.		

FLOOD STAGE DATA

(All dates in December unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest	
		From–	To–	Stage	Date
	Ft.			*Ft.*	
ST. LAWRENCE DRAINAGE					
Clinton River					
Mt. Clemens, Michigan	13	26	27	13.5	27
St. Marys					
Decatur, Indiana	15	26	31	17.99	27
St. Josephs					
Montpelier, Ohio	10	29	Jan.	10.46	29
Ellicott Cr:					
Buffalo, New York	4	27	28	7.27	27
Otter Creek					
Center Rutland, Vermont	7	21 26	22 27	E 9.0 #10.26	22 26
ATLANTIC SLOPE DRAINAGE					
Kennebec					
Skowhegan, Maine	35,000 c.f.s.	18	19	66,300 c.f.s.	19
		21	24	123,000 c.f.s.	22
Androscoggin:					
Rumford, Maine	35,000 c.f.s.	21	24	45,172 c.f.s.	22
Gulf Isle Dam, Maine	35,000 c.f.s.	21	24	49,330 c.f.s.	22
Pemigewasset:					
Plymouth, New Hampshire	11	21	23	20.4	22
Concord, New Hampshire	12	22	25	13.03	23, 25
Manchester, New Hampshire	[illegible]	23	27	7.5	24
Farmington:					
Simsbury, Connecticut	12	22	23	14.0	22
Connecticut:					
White River Junction, Vermont	18	21	23	19.0	22
Montague City, Massachusetts	28	22	23	30.0	22
Hartford, Connecticut	16	22 28	24 31	21.35 19.14	23 29
Bodkin Rock, Connecticut	8	22 28	26 Jan. 1	12.0 10.5	24 30
Housatonic:					
Great Barrington, Mass.	9	22	23	9.3	22
Gaylordsville, Connecticut	8	21 28	25 30	11.0 8.5	21 29
Stevenson, Connecticut	12	21	22	18.8	21
Hoosic:					
Eagle Bridge, New York	11	27	27	[illegible]	27
Mohawk:					
Little Falls, New York	15	27	28	E15.5	27, 28
Schenectady, New York	10	27	[illegible]	[illegible]	27
Pompton:					
Pompton Plains, New Jersey	12	21	24	19.27	22
Ramapo:					
Pompton Lakes, New Jersey	[illegible]	21	23	3.17	21
Mahwah, New Jersey	8	21	23	10.47	21
Rockaway:					
Boonton, New Jersey	5	21	24	7.26	22
Saddle:					
Lodi, New Jersey	5	21	22	8.35	21
Passaic:					
Chatham, New Jersey	6	21	25	6.36	22
Little Falls, New Jersey	6	21	25	8.30	[illegible]
Millstone:					
Blackwells Mills, New Jersey	[illegible]	21	[illegible]	[illegible]	[illegible]
ATLANTIC SLOPE DRAINAGE-Cont'd					
Raritan					
Manville, New Jersey	[illegible]	21 22	22 27	E14.5 E13.4	21 27
Bound Brook, New Jersey	[illegible]	21 26	22 27	E12.7 E 9.5	21 27
East Branch Delaware:					
Fishs Eddy, Pennsylvania	11	21	22	11.5	21
Lehigh:					
Lehighton, Pennsylvania	10	21	21	10.00	21
Walnutport, Pennsylvania	8	21	21	8.40	21
Assunpink:					
Trenton, New Jersey	7	21	21	[illegible]	21
Neshaminy Creek:					
Langhorne, Pennsylvania	9	21	21	[illegible]	21
Perkiomen Creek					
Graterford, Pennsylvania	11	21	21	13.10	21
Schuylkill:					
Philadephia, Pennsylvania	11	21	21	11.48	21
Brandywine Creek:					
Chadds Ford, Pennsylvania	9	21	21	10.04	21
Delaware:					
Phillipsburg, New Jersey	22	22	22	[illegible]	22
Chenango:					
Sherburne, New York	8	27	27	8.47	27
Greene, New York	13	27	28	15.00	27
Chemung:					
Chemung, New York	12	27	27	12.06	27
Susquehanna:					
Bainbridge, New York	13	27	29	14.75	28
Conklin, New York	11	27	29	12.4	28
South Branch Potomac:					
Petersburg, West Virginia	12	26	27	12.58	27
Springfield, West Virginia	[illegible]	26	27	#17.69	27
Shenandoah:					
Millville, West Virginia	13	27	27	14.74	27
Monocacy:					
Frederick, Maryland	15	27	27	15.99	27
Potomac:					
Shepherdstown, West Virginia	15	27	28	#19.57	28
Point of Rocks, Marylands	16	27	28	#20.85	28
Little Falls, Virginia	10	28	29	11.31	29
Jackson:					
Covington, Virginia	9	[illegible]	[illegible]	[illegible]	[illegible]
Bent Creek:					
Bent Creek, Virginia	16	27	28	17.99	28
Rivanna:					
Palmyra, Virginia	17	21	22	[illegible]	21
Appomattox:					
Farmville, Virginia	16	22	22	16.51	22
Mattoax, Virginia	21	[illegible]	[illegible]	21.62	[illegible]
James					
Lick Run, Virginia	16	[illegible]	27	[illegible]	[illegible]
Buchanan, Virginia	17	27	28	24.1	[illegible]
Lynchburg, Virginia	18	27	27	[illegible]	[illegible]
Holcombs Rock, Virginia	[illegible]	[illegible]	28	[illegible]	[illegible]
Scottsville, Virginia	[illegible]	28	29	[illegible]	[illegible]
Bremo Bluff, Virginia	19	21 [illegible]	22 29	21.7 [illegible]	[illegible]

FLOOD STAGE DATA

[illegible]

DECEMBER 1973

River and station	Flood stage	Above flood stages -dates From–	Above flood stages -dates To–	Crest Stage	Crest Date
	Ft			Ft	
ATLANTIC SLOPE DRAINAGE-Cont'd					
[illegible]					
[illegible]	[illegible]	[illegible] [illegible]	[illegible] [illegible]	24.7 [illegible]	22 [illegible]
[illegible]	[illegible]	[illegible]	[illegible]	20.89	29
[illegible]	[illegible]	[illegible] [illegible]	[illegible] [illegible]	[illegible] 17.2	22 29
[illegible]	[illegible]	[illegible] [illegible]	[illegible] [illegible]	15.60 15.99	22 [illegible]
Richmond, Virginia (City L)	[illegible]	[illegible] [illegible]	[illegible] [illegible]	11.70 [illegible]	22 29
[illegible]:					
Danville, Virginia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Roanoke:					
Randolph, Virginia	[illegible]	[illegible]	[illegible]	#23.7	[illegible]
[illegible], North Carolina	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
[illegible], North Carolina	[illegible]	[illegible]	[illegible]	#15.0	[illegible]
Smithfield, North Carolina	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Yadkin:					
Elkin, North Carolina	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
Lumberton, North Carolina	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Reedy:					
Greenville, South Carolina	[illegible]	[illegible]	Jan 1	[illegible]	Jan [illegible]
Savannah:					
Clyo, Georgia	11	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
Peachtree Creek:					
Atlanta, Georgia	[illegible]	1	1	[illegible]	31
Choctawhatchee:					
Caryville, Florida	12	[illegible]	1	[illegible]	[illegible]
Cahaba:					
[illegible], Alabama	[illegible]	[illegible] [illegible]	[illegible] Jan 1	24.5 27.8	[illegible] Jan [illegible]
Old Town Creek:					
[illegible], Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tibbee Creek:					
Tibbee, Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Black Warrior:					
[illegible]	[illegible]	[illegible]	[illegible]	#17.1	[illegible]
Tuscaloosa Lock & Dam, Ala.	[illegible]	[illegible]	[illegible]	58.5	[illegible]
Warrior Lock & Dam, Alabama	[illegible]	[illegible]	Jan 4	#38.0	[illegible]
Tombigbee:					
Fulton, Mississippi	[illegible]	Nov [illegible] [illegible]	[illegible] Jan 1	18.31 [illegible]	Nov [illegible] [illegible]
Amory, Mississippi	[illegible]	Nov [illegible] [illegible]	[illegible] 30	24.73 23.37	Nov [illegible]
Aberdeen, Mississippi	[illegible]	Nov [illegible] [illegible]	[illegible] Jan 1	[illegible] 35.10	Nov [illegible] [illegible]
Gainesville, Alabama	[illegible]	[illegible]	1/	44.2	Jan [illegible]
[illegible] Lock & Dam, Ala.	[illegible]	[illegible]	1/	[illegible]	Jan [illegible]
Coffeeville Lock & Dam, Ala.	[illegible]	[illegible]	1/	#53.7	Jan [illegible]
Tallahala Creek:					
Laurel, Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Leaf:					
[illegible], Mississippi	[illegible]	[illegible]	[illegible]	26.7	[illegible]
Beaumont, Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chickasawhay:					
Enterprise, Mississippi	[illegible]	[illegible]	[illegible]	28.[illegible]	[illegible]
Shubuta, Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pascagoula:					
Merrill, Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Yockanookany:					
Ofahoma, Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bogue Chitto					
Franklinton, Louisiana	[illegible]	[illegible]		[illegible]	
Pearl:					
Edinburg, Mississippi	[illegible]	[illegible]		20.50 25.20	[illegible]
Carthage, Mississippi	[illegible]	[illegible]	[illegible]	17.80 22.80	[illegible]
Jackson, Mississippi	[illegible]	[illegible]	[illegible]	24.40 32.90	[illegible]
Monticello, Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia, Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bogalusa, Louisiana	[illegible]	[illegible] [illegible]	[illegible] [illegible]	[illegible] 20.5	[illegible] Jan 29,31

River and station	Flood stage	Above flood stages -dates From	Above flood stages -dates To–	Crest Stage	Crest Date
	Ft			Ft	
EAST GULF OF MEXICO DRAINAGE (Continued)					
Pearl-Cont'd:					
Pearl River, Louisiana	[illegible]	[illegible]	[illegible]	16.8	Jan 27, 31
Upper Mississippi Basin					
[illegible]:					
Perryville, Illinois	[illegible]	[illegible]	[illegible]	10[illegible]	[illegible]
Rock River:					
Moline, Illinois	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Meramec River:					
Pacific, Missouri	[illegible]	[illegible]	[illegible]	18.70	[illegible]
Valley Park, Missouri	[illegible]	[illegible]	[illegible]	17.05	[illegible]
Mississippi:					
Cape Girardeau, Missouri	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Missouri Basin					
Platte:					
Odessa, Nebraska	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Little Platte River:					
Smithville, Missouri	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Platte River:					
Agency, Missouri	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mill Creek:					
Paxico, Kansas	[illegible]	[illegible]		22.3	[illegible]
[illegible]					
[illegible], Kansas	[illegible]	[illegible]	[illegible]	30.5	[illegible]
[illegible]					
[illegible], Kansas	[illegible]	[illegible]	[illegible]	#18.15	[illegible]
Blue River:					
Kansas City Bannister Rd, Mo.	[illegible]	[illegible]	[illegible]	25.56	[illegible]
Little Blue River:					
Lake City, Missouri	18	[illegible]	[illegible]	[illegible]	[illegible]
Grand River:					
Chillicothe, Missouri	24	5	[illegible]	28.0	[illegible]
Sumner, Missouri	[illegible]	5	[illegible]	31.10	[illegible]
Chariton River:					
Novinger, Missouri	20	5	[illegible]	[illegible]	[illegible]
Lamine River:					
Clifton City, Missouri	19	5	[illegible]	[illegible]	[illegible]
Blackwater River:					
Valley City, Missouri	[illegible]	[illegible]	[illegible]	27.50	[illegible]
Blue Lick, Missouri	[illegible]	[illegible]	[illegible]	25.45	[illegible]
Pottawatomie Creek:					
Garnett, Kansas	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Marais Des Cygnes River:					
Osawatomie, Kansas	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible], Kansas	[illegible]	[illegible]	[illegible]	#28.63	[illegible]
Missouri:					
Sibley, Missouri	[illegible]	[illegible]	[illegible]	22.04	[illegible]
Lexington, Missouri	[illegible]	[illegible]	[illegible]	23.3	[illegible]
Waverly, Missouri	[illegible]	[illegible]	[illegible]	20.5	[illegible]
Boonville, Missouri	[illegible]	[illegible]	[illegible]	22.49	[illegible]
Hermann, Missouri	[illegible]	[illegible]	[illegible]	24.90	[illegible]
St. Charles, Missouri	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ohio Basin					
Greenbrier:					
Buckeye, West Virginia	[illegible]	[illegible]	[illegible]	16.06	26
Alderson, West Virginia	[illegible]	[illegible]	[illegible]	20.35	27
Scioto:					
Circleville, Ohio	[illegible]	27	[illegible]	15.01	[illegible]
Piketon, Ohio	[illegible]	[illegible]	[illegible]	19.55	Nov [illegible]
Green:					
Brownsville, Kentucky	[illegible]	Nov 28	[illegible]	[illegible]	Nov [illegible]
[illegible], Kentucky	[illegible]	Nov 28	[illegible]	#38.14	Nov 30
Calhoun, Kentucky	[illegible]	1		25.4	[illegible]
Eagle Creek:					
Zionsville, Indiana		[illegible]		[illegible]	[illegible]
[illegible]:					
Bowling Green, Indiana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Embarrass:					
Ste. Marie, Illinois	[illegible]	[illegible]	[illegible]	20.9[illegible]	[illegible]
Lawrenceville, Illinois	[illegible]	[illegible]	[illegible]	18.8[illegible]	[illegible]
White:					
Anderson, Indiana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Noblesville, Indiana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nora, Indiana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ravenswood, Indiana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

FLOOD STAGE DATA

(All dates in December unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From—	Above flood stages -dates To—	Crest Stage	Crest Date
	Ft.			Ft	
Ohio Basin-Cont'd					
White-Continued:					
Centerton, Indiana	602 MSL	27	30	604.5	29
Spencer, Indiana	14	26	Jan 1	18.74	30
Elliston, Indiana	18	Nov 27 26	1 Jan 3	19.20 24.05	Nov 28 31
Edwardsport, Indiana	15	Nov 29 27	2 Jan 4	15.7 21.0	Nov 30 31
Petersburg, Indiana	16	29	Jan 5	19.61	Jan 3
Skillet Fork					
Wayne City, Illinois	15	25	29	18.84	27
Little Wabash:					
Wilcox, Illinois	16	25	Jan 2	22.33	28
Carmi, Illinois	20	Nov 30 29	4 Jan 16	#27.30 30.57	Nov 30 Jan 3
Wabash:					
Bluffton, Indiana	10	28	29	11.40	28
Wabash, Indiana	12	27	27	12.43	27
Lafayette, Indiana	11	26	Jan 1	17.84	28
Covington, Indiana	16	27	Jan 2	21.65	30
Montezuma, Indiana	14	26	Jan 4	21.08	28
Terre Haute, Indiana	14	26	Jan 4	19.2	29
Huntsonville, Illinois	[illegible]	29	Jan 5	21.8	Jan 2
Riverton, Indiana	18	30	[illegible]	19.27	Jan 4
Vincennes, Indiana	16	29	Jan 8	19.87	Jan 3
Mt. Carmel, Illinois	17	30	Jan 7	21.0	Jan 4
Cumberland:					
Barbourville, Kentucky	27	26	28	32.4	27
Williamsburg, Kentucky	21	27	28	24.3	27
French Broad:					
Rosman, North Carolina	8	26	[illegible]	10.26	26
Blantyre, North Carolina	17	27	28	#18.5	28
Emory River:					
Oakdale, Tennessee	25	27	27	26.71	27
South Chickamauga Creek:					
Chickamuga, Tennessee	10	26	29	14.26	27
Elk:					
Fayetteville, Tennessee	661 MSL	26	27	664.3	26
Tennessee:					
Whitesburg, Alabama	560 MSL	Nov 28	3	564.41	1
Florence, Alabama	419 MSL	Nov 28 27	3 Jan 20	419.74 426.26	2 Jan 11
Gilbertsville, Kentucky	320 MSL	Nov 29 27	11 1/	327.70 337.92	6 Jan 16
Ohio:					
Tell City, Indiana	38	1	4	40.4	3
Newburgh, Indiana Dam 47	38	1	6	42.5	4
Cypress, Indiana Dam 48	38	1	6	41.6	4
Mt. Vernon, Indiana	35	1	7	38.8	5
Dam No. 49, Kentucky	37	2	7	39.6	5
Shawneetown, Illinois	33	Nov 30	8	39.2	6
Dam No. 50, Kentucky	34	Nov 30 31	9 1/	41.8 48.0	6 Jan 21
Cairo, Illinois	40	Nov 30	13	45.68	9
White Basin					
Cache:					
Patterson, Arkansas	7	Nov 26	1	10.3	7
Black:					
Pocahontas, Arkansas	17	Nov 25 29	16 Jan 3	22.59 17.82	Nov 30 31
Black Rock, Arkansas	14	Nov 24	Jan 15	25.9	5
White:					
Batesville, Arkansas	23	4	5	25.0	4
Newport, Arkansas	26	Nov 26	10	P29.3	6
Augusta, Arkansas	32	Nov 28	15	34.05	Nov 29
Georgetown, Arkansas	21	Nov 29	19	24.9 25.6	8 1 8
Clarendon, Arkansas	26	1	1/	31.35	10
St Charles, Arkansas	25	5	1/	29.3	14
Arkansas Basin					
Cow Creek:					
Lyons, Kansas	18	7	10	19.0	7-8
Little Caney:					
Copan, Oklahoma	21	4	6	21.8	5
Spring:					
Quapaw, Oklahoma	[illegible]	4	6	[illegible]	5
Neosho:					
Oswego, Kansas	17	5 25	6 26	19.55 18.70	6 25
Arkansas Basin-Cont'd					
Neosho-Continued:					
Commerce, Oklahoma	15	4 24	7 27	17.9 17.7	5 26
Illinois:					
Tahlequah, Oklahoma	11	4	6	15.4	5
Poteau:					
Poteau, Oklahoma	24	25	25	25.7	25
Panama, Oklahoma	24	4	6	27.4	5
Fourche La Fave					
Houston	25	Nov 25 4 25	3 9 25	31.32 30.00 25.16	Nov 28 6 25
Red Basin					
Sulphur:					
Hagansport, Texas	44	4 20 24	6 20 26	46.95 44.10 47.00	4 20 24
Naples, Texas	22	Nov 26	12	[illegible]	[illegible]
Little Missouri:					
Boughton, Arkansas	20	4	6	21.79	5
Saline:					
Benton, Arkansas	20	4	5	24.27	4
Quachita:					
Arkadelphia, Arkansas	17	3	5	23.32	5
Camden, Arkansas	26	Nov 26 27	17 30	37.0 27.3	8 29
Lower Mississippi Basin					
St. Francis:					
Fisk, Missouri	20	9	Jan 6	24.87	16
St. Francis, Arkansas	18	Nov 25 4	2 Jan 14	20.6 21.69	Nov 28 27
Tallahatchie:					
Swan Lake, Mississippi	26	Nov 30 27	12 1/	27.37 30.25	3 Jan 15
Yazoo:					
Yazoo City, Mississippi	29	25	1/	32.85	25
Big Black:					
West, Mississippi	12	1 25	7 1/	18.7 13.8	1 26
Bovina, Mississippi	28	26	1/	38.55	Jan 11
Amite:					
Denham Springs, Louisiana	25	26	27	25.0	26-27
Mississippi:					
New Madrid, Missouri	34	5	12	35.2	10
Caruthersville, Missouri	32	4	12	33.5	9,10
Atchafalaya:					
Morgan City, Louisisna	7	13	1/	7.8	25
West Gulf of Mexico Drainage					
Calcasieu:					
Hineston, Louisiana	12	Nov 28 6 21	1 10 Jan 1	[illegible] 14.3 15.4	[illegible] 9 27
West Gulf Coast Drainage					
Sabine:					
Emory, Texas	12	Nov 26 20	7 20	13.30 12.12	Nov 29 20
Mineola, Texas	14	Nov 26 21	11 29	16.44 15.23	1 24
Gladewater, Texas	26	4	11	28.70	6
Longview, Texas	25	4	14	28.60	5
Deweyville, Texas	14	7	1/	14.5	31
Attoyac Bayou:					
NR Chireno, Texas	14	4 24	6 29	18.08 16.14	5 25
Angelina:					
NR Lufkin, Texas	8	[illegible]	P1/	A11.96	11
Neches:					
NR Alto, Texas	16	Nov 30 25	16 28	17.90 16.61	5 26
NR Diboll, Texas	10	Oct 13	1/	A13.97 13.98	6 25
East Fork Trinity:					
Crandall, Texas	13	Nov 26 11 14 28	4 12 15 [illegible]	13.94 13.31 13.24 13.30	Nov 27 12 15 29,30
Trinity:					
Moss Bluff, Texas	[illegible]	[illegible] 22	16 31	A 6.75 6.75	10 31
Navasota:					
NR Easterly, Texas	14	5	6	14.6	6
NR Bryan, Texas	12	5 22	11 31	13.07 13.03	8 29

FLOOD STAGE DATA

River and station	Flood stage	Above flood stages -dates		Crest	
		From—	To—	Stage	Date
	Ft			Ft	
[illegible]					
[illegible]:					
[illegible]	[illegible]	[illegible]	[illegible]	21.4	[illegible]
[illegible]					
[illegible]:					
Tehama, California	[illegible]	[illegible] 30		216.3	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible] 30		185.1	1
[illegible]:					
Myrtle Point, Oregon	35	21	22	35.20	[illegible]
[illegible]:					
Tillamook, Oregon	11	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	28	11.3	[illegible]
[illegible]:					
[illegible]s, Oregon	[illegible]	[illegible]	[illegible]	13.2	[illegible]
		[illegible]	28	13.2	[illegible]
[illegible]:					
Suver, Oregon	[illegible]	[illegible]	17	[illegible]	[illegible]
S. Yamhill:					
Whiteson, Oregon	[illegible]	[illegible]	18	[illegible]	[illegible]
Pudding:					
Aurora, Oregon	[illegible]	[illegible]	31	24.6	[illegible]
Tualatin:					
[illegible]	[illegible]	[illegible]	Jan 3	32.2	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	12.1	[illegible]
[illegible]:					
Sycamore, Oregon	[illegible]	[illegible]	[illegible]	8.0	[illegible]
		[illegible]	27	E 8.6	[illegible]

[illegible] See Previous Monthly Report for Additional Crest Information.

[illegible]

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	86	-2.4	-5.7	29	2.0
1000	28	173	-2.1	-6.2	27	1.9
950	31	560	-2.7	-5.6	26	3.8
900	31	968	-3.7	-6.6	27	7.1
850	31	1,440	-3.7	-8.0	27	8.9
800	31	1,919	-4.6	-9.5	26	10.0
750	31	2,426	-5.7	-13.1	26	12.3
700	31	2,966	-7.3	-16.3	26	14.9
650	30	3,543	-9.6	-19.4	26	18.3
600	30	4,158	-12.9	-22.0	26	20.8
550	30	4,816	-17.0	-25.5	25	21.4
500	29	5,535	-21.4	-30.4	25	23.7
450	29	6,303	-26.8	-35.6	25	26.8
400	29	7,143	-32.7	-39.8	25	31.1
350	29	8,073	-39.4	-44.1	25	35.6
300	29	9,109	-46.7		25	37.4
250	29	10,299	-53.8		27	40.2
200	29	11,718	-57.5		27	37.5
175	29	12,562	-56.8		26	31.4
150	29	13,540	-56.8		26	27.6
125	28	14,692	-58.2		26	24.8
100	28	16,090	-60.0		25	21.8
80	26	17,472	-60.8		26	15.7
70	26	18,303	-61.0		27	12.7
60	25	19,263	-61.2		27	11.7
50	25	20,394	-62.0		26	9.5
40	24	21,774	-62.1		26	10.5
30	22	23,555	-62.0		28	13.3
25	21	24,682	-62.1		28	13.1
20	19	26,061	-62.6		28	17.3
15	18	27,834	-62.7		28	22.1
10	8	30,379	-60.3			

ALBUQUERQUE, N. MEX.
838 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,619	-3.8	-10.3	36	1.2
800	31	1,995	1.1	-13.8	31	4.3
750	31	2,512	-1.3	-15.7	30	8.5
700	31	3,060	-3.5	-18.3	30	11.1
650	31	3,643	-5.9	-19.8	30	13.2
600	31	4,266	-9.4	-22.8	30	14.9
550	31	4,933	-13.6	-27.1	30	16.2
500	31	5,651	-18.5	-32.2	30	17.7
450	30	6,431	-23.7	-36.5	30	19.6
400	30	7,282	-29.9	-42.3	31	19.2
350	30	8,221	-37.0	-48.1	30	20.3
300	30	9,267	-45.1		31	21.7
250	28	10,457	-52.9		30	21.4
200	26	11,881	-58.4		31	21.6
175	26	12,718	-59.3		30	21.6
150	26	13,684	-59.8		30	19.0
125	25	14,816	-62.6		29	18.2
100	25	16,184	-64.7		29	13.1
80	25	17,542	-65.9		29	9.0
70	25	18,356	-64.8		30	6.8
60	25	19,301	-63.1		31	4.6
50	25	20,426	-61.3		31	3.3
40	22	21,815	-60.0		32	2.5
30	20	23,616	-57.9		31	3.0
25	18	24,771	-57.0		31	4.2
20	16	26,175	-56.6		28	8.0
15	11	28,013	-54.0			

AMARILLO, TEXAS
890 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,095	-.9	-7.3	29	3.7
900	6	1,108	-4.3	-8.0		
850	31	1,465	4.6	-9.0	31	6.5
800	31	1,958	3.3	-12.0	31	7.2
750	31	2,478	.8	-14.1	30	8.4
700	31	3,029	-2.3	-16.3	30	10.0
650	31	3,614	-5.3	-20.2	29	11.3
600	31	4,239	-8.7	-24.3	29	13.0
550	31	4,908	-12.8	-28.4	29	15.0
500	31	5,628	-18.1	-32.7	29	16.0
450	31	6,406	-23.9	-37.4	29	17.7
400	31	7,255	-30.6	-42.8	29	20.1
350	31	8,192	-37.6	-46.3	29	21.6
300	31	9,235	-45.3		29	23.1
250	30	10,440	-53.1		29	22.9
200	30	11,858	-58.1		29	25.3
175	30	12,699	-58.1		29	22.7
150	29	13,668	-59.3		28	23.5
125	29	14,804	-61.6		28	20.7
100	29	16,176	-64.4		28	14.1
80	28	17,540	-64.9		28	10.5
70	28	18,356	-63.9		28	7.5
60	28	19,300	-63.7		28	5.0
50	28	20,426	-61.4		29	4.1
40	28	21,814	-60.2		30	4.1
30	27	23,619	-58.1		28	4.0
25	26	24,765	-57.2		28	6.3
20	25	26,194	-55.3		28	10.3
15	22	28,030	-54.1		28	19.4
10	7	30,651	-51.1			

* ANCHORAGE, ALASKA
996 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	45	-6.6	-9.7	02	1.2
1000	8	134	-7.2	-13.7		
950	31	413	-4.4	-6.9	05	2.3
900	31	840	-4.3	-8.9	12	3.3
850	31	1,289	-6.4	-11.0	13	5.4
800	31	1,761	-9.1	-13.8	15	7.0
750	31	2,257	-12.2	-17.5	15	7.4
700	31	2,782	-15.4	-21.9	16	7.0
650	31	3,337	-19.3	-24.8	17	6.7
600	31	3,927	-23.4	-29.5	17	7.2
550	31	4,558	-27.6	-34.0	17	7.9
500	31	5,237	-32.5	-38.3	18	8.8
450	31	5,972	-37.6	-41.9	18	9.7
400	31	6,774	-43.3	-44.0	18	10.0
350	31	7,665	-49.3		18	10.2
300	31	8,651	-53.9		19	10.5
250	31	9,830	-53.9		20	9.6
200	31	11,272	-51.1		21	8.6
175	31	12,142	-50.4		22	9.1
150	30	13,150	-50.1		23	9.7
125	30	14,341	-50.3		23	9.6
100	29	15,789	-51.9		24	11.0
80	28	17,234	-53.1		25	12.0
70	28	18,093	-53.8		26	12.6
60	28	19,063	-54.3		26	13.5
50	28	20,249	-55.4		27	15.3
40	26	21,674	-56.0		27	17.2
30	25	23,489	-58.3		28	20.9
25	22	24,649	-59.5		28	22.8
20	19	26,077	-59.7		28	24.8
15	16	27,950	-59.9		29	27.7
10	10	30,564	-60.9			

* ANNETTE, ALASKA
1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	37	2.1	-.6	12	3.3
1000	20	113	2.4	-.1	12	3.6
950	31	474	.5	-2.0	14	7.9
900	31	906	-1.9	-4.8	16	9.1
850	31	1,358	-4.6	-8.9	17	9.5
800	31	1,834	-6.9	-12.6	18	9.2
750	31	2,335	-9.7	-16.4	19	9.1
700	31	2,865	-12.9	-21.4	19	8.9
650	31	3,426	-16.5	-24.1	20	9.7
600	31	4,024	-20.0	-27.2	21	9.0
550	31	4,664	-24.2	-32.1	21	10.3
500	31	5,352	-29.0	-36.0	22	10.9
450	31	6,098	-34.1	-40.4	22	12.4
400	31	6,913	-39.6	-45.1	23	13.5
350	31	7,816	-46.0		23	13.2
300	31	8,825	-51.5		23	14.5
250	31	9,999	-54.5		24	14.6
200	31	11,432	-52.9		25	14.1
175	31	12,295	-52.2		25	13.5
150	31	13,294	-51.9		25	14.6
125	31	14,474	-52.7		26	13.2
100	30	15,908	-54.3		26	11.9
80	29	17,337	-54.5		26	10.8
70	28	18,196	-55.4		27	9.6
60	28	19,179	-55.9		27	9.4
50	27	20,335	-57.3		28	10.0
40	27	21,744	-58.0		29	10.9
30	23	23,565	-58.4		29	12.7
25	21	24,741	-58.1		30	13.2
20	16	26,274	-55.7		32	12.4
15	13	28,133	-57.3		33	13.2
10	8	30,792	-58.8			

ATHENS, GEORGIA
990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	2.9	-.1	32	.9
950	31	581	5.7	-1.8	26	2.7
900	31	1,023	5.1	-2.8	26	5.1
850	31	1,489	4.3	-5.4	25	8.4
800	31	1,982	3.0	-8.3	25	11.2
750	31	2,504	1.4	-10.9	25	12.8
700	31	3,056	-1.7	-14.5	25	14.1
650	31	3,643	-4.7	-17.3	25	15.9
600	31	4,269	-8.4	-22.0	25	16.7
550	31	4,939	-12.3	-26.7	25	19.1
500	31	5,662	-16.6	-30.7	26	22.0
450	31	6,446	-22.0	-34.9	26	23.4
400	30	7,297	-28.9	-41.1	26	24.9
350	30	8,242	-36.1	-46.8	26	26.7
300	30	9,291	-43.9		25	30.4
250	30	10,493	-52.3		26	32.0
200	30	11,915	-57.9		26	34.4
175	30	12,755	-59.1		26	33.1
150	29	13,722	-59.8		26	29.8
125	29	14,855	-62.2		26	26.7
100	29	16,224	-64.6		26	21.2
80	29	17,581	-66.1		26	16.1
70	28	18,390	-65.4		26	11.7
60	27	19,334	-64.0		26	9.4
50	27	20,457	-61.9		26	7.5
40	27	21,844	-60.1		27	5.9
30	26	23,643	-58.5		27	8.1
25	26	24,793	-57.1		27	10.9
20	24	26,207	-55.6		28	14.0
15	20	28,053	-53.3		28	24.8
10	12	30,699	-47.4			

* BARROW, ALASKA
1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	-21.3	-23.7	06	1.5
1000	27	128	-21.5	-23.9	07	3.6
950	30	495	-17.1	-21.7	08	4.0
900	30	903	-15.5	-21.7	08	3.3
850	30	1,334	-15.5	-22.5	09	3.1
800	30	1,791	-16.5	-24.0	09	2.6
750	30	2,276	-17.9	-24.8	10	2.8
700	30	2,789	-20.3	-26.7	10	2.7
650	30	3,335	-23.4	-28.8	12	2.3
600	30	3,916	-26.9	-32.5	13	2.6
550	30	4,539	-30.7	-35.3	15	2.6
500	30	5,210	-35.2	-38.9	17	3.9
450	30	5,937	-40.0	-41.4	17	4.6
400	30	6,731	-45.5		18	5.0
350	30	7,614	-50.7		18	5.8
300	30	8,605	-55.2		17	6.0
250	30	9,763	-57.0		19	4.4
200	29	11,183	-55.2		21	4.3
175	28	12,033	-55.4		23	5.6
150	28	13,015	-55.8		24	7.4
125	26	14,177	-56.8		25	8.8
100	23	15,610	-57.7		25	12.2
80	22	17,001	-58.9		25	16.1
70	22	17,837	-59.7		25	17.7
60	21	18,791	-61.4		26	19.2
50	18	19,899	-62.5		26	23.7
40	11	21,288	-63.1		26	24.9
30	8	23,182	-61.4			

BARTER IS., ALASKA
1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	-21.3	-23.7	21	1.3
1000	26	126	-19.7	-22.5	19	.9
950	31	489	-15.7	-20.0	13	1.1
900	31	898	-14.8	-20.4	17	.8
850	31	1,332	-13.7	-20.2	14	.9
800	31	1,793	-14.5	-21.2	13	.2
750	31	2,281	-16.1	-23.3	32	.2
700	31	2,798	-18.0	-25.5	24	.4
650	31	3,350	-20.9	-28.4	24	1.3
600	31	3,937	-24.2	-32.0	24	1.9
550	31	4,567	-28.2	-35.6	24	2.6
500	31	5,244	-32.7	-39.9	23	3.7
450	31	5,978	-37.8	-42.3	23	3.9
400	30	6,788	-43.0	-42.5	21	3.6
350	30	7,679	-48.9		22	4.9
300	30	8,674	-55.1		21	5.4
250	30	9,829	-58.2		22	5.6
200	30	11,241	-55.6		25	6.3
175	30	12,094	-54.6		25	7.2
150	30	13,080	-54.7		26	8.6
125	30	14,245	-55.5		26	10.0
100	29	15,663	-56.5		27	13.0
80	27	17,063	-58.5		27	15.6
70	26	17,902	-59.4		27	16.5
60	25	18,861	-61.6		27	19.9
50	25	19,968	-63.0		28	22.1
40	22	21,368	-64.3		28	23.6
30	14	23,194	-64.2		27	28.1
25	13	24,940	-64.7		28	30.1
20	11	25,696	-66.5		29	33.1
15	5	27,382	-67.5			

BETHEL, ALASKA
994 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	-13.3	-17.7	04	3.4
1000	8	83	-13.4	-16.6		
950	31	384	-8.8	-12.1	08	4.5
900	31	804	-8.7	-12.0	11	3.9
850	31	1,246	-10.0	-13.0	14	3.9
800	31	1,713	-11.6	-16.6	14	4.3
750	31	2,205	-14.3	-19.9	15	4.7
700	31	2,725	-17.4	-23.5	16	5.3
650	31	3,277	-21.0	-26.0	16	5.1
600	31	3,863	-24.9	-30.4	17	4.7
550	31	4,490	-29.3	-34.7	17	5.4
500	31	5,164	-34.2	-39.6	17	6.6
450	31	5,894	-39.2	-42.6	17	6.9
400	31	6,692	-44.4	-45.7	17	6.9
350	31	7,579	-49.4		18	6.2
300	31	8,579	-52.3		18	5.8
250	31	9,758	-52.0		20	5.4
200	31	11,212	-49.5		21	6.1
175	31	12,087	-49.4		22	7.0
150	31	13,097	-49.4		23	7.3
125	31	14,291	-50.0		23	8.2
100	31	15,747	-50.8		24	9.9
80	31	17,197	-51.8		24	11.8
70	31	18,063	-52.0		25	12.3
60	31	19,058	-53.2		25	12.7
50	30	20,234	-53.7		25	15.1
40	30	21,664	-55.2		26	16.7
30	28	23,498	-56.0		27	19.0
25	25	24,671	-55.8		27	20.4
20	21	26,104	-56.7		27	22.7
15	17	27,966	-57.3		27	26.5
10	5	30,811	-55.8			

* BISMARCK, N. DAK.
956 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	503	-12.6	-14.6	35	.7
950	23	579	-13.9	-16.1	34	1.2
900	31	970	-8.8	-11.0	31	3.4
850	31	1,415	-6.6	-11.6	32	5.4
800	31	1,869	-6.9	-14.6	32	6.9
750	31	2,392	-8.2	-16.3	31	7.6
700	31	2,925	-10.8	-18.9	31	9.1
650	31	3,492	-13.9	-22.0	31	9.8
600	31	4,096	-16.9	-24.9	31	11.6
550	31	4,745	-20.7	-28.1	31	13.2
500	31	5,443	-25.4	-33.1	31	14.9
450	31	6,200	-30.5	-35.9	31	15.5
400	31	7,026	-36.6	-40.2	30	17.7
350	31	7,943	-42.8	-43.3	30	18.7
300	31	8,964	-49.7		29	20.0
250	31	10,142	-54.9		29	24.0
200	31	11,562	-56.2		29	21.6
175	30	12,414	-55.0		29	20.2
150	30	13,402	-54.2		29	18.2
125	30	14,568	-55.2		29	16.4
100	30	15,988	-57.1		29	14.4
80	30	17,397	-57.8		30	11.1
70	29	18,239	-58.4		30	10.4
60	27	19,209	-58.9		30	9.8
50	25	20,343	-59.2		31	8.9
40	24	21,737	-59.4		31	9.0
30	21	23,551	-60.0		31	9.5
25	15	24,696	-60.9		31	12.3
20	14	26,092	-61.6		32	13.2
15	6	27,973	-61.3			

BOISE, IDAHO
918 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	871	2.3	-2.4	15	1.4
900	31	1,033	2.6	-2.9	15	1.3
850	31	1,494	.8	-5.6	21	1.6
800	31	1,979	-1.9	-7.6	26	3.6
750	31	2,490	-4.2	-10.8	27	7.0
700	31	3,031	-7.3	-13.4	27	8.7
650	31	3,606	-9.9	-18.0	28	11.1
600	31	4,220	-13.3	-20.6	28	13.5
550	31	4,877	-17.4	-24.6	28	15.5
500	31	5,585	-21.8	-29.1	28	18.3
450	31	6,353	-26.8	-34.2	29	20.4
400	30	7,191	-32.6	-39.6	29	23.9
350	30	8,122	-39.2	-42.3	29	28.2
300	29	9,150	-46.5		29	33.3
250	29	10,341	-53.7		29	36.8
200	29	11,760	-58.2		29	32.7
175	28	12,600	-58.6		29	29.9
150	28	13,570	-58.3		28	26.0
125	28	14,716	-59.2		29	21.3
100	28	16,110	-60.1		29	15.8
80	27	17,497	-61.3		29	10.1
70	27	18,326	-60.8		29	9.1
60	26	19,285	-60.7		30	5.7
50	23	20,419	-59.9		31	4.3
40	21	21,814	-59.0		32	3.8
30	18	23,630	-58.4		33	5.0
25	16	24,786	-58.1		34	5.7
20	13	26,189	-57.7		34	6.9
15	12	28,013	-58.5		34	9.3

BOOTHVILLE, LA.
1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1	11.4	8.8	33	.6
1000	31	161	12.7	7.8	23	.4
950	31	591	10.6	4.6	23	3.7
900	31	1,041	9.7	-.7	24	5.4
850	31	1,515	7.9	-4.2	25	7.4
800	31	2,014	6.3	-6.3	25	8.9
750	31	2,541	4.2	-11.6	26	9.5
700	31	3,099	1.2	-15.6	26	10.9
650	31	3,692	-1.8	-17.7	26	13.1
600	31	4,325	-5.3	-22.1	26	15.1
550	31	5,002	-9.8	-26.5	26	16.4
500	31	5,731	-14.6	-31.0	26	18.1
450	31	6,521	-20.0	-35.1	26	20.2
400	31	7,383	-26.4	-39.8	26	21.5
350	31	8,337	-33.7	-45.8	25	22.6
300	31	9,397	-41.8	-50.8	25	24.7
250	31	10,611	-49.8		25	30.2
200	30	12,041	-57.7		25	33.5
175	30	12,878	-60.2		26	33.0
150	30	13,835	-62.5		26	29.8
125	29	14,951	-65.3		26	26.6
100	28	16,300	-68.1		26	21.4
80	28	17,637	-69.2		25	13.5
70	28	18,437	-67.6		25	10.6
60	28	19,370	-65.3		25	8.4
50	28	20,467	-62.7		25	6.7
40	27	21,872	-59.5		26	6.9
30	26	23,689	-56.0		27	6.9
25	26	24,855	-53.8		26	9.7
20	26	26,296	-51.7		27	14.3
15	22	28,185	-48.0		27	23.5
10	8	30,833	-45.4			

* BROWNSVILLE, TEXAS
1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	7	14.2	10.6	19	.4
1000	31	149	17.1	11.4	15	2.0
950	31	586	15.0	8.5	16	5.0
900	31	1,043	13.3	1.9	18	4.1
850	31	1,523	11.8	-2.6	23	3.6
800	31	2,028	9.7	-5.8	27	5.0
750	31	2,561	7.1	-9.9	27	6.8
700	31	3,125	4.2	-14.6	27	9.1
650	31	3,724	.8	-18.5	27	10.3
600	31	4,363	-2.9	-21.9	27	11.1
550	31	5,046	-7.4	-26.3	27	12.3
500	31	5,781	-12.6	-31.3	27	13.9
450	31	6,577	-18.4	-35.6	27	15.7
400	31	7,444	-25.3	-41.3	27	18.0
350	31	8,402	-32.7	-46.8	27	20.3
300	31	9,466	-41.2	-52.6	26	24.2
250	31	10,681	-49.8		26	30.1
200	31	12,110	-58.8		26	31.6
175	31	12,942	-62.2		26	31.2
150	31	13,888	-64.8		26	28.8
125	31	14,993	-68.2		26	24.7
100	31	16,322	-70.9		26	19.0
80	29	17,637	-71.8		26	13.5
70	27	18,429	-70.0		26	9.0
60	27	19,354	-66.9		26	7.0
50	27	20,467	-62.4		25	4.0
40	27	21,853	-59.7		25	6.3
30	25	23,677	-54.8		27	6.6
25	23	24,852	-52.3		26	7.1
20	22	26,304	-49.4		27	9.6
15	19	28,187	-47.3		27	13.0
10	17	30,891	-43.5		27	21.8
7	10	33,331	-41.2			
5	5	35,657	-39.8			

BUFFALO, N. Y.
992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	218	-2.3	-5.5	25	1.8
1000	6	270	-5.2	-10.3		
950	31	558	-3.7	-6.0	25	5.5
900	31	984	-5.1	-8.3	26	7.5
850	31	1,433	-5.5	-11.6	26	8.9
800	31	1,909	-6.3	-13.4	26	10.3
750	31	2,413	-7.7	-15.8	27	11.7
700	31	2,948	-9.8	-18.7	27	13.1
650	31	3,517	-12.1	-20.7	26	14.7
600	31	4,127	-14.8	-23.6	26	16.4
550	31	4,781	-18.6	-27.0	26	19.0
500	31	5,485	-23.0	-32.2	26	21.0
450	30	6,250	-28.1	-37.8	26	22.9
400	30	7,085	-34.2	-43.6	26	24.1
350	30	8,010	-40.5	-45.0	25	26.5
300	30	9,042	-47.3		26	28.0
250	30	10,233	-53.1		25	30.7
200	30	11,659	-56.3		26	27.9
175	30	12,507	-56.2		26	25.1
150	30	13,487	-55.9		26	24.0
125	30	14,644	-57.2		26	23.1
100	29	16,048	-59.0		26	17.4
80	28	17,444	-60.5		25	14.5
70	26	18,272	-60.6		27	13.6
60	26	19,232	-60.6		27	10.6
50	24	20,364	-60.8		27	10.7
40	23	21,747	-61.5		27	9.8
30	22	23,533	-62.3		27	12.3
25	20	24,661	-62.3		28	13.3
20	17	26,042	-62.5		28	16.2
15	16	27,807	-62.7		27	21.9
10	6	30,274	-60.3			

CAPE HATTERAS, N. C.
1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	9.7	6.7	30	2.6
1000	29	168	11.2	4.8	28	2.7
950	31	563	8.9	1.7	25	5.3
900	31	1,029	7.0	-.7	24	7.6
850	31	1,498	5.5	-5.3	24	10.4
800	31	1,993	3.8	-8.8	24	11.6
750	31	2,515	1.6	-12.1	25	12.6
700	31	3,069	-.8	-14.4	25	13.9
650	31	3,658	-3.7	-16.2	25	15.4
600	31	4,285	-7.4	-21.0	25	16.2
550	31	4,958	-11.3	-25.1	25	17.8
500	31	5,683	-16.1	-31.2	25	19.8
450	30	6,465	-21.6	-36.7	25	21.2
400	30	7,323	-27.7	-40.8	25	23.6
350	30	8,271	-34.9	-45.9	25	24.6
300	30	9,326	-43.2	-49.5	25	27.2
250	30	10,531	-51.7		25	28.8
200	29	11,955	-58.7		26	32.6
175	29	12,790	-60.4		26	31.4
150	29	13,749	-60.8		26	29.8
125	27	14,883	-62.8		26	27.5
100	27	16,251	-64.4		26	22.3
80	27	17,610	-65.5		26	16.1
70	27	18,425	-64.4		26	12.8
60	27	19,370	-63.6		26	10.1
50	27	20,495	-61.4		27	8.5
40	26	21,887	-59.8		27	7.6
30	24	23,698	-58.0		27	7.6
25	23	24,848	-57.4		27	11.3
20	21	26,268	-56.5		28	15.6
15	19	28,105	-53.5		28	23.5
10	7	30,708	-50.2			

RAWINSONDE DATA

Average monthly values

• CARIBOU, MAINE — 992 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	191	-5.5	-7.6	24	1.6
1000	7	253	-12.4	-15.7		
950	31	527	-5.3	-8.3	24	4.0
900	31	952	-5.1	-9.1	25	6.2
850	31	1,401	-5.7	-10.8	25	7.9
800	31	1,876	-6.6	-11.9	25	9.3
750	31	2,379	-8.3	-13.8	25	11.4
700	31	2,913	-10.4	-17.6	25	13.6
650	31	3,481	-12.9	-21.4	25	16.3
600	31	4,088	-16.1	-25.2	25	18.9
550	31	4,739	-19.5	-28.2	25	21.2
500	31	5,442	-23.8	-31.7	25	22.4
450	31	6,203	-29.1	-37.6	25	24.9
400	31	7,035	-34.8	-40.8	25	27.3
350	30	7,959	-41.3	-44.6	25	29.0
300	30	8,987	-48.1		25	32.7
250	30	10,173	-53.7		26	31.5
200	29	11,599	-55.6		26	30.5
175	29	12,449	-56.1		26	25.2
150	29	13,430	-55.5		26	22.9
125	29	14,588	-56.2		26	22.3
100	25	15,994	-57.6		26	19.0
80	24	17,397	-59.0		26	17.1
70	24	18,235	-59.8		27	16.0
60	22	19,196	-60.8		27	14.5
50	20	20,325	-61.2		27	14.0
40	18	21,705	-62.3		28	15.4
30	17	23,476	-63.3		28	16.0
25	17	24,593	-64.6		29	18.1
20	15	25,951	-65.9		28	21.8
15	14	27,690	-66.7		28	25.0
10	10	30,173	-63.5			
7	6	32,391	-60.7			

CHARLESTON, S. C. — 1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	13	6.9	3.9	29	1.1
1000	31	161	9.6	4.2	28	1.4
950	31	567	9.0	.5	25	3.8
900	31	1,033	7.4	-1.0	24	6.6
850	31	1,503	5.8	-5.3	25	8.4
800	31	1,998	4.4	-8.1	25	9.7
750	31	2,522	2.3	-11.3	25	11.0
700	31	3,077	-.3	-15.0	25	12.3
650	31	3,666	-3.5	-17.3	25	13.4
600	31	4,295	-6.8	-21.5	25	15.5
550	31	4,969	-10.8	-26.0	25	17.6
500	31	5,695	-15.7	-29.8	25	18.8
450	31	6,482	-21.2	-35.0	25	20.3
400	31	7,339	-27.7	-40.1	26	21.6
350	31	8,288	-34.8	-45.3	25	24.9
300	31	9,343	-42.9	-49.4	25	27.2
250	31	10,550	-51.4		25	29.6
200	30	11,980	-57.9		26	33.5
175	29	12,816	-60.6		26	32.4
150	28	13,785	-62.0		26	29.5
125	27	14,908	-63.9		26	25.9
100	25	16,270	-67.2		26	20.8
80	24	17,617	-68.4		26	15.2
70	24	18,420	-67.4		26	11.1
60	24	19,355	-65.1		26	8.3
50	24	20,472	-62.8		26	6.6
40	23	21,860	-60.0		27	5.6
30	22	23,666	-57.5		27	8.2
25	19	24,824	-55.9		26	12.1
20	18	26,252	-54.3		28	13.9
15	11	28,104	-51.4		28	25.2
10	7	30,792	-44.8			
7						

CHATHAM, MASS. — 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	16	3.9	.5	22	2.1
1000	30	146	3.9	.1	24	3.0
950	31	558	2.4	-1.7	24	6.8
900	31	964	.7	-6.3	24	9.4
850	31	1,452	-.7	-9.8	24	11.1
800	31	1,936	-1.6	-10.4	24	12.6
750	31	2,449	-3.4	-12.9	25	14.7
700	31	2,992	-5.6	-16.7	25	16.5
650	31	3,572	[illegible]	-19.8	25	18.3
600	31	4,192	[illegible]	-21.8	25	20.4
550	31	4,856	-14.9	-25.6	25	22.2
500	31	5,570	-19.8	-31.0	25	23.9
450	29	6,337	-25.0	-35.7	25	26.3
400	28	7,182	-31.4	-41.2	25	28.4
350	29	8,116	-38.5	-44.6	25	30.2
300	28	9,155	-46.2		26	32.1
250	27	10,351	-53.5		26	34.2
200	27	11,769	-58.1		26	31.6
175	26	12,603	-58.9		26	[illegible]
150	25	13,569	-58.1		26	25.6
125	[illegible]	14,719	-60.1		26	23.0
100	[illegible]	16,109	-61.3		26	20.7
80	[illegible]	17,491	-62.3		26	17.1
70	20	18,323	-62.7		26	14.9
60	20	19,274	-62.6		25	13.2
50	18	20,401	-62.4		26	12.4
40	17	21,772	-62.6		26	13.5
30	16	23,545	-62.1		27	13.3
25	16	24,674	-61.7		25	15.7
20	14	26,059	-61.0		27	16.3
15	9	27,848	-62.1			
10	7	30,391	-55.8			
7						

CHIHUAHUA, MEXICO — 859 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	[illegible]	[illegible]	[illegible]	26	[illegible]
1000						
950						
900						
850	29	1,521	5.6	-6.5	26	[illegible]
800	31	2,015	[illegible]	-8.0	27	2.3
750	31	2,545	6.0	-10.5	28	4.1
700	31	[illegible]	[illegible]	-12.8	29	[illegible]
650	31	3,704	.1	-15.8	29	8.0
600	31	4,340	[illegible]	[illegible]	29	9.0
550	31	5,021	-8.6	-24.4	28	11.0
500	31	5,753	-13.5	-28.7	29	13.9
450	31	6,546	-19.3	-33.8	29	14.5
400	31	7,410	-26.0	[illegible]	29	14.4
350	31	8,365	-33.5	-45.7	29	15.6
300	31	9,425	-41.9	[illegible]	29	16.9
250	31	10,636	-50.8		29	19.1
200	31	12,062	-58.6		28	20.9
175	31	12,895	-61.2		29	22.4
150	31	13,847	-63.3		28	20.7
125	31	14,961	-65.9		28	17.4
100	31	16,303	-67.6		28	15.0
80	30	17,629	-69.5		28	11.5
70	30	18,431	-67.3		27	8.8
60	30	19,365	-65.3		28	6.4
50	30	20,484	-62.5		28	5.1
40	30	21,873	-59.2		27	[illegible]
30	29	23,592	-55.9		27	[illegible]
25	26	24,862	-52.6		27	7.4
20	27	26,313	-49.9		27	11.2
15	26	28,200	-48.3		27	16.0
10	20	30,880	-46.6		27	19.0
7						

• COLD BAY, ALASKA — [illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	28	[illegible]	[illegible]	-2.9	30	[illegible]
1000	[illegible]	76	-1.2	-3.8		
950	27	[illegible]	-3.4	-5.7	32	[illegible]
900	28	789	[illegible]	-7.8	28	[illegible]
850	28	1,234	[illegible]	-10.6	28	[illegible]
800	28	1,701	[illegible]	-15.6	28	[illegible]
750	28	2,192	-14.7	-20.6	27	4.4
700	28	2,712	-17.7	-25.1	27	[illegible]
650	28	[illegible]	[illegible]	[illegible]	28	4.4
600	28	3,851	-24.3	-32.3	24	[illegible]
550	28	[illegible]	-28.4	-36.9	24	5.1
500	28	[illegible]	-32.8	-41.7	24	6.5
450	28	5,891	-38.2	[illegible]	24	7.3
400	27	[illegible]	-43.6		24	9.4
350	26	7,576	-48.3		25	11.0
300	[illegible]	8,582	-50.5		26	11.7
250	26	9,773	-49.8		[illegible]	[illegible]
200	26	11,242	-47.8		26	10.9
175	25	12,113	-47.8		26	10.9
150	25	[illegible]	-48.3		26	12.0
125	25	14,341	-49.4		26	11.0
100	25	15,807	-49.4		26	11.8
80	24	[illegible]	-50.9		26	11.4
70	24	18,155	-51.6		25	11.3
60	24	19,135	-52.2		26	[illegible]
50	22	[illegible]	-53.6		26	10.8
40	21	21,746	-54.1		27	11.4
30	[illegible]	23,591	-55.2		27	12.3
25	18	24,766	-55.9		28	[illegible]
20	17	26,147	-57.6		28	16.1
15	16	27,980	-58.5		29	19.4
10	11	30,490	-60.2			
7						

DAYTON, OHIO — 982 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	299	-2.0	-4.9	17	.3
1000						
950	31	564	-2.0	-4.5	23	2.7
900	31	993	-2.8	-5.9	25	5.4
850	31	1,446	-3.2	-9.2	25	7.8
800	31	1,926	-3.7	-11.3	26	8.9
750	31	2,435	-5.2	-13.3	26	10.0
700	31	2,975	-7.4	-16.9	26	11.7
650	31	3,550	-9.7	-20.9	26	13.2
600	31	4,164	-13.0	-23.5	26	14.9
550	31	4,823	-17.0	-27.3	26	16.7
500	31	5,532	-21.3	-31.9	26	19.0
450	31	6,302	-26.4	-36.7	26	21.3
400	31	7,142	-32.7	-40.9	25	24.5
350	31	8,072	-39.6	-44.0	25	24.5
300	31	9,107	-46.9		25	27.7
250	31	10,297	-53.4		26	29.5
200	31	11,720	-56.8		26	28.9
175	31	12,565	-57.0		26	28.1
150	31	13,542	-57.0		26	24.7
125	31	14,693	-58.6		26	21.7
100	29	16,090	-60.6		26	17.5
80	28	17,479	-61.7		26	14.4
70	28	18,305	-62.2		26	13.4
60	26	19,253	-61.7		26	11.4
50	26	20,382	-61.6		27	8.8
40	23	21,766	-60.8		27	8.7
30	20	23,563	-60.8		27	9.8
25	19	24,691	-61.2		28	11.1
20	14	26,089	-60.4		28	12.3
15	12	27,887	-60.0			
10						

DEL RIO, TEXAS — 981 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	314	6.3	.6	02	1.6
1000						
950	31	579	10.0	-.1	17	1.5
900	31	1,029	10.5	-3.4	24	3.7
850	31	1,505	9.6	-6.8	27	5.8
800	31	2,006	7.9	-10.0	29	7.5
750	31	2,536	5.3	-13.5	29	8.4
700	31	3,096	2.3	-15.8	29	9.3
650	31	3,691	-1.0	-18.3	28	11.2
600	31	4,325	-4.4	-21.7	28	12.9
550	31	5,005	-9.0	-24.9	28	13.2
500	31	5,735	-14.1	-29.0	28	15.2
450	31	6,525	-20.2	-34.2	28	16.2
400	31	7,387	-26.9	-40.3	28	17.9
350	31	8,338	-34.3	-46.8	28	19.3
300	31	9,395	-42.5	-51.9	28	21.8
250	31	10,604	-51.0		27	24.9
200	31	12,033	-57.5		27	26.6
175	31	12,872	-59.7		27	25.5
150	31	13,831	-61.8		27	24.2
125	31	14,952	-64.9		27	21.2
100	29	16,300	-68.7		27	18.3
80	29	17,633	-68.3		27	12.3
70	29	18,439	-66.4		27	8.0
60	28	19,377	-65.3		27	6.1
50	28	20,497	-61.8		27	4.7
40	28	21,889	-59.1		26	4.3
30	28	23,706	-55.8		27	7.6
25	29	24,873	-53.5		27	10.1
20	28	26,317	-51.2		28	12.1
15	26	28,198	-48.7		27	18.9
10	14	30,908	-44.5		27	32.1

DENVER, COLO. — 835 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	1,611	-2.6	-10.0	24	1.0
1000						
950						
900						
850						
800	31	1,953	1.4	-13.0	30	3.5
750	31	2,470	-1.5	-15.3	31	6.5
700	31	3,016	-5.0	-18.2	32	8.7
650	31	3,595	-8.5	-19.8	32	11.1
600	31	4,211	-12.4	-22.8	32	13.3
550	31	4,870	-16.4	-26.4	31	14.1
500	31	5,560	-21.6	-30.7	31	15.0
450	31	6,349	-26.8	-36.4	30	16.3
400	30	7,198	-32.8	-42.1	30	17.8
350	30	8,128	-39.1	-45.6	30	19.8
300	30	9,165	-46.6		30	20.4
250	30	10,355	-53.9		30	21.8
200	30	11,774	-57.7		29	23.9
175	28	12,612	-58.3		30	23.0
150	28	13,584	-57.4		30	19.6
125	28	14,734	-58.8		30	18.4
100	27	16,125	-60.8		29	12.9
80	26	17,506	-62.3		30	8.5
70	25	18,336	-62.0		30	7.1
60	23	19,284	-61.0		30	5.8
50	22	20,416	-60.7		32	4.4
40	22	21,808	-59.6		31	5.3
30	18	23,611	-58.8		31	4.8
25	18	24,757	-58.5		31	6.1
20	15	26,184	-57.6		32	6.8
15	9	28,010	-56.9			
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DODGE CITY, KANS. — 923 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	29	791	-2.9	-7.5	30	1.9
1000						
950						
900	29	993	.9	-6.8	31	4.0
850	29	1,455	3.1	-9.9	30	5.2
800	29	1,945	1.6	-11.2	31	7.2
750	29	2,463	-.9	-13.2	30	8.3
700	29	3,010	-4.0	-16.2	30	9.8
650	29	3,592	-7.4	-19.2	30	11.6
600	29	4,210	-11.5	-22.6	30	12.6
550	29	4,873	-15.2	-26.2	30	14.3
500	29	5,586	-20.1	-31.0	30	16.8
450	29	6,359	-25.4	-36.8	30	19.3
400	29	7,204	-31.7	-42.3	30	21.0
350	29	8,137	-38.9	-45.8	30	22.3
300	29	9,174	-46.5		30	23.9
250	29	10,365	-53.3		30	23.6
200	29	11,787	-57.2		29	24.3
175	28	12,626	-57.1		29	24.1
150	28	13,603	-57.0		28	22.4
125	28	14,751	-59.4		29	19.6
100	27	16,138	-61.5		28	13.5
80	24	17,514	-63.2		29	9.6
70	24	18,336	-62.8		28	7.3
60	23	19,281	-61.5		29	6.0
50	21	20,420	-60.6		29	4.1
40	19	21,814	-59.6		31	3.6
30	16	23,621	-58.6		32	3.2
25	13	24,779	-58.1		31	[illegible]
20	[illegible]	26,176	-57.1		29	7.9
15	[illegible]	27,995	-55.4		28	[illegible]
10	8	30,614	-53.6			

EL PASO, TEXAS — 884 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	1,193	2.1	-13.8	28	2.5
1000						
950						
900						
850	31	1,510	[illegible]	-11.7	29	[illegible]
800	31	2,006	[illegible]	[illegible]	29	7.0
750	31	2,530	2.7	-14.3	29	8.3
700	31	3,086	.2	-17.1	29	10.0
650	31	3,677	-2.6	-20.6	29	11.6
600	31	4,307	-6.3	-24.2	29	12.8
550	31	4,962	-10.9	[illegible]	29	14.2
500	31	5,706	-16.1	-31.5	29	15.3
450	31	[illegible]	-22.0	-36.6	29	16.6
400	31	7,346	-28.2	-42.9	29	19.5
350	31	8,294	-35.2	[illegible]	30	21.0
300	31	9,347	-43.3		30	21.5
250	31	10,551	-51.8		30	22.1
200	31	11,973	-59.0		29	25.0
175	30	12,805	-60.7		29	24.5
150	30	13,761	-61.9		29	22.6
125	30	14,801	-65.1		28	20.6
100	29	16,234	-68.0		28	15.3
80	26	17,574	-68.0		29	9.6
70	26	18,379	-66.6		29	7.0
60	25	19,321	-64.9		29	5.1
50	23	20,442	-62.6		30	4.1
40	23	21,826	-60.4		29	4.0
30	22	23,631	-57.9		27	4.6
25	[illegible]	24,793	-56.1		28	7.4
20	[illegible]	26,220	-53.8		27	11.7
15	17	28,090	[illegible]		28	21.4
10	[illegible]	30,740	-48.8			

ELY, NEV. — 810 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	30	1,908	-5.9	-9.0	20	2.3
1000						
950						
900						
850						
800	30	2,006	-2.3	-6.6	20	1.9
750	30	2,520	-2.1	-9.8	25	[illegible]
700	30	3,066	-4.0	-12.7	28	6.8
650	30	3,649	-6.3	-15.4	29	10.1
600	30	4,271	-9.8	-18.7	30	13.5
550	30	4,937	-13.9	-22.2	29	16.1
500	30	5,655	-18.5	-25.8	29	18.3
450	30	6,434	-23.5	-30.9	30	21.4
400	29	7,283	-29.3	-36.6	30	25.4
350	29	8,236	-36.0	-43.4	30	28.9
300	28	9,285	-44.6		30	31.4
250	28	10,481	-53.4		30	32.7
200	28	11,894	-59.3		30	32.7
175	28	12,727	-61.1		30	29.7
150	28	13,683	-61.8		29	27.7
125	28	14,811	-62.4		30	23.3
100	26	16,181	-64.8		30	16.6
80	25	17,539	-64.6		31	10.0
70	24	18,355	-63.3		31	7.3
60	24	19,304	-62.5		32	6.4
50	23	20,436	-61.3		33	4.5
40	21	21,811	-59.9		34	4.6
30	17	23,610	-58.1		35	4.3
25	15	24,768	-58.3		33	4.1
20	15	26,174	-57.3		31	5.7
15	8	27,982	-57.4			
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EMPALME, MEXICO — 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	12	10.4	.6	35	.7
1000	31	139	17.5	.5	35	1.9
950	31	578	18.4	-2.9	36	3.1
900	31	1,039	16.3	-5.1	34	1.1
850	31	1,521	13.5	-8.0	27	1.4
800	31	2,029	10.8	-9.6	26	2.2
750	31	2,564	8.4	-12.0	27	3.1
700	31	3,131	5.4	-15.6	30	4.9
650	31	3,732	2.0	-17.2	30	7.0
600	31	4,373	-2.0	-20.9	30	8.6
550	31	5,058	-6.7	-24.9	30	10.0
500	31	5,795	-11.8	-29.3	30	10.7
450	31	6,593	-17.8	-34.7	30	11.5
400	30	7,459	-24.9	-41.3	30	14.0
350	30	8,418	-32.4	-46.2	30	15.0
300	30	9,483	-41.1	-52.3	30	16.3
250	30	10,696	-50.7		30	18.5
200	30	12,119	-59.6		29	19.9
175	30	12,951	-61.7		29	19.9
150	29	13,897	-64.6		28	18.7
125	29	15,003	-67.3		28	16.1
100	29	16,340	-70.0		28	13.3
80	29	17,665	-70.1		28	9.6
70	28	18,462	-68.1		28	6.7
60	28	19,393	-65.9		29	5.2
50	26	20,513	-62.3		30	3.6
40	26	21,901	-59.5		28	3.4
30	25	23,719	-55.6		27	5.6
25	24	24,890	-53.3		27	8.4
20	23	26,338	-49.9		27	[illegible]
15	[illegible]	28,235	-47.8		27	15.6
10	[illegible]	30,888	-47.3			

• FAIRBANKS, ALASKA — 989 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	135	-20.0	-26.6	01	.4
1000						
950	31	440	-11.7	-15.5	[illegible]	3.5
900	31	856	-10.4	-15.2	11	5.4
850	31	1,298	-9.4	-15.1	14	4.6
800	31	1,766	-10.6	-16.4	16	3.6
750	31	2,260	-13.1	-19.2	16	4.3
700	31	2,783	-16.1	-22.5	17	4.7
650	31	3,338	-19.4	-25.9	18	4.4
600	31	3,928	-23.5	-29.2	19	4.4
550	31	4,559	-27.8	-33.4	20	6.1
500	31	5,237	-32.6	-38.4	19	7.6
450	31	5,971	-38.0	[illegible]	19	8.4
400	31	6,772	-43.7	-43.2	19	9.4
350	31	7,660	-49.8		19	10.2
300	31	8,654	-54.8		20	10.7
250	31	9,815	-55.8		21	9.6
200	31	11,242	-53.2		22	8.7
175	31	12,103	-52.9		23	7.8
150	31	13,100	-52.1		24	8.8
125	31	14,279	-52.8		24	[illegible]
100	31	15,717	-53.6		25	11.7
80	31	17,148	-54.9		26	13.5
70	31	18,060	-56.0		26	14.2
60	31	18,978	-57.4		26	15.9
50	31	20,127	-58.3		27	19.4
40	28	21,554	-58.6		27	21.7
30	[illegible]	23,345	-60.3		27	25.5
25	[illegible]	24,512	-60.7		28	27.9
20	[illegible]	[illegible]	-62.5		28	32.1
15	[illegible]	27,721	-62.4		28	[illegible]
10	[illegible]	[illegible]	-63.2			

FLINT, MICH. — 989 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	236	-2.8	-5.6	23	[illegible]
1000	5	259	-2.5	-6.1		
950	31	551	-4.7	-6.5	24	1.5
900	31	975	-6.5	-9.0	26	3.1
850	31	1,421	[illegible]	-15.1	26	[illegible]
800	31	1,894	-7.1	-17.1	26	7.1
750	31	2,397	-8.2	-18.5	27	9.1
700	31	2,931	-9.6	-19.5	27	11.0
650	31	3,501	-12.1	-22.2	26	12.9
600	31	4,110	-15.2	-26.4	26	14.4
550	31	4,762	-19.1	-31.2	26	16.6
500	31	5,465	-23.5	-34.9	26	18.5
450	31	6,228	-28.6	[illegible]	27	20.6
400	31	7,061	-34.7	[illegible]	27	23.2
350	31	7,963	-41.6	[illegible]	27	25.4
300	31	9,011	-48.2		26	29.7
250	31	10,198	-53.6		26	28.6
200	31	11,624	-55.3		26	27.9
175	[illegible]	12,471	-54.8		26	24.4
150	[illegible]	13,455	-55.4		26	22.1
125	[illegible]	14,616	-55.5		26	20.1
100	[illegible]	16,026	[illegible]		27	17.7
80	[illegible]	17,418	-59.7		26	13.1
70	[illegible]	18,253	[illegible]		27	11.5
60	[illegible]	19,210	[illegible]		27	10.1
50	[illegible]	20,345	-60.2		27	9.0
40	[illegible]	21,736	-60.5		28	7.8
30	17	23,536	-60.9		[illegible]	8.7
25	[illegible]	24,661	-61.4		28	12.1
20	[illegible]	26,055	-61.8		[illegible]	15.8
15	7	27,870	-62.2			
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GLASGOW, MONT. — 933 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	[illegible]	-9.6	-12.4	[illegible]	[illegible]
1000						
950						
900	31	976	-5.4	[illegible]	29	2.7
850	31	1,427	[illegible]	-9.4	29	6.9
800	31	1,905	-5.2	[illegible]	29	8.5
750	31	2,409	[illegible]	-13.4	30	11.0
700	31	2,944	[illegible]	-16.4	30	12.6
650	31	3,511	-13.6	-20.0	30	13.0
600	31	4,116	-17.1	-23.4	30	14.0
550	31	4,763	-21.2	-28.4	30	14.7
500	31	5,460	-25.4	-33.1	30	15.2
450	31	6,214	-31.0	[illegible]	30	16.5
400	[illegible]	7,040	-36.8	[illegible]	30	18.7
350	31	7,954	-43.5	[illegible]	[illegible]	20.5
300	31	8,973	-49.8		30	22.2
250	31	10,153	-54.3		30	23.6
200	31	11,579	-55.6		30	23.1
175	31	12,430	-55.2		30	20.2
150	[illegible]	13,414	-54.0		[illegible]	17.8
125	[illegible]	14,583	-55.2		[illegible]	16.2
100	[illegible]	16,003	-56.6		[illegible]	[illegible]
80	[illegible]	17,414	-57.6		[illegible]	[illegible]
70	[illegible]	18,257	[illegible]		[illegible]	10.2
60	[illegible]	19,229	[illegible]		[illegible]	10.0
50	[illegible]	20,375	[illegible]		[illegible]	9.6
40	[illegible]	21,772	[illegible]		[illegible]	9.1
30	[illegible]	[illegible]	[illegible]		[illegible]	10.0
25	[illegible]	24,718	[illegible]		31	11.0
20	[illegible]	[illegible]	[illegible]		31	12.5
15	[illegible]	[illegible]	[illegible]			
10						

RAWINSONDE DATA

Average monthly values

DECEMBER 1972

GRAND JUNCTION, COLO. 855 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,472	-3.9	-8.0	12	.8
1000						
950						
900						
850	24	1,537	-3.3	-10.7	[illegible]	1.7
800	31	1,996	-2.4	-10.3	14	1.2
750	31	2,506	-4.3	-13.4	23	1.6
700	31	3,048	-6.5	-14.1	29	4.2
650	31	3,625	-9.0	-16.4	30	7.1
600	31	4,241	-12.2	-19.4	30	10.7
550	31	4,902	-16.1	-23.5	30	14.0
500	31	5,613	-20.7	-28.7	30	17.3
450	31	6,385	-25.8	-33.6	30	19.7
400	31	7,228	-31.7	-40.7	30	22.7
350	31	8,102	-38.4	-45.5	30	24.9
300	31	9,202	-46.0		30	27.4
250	31	10,396	-53.0		31	28.4
200	31	11,818	-57.4		31	29.6
175	31	12,661	-57.9		30	26.3
150	31	13,633	-58.7		30	23.8
125	31	14,778	-59.4		30	18.8
100	28	16,160	-63.1		30	14.9
80	27	17,528	-63.1		29	9.9
70	27	18,351	-62.9		30	7.3
60	27	19,302	-62.1		30	6.4
50	25	20,428	-60.7		31	5.1
40	23	21,822	-59.5		34	3.9
30	17	23,624	-58.6		35	4.3
25	16	24,775	-57.6		34	5.1
20	15	26,188	-57.2		34	6.7
15	12	[illegible]	-56.9		33	9.5
10						

GREAT FALLS, MONT. 886 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,118	-2.6	-7.5	22	5.5
1000						
950						
900						
850	31	1,444	-.7	-9.1	24	10.0
800	31	1,927	-3.1	-11.1	27	9.5
750	31	2,435	-6.3	-13.6	28	9.9
700	31	2,972	-9.6	-16.2	29	11.5
650	31	3,540	-13.0	-18.8	29	13.3
600	31	4,146	-16.4	-24.1	29	13.3
550	31	4,796	-20.4	-29.2	29	14.5
500	31	5,496	-25.0	-32.8	29	16.4
450	31	6,253	-30.5	-36.1	29	18.4
400	31	7,080	-36.3	-40.2	29	19.5
350	31	7,997	-42.6	-42.6	29	22.0
300	31	9,020	-49.2		29	24.8
250	31	10,202	-53.8		29	27.9
200	31	11,626	-56.4		29	24.2
175	31	12,475	-55.7		29	22.4
150	31	13,457	-55.4		29	19.1
125	31	14,619	-56.1		29	18.0
100	31	16,035	-57.3		29	14.5
80	30	17,442	-58.7		29	12.2
70	30	18,281	-58.3		29	11.2
60	30	19,252	-58.5		30	8.5
50	28	20,403	-58.4		30	7.5
40	27	21,807	-59.0		31	7.6
30	21	23,619	-58.8		32	7.2
25	18	24,757	-59.5		32	8.7
20	13	26,178	-59.6		32	12.7
15	10	27,962	-60.8		32	17.9
10	6	30,617	-61.4			

GREEN BAY, WIS. 992 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	210	-6.7	-9.0	33	1.7
1000		243	-8.3	-10.5		
950	31	547	-6.8	-8.6	35	1.2
900	31	968	-8.2	-11.2	30	1.6
850	31	1,412	-8.1	-14.6	27	3.2
800	31	1,883	-8.8	-17.1	27	4.9
750	31	2,382	-9.8	-20.2	29	6.7
700	31	2,913	-11.6	-21.4	28	7.7
650	31	3,479	-14.0	-23.4	27	8.8
600	31	4,083	-16.8	-26.2	28	11.5
550	31	4,732	-20.6	-29.9	28	12.8
500	31	5,430	-25.2	-34.1	27	14.7
450	31	6,188	-30.0	-39.	27	17.2
400	31	7,017	-36.1	-42.6	27	19.7
350	31	7,934	-42.6	-42.2	27	21.7
300	31	8,957	-48.9		27	23.8
250	29	10,140	-53.7		27	24.3
200	29	11,569	-54.7		27	23.6
175	29	12,425	-54.3		27	21.7
150	29	13,412	-54.7		27	20.2
125	28	14,575	-55.3		27	18.7
100	27	15,989	-57.4		27	15.6
80	26	17,399	-58.8		27	13.0
70	26	18,236	-59.7		28	11.7
60	26	19,200	-59.8		28	9.6
50	25	20,339	-60.3		28	8.9
40	24	21,728	-61.2		29	9.5
30	23	23,513	-62.0		29	10.3
25	22	24,641	-62.3		29	13.2
20	19	26,007	-63.0		29	16.4
15	10	27,773	-63.2			
10						

GREENSBORO, N. C. 986 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	275	1.1	-1.9	32	.6
1000						
950	31	578	3.7	-1.9	27	2.5
900	31	1,018	3.4	-3.6	27	5.6
850	31	1,461	2.7	-4.5	25	7.4
800	31	1,971	1.6	-7.3	25	9.2
750	31	2,490	-.2	-11.8	25	11.7
700	31	3,040	-2.5	-15.0	26	14.0
650	31	3,625	-5.5	-18.0	26	15.9
600	31	4,249	-9.0	-22.3	26	17.3
550	31	4,918	-13.0	-27.2	26	18.7
500	31	5,637	-17.7	-31.3	26	20.9
450	31	6,418	-23.1	-35.8	26	22.2
400	31	7,270	-29.3	-40.9	26	23.6
350	31	8,212	-36.5	-45.8	26	25.8
300	31	9,260	-44.0		26	29.5
250	31	10,463	-51.9		26	32.1
200	31	11,805	-58.5		26	33.6
175	30	12,730	-58.6		27	32.1
150	30	13,696	-59.3		27	28.8
125	29	14,833	-60.7		27	25.9
100	28	16,212	-63.5		27	20.4
80	27	17,577	-64.3		27	15.2
70	27	18,395	-63.6		27	11.2
60	26	19,336	-62.5		26	9.6
50	25	20,465	-61.2		26	7.6
40	22	21,852	-60.3		27	7.6
30	20	23,651	-59.0		27	10.0
25	18	24,797	-57.7		27	12.2
20	16	26,210	-56.8		27	15.0
15	12	28,044	-55.3		28	24.9
10	9	30,673	-47.9			

GUADALUPE IS., MEXICO 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	23	14.9	11.8	34	5.3
1000	29	165	13.7	9.3	33	5.6
950	29	596	13.1	1.0	32	4.2
900	29	1,051	12.9	-5.5	33	3.4
850	29	1,530	12.4	-8.4	33	3.4
800	29	2,037	11.0	-10.0	32	4.0
750	29	2,573	9.5	-11.7	32	5.1
700	29	3,142	6.5	-13.7	31	5.3
650	29	3,746	2.6	-17.1	31	4.4
600	29	4,387	-1.8	-20.2	30	5.0
550	29	5,073	-6.5	-24.3	30	5.5
500	29	5,811	-11.8	-29.1	30	6.7
450	29	6,608	-17.9	-34.4	29	6.5
400	29	7,478	-24.5	-39.6	30	7.9
350	29	8,439	-32.0	-45.7	30	8.6
300	28	9,505	-40.9	-51.5	30	9.0
250	28	10,720	-50.6		29	9.3
200	28	12,142	-59.8		29	11.1
175	28	12,969	-63.7		29	10.9
150	28	13,909	-66.0		28	8.9
125	26	15,007	-69.0		28	9.6
100	24	16,329	-70.8		28	9.4
80	22	17,651	-70.3		29	9.4
70	22	18,449	-68.1		29	7.9
60	21	19,381	-66.0		29	8.5
50	19	20,497	-63.0		30	9.0
40	16	21,882	-60.0		30	9.3
30	13	23,703	-55.8			
25	12	24,865	-53.5			
20	9	26,310	-51.0			
15						
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* GUAM, MARIANA IS. 998 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	111	25.2	23.1	09	3.9
1000						
950	31	548	23.3	20.7	09	9.6
900	31	1,020	20.5	16.6	10	9.9
850	31	1,512	17.7	11.8	10	9.1
800	31	2,030	15.8	6.4	10	8.9
750	31	2,576	13.3	1.8	10	9.1
700	31	3,154	10.4	-4.5	10	9.2
650	31	3,767	7.1	-7.3	10	8.8
600	31	4,421	3.2	-10.8	10	8.4
550	31	5,121	-1.1	-15.8	11	9.0
500	31	5,875	-5.5	-22.5	11	9.5
450	31	6,695	-10.1	-26.3	10	8.5
400	31	7,593	-15.8	-32.2	10	8.2
350	30	8,589	-22.7	-38.2	09	7.7
300	30	9,698	-31.4	-45.7	08	6.4
250	30	10,962	-41.7		08	4.6
200	29	12,436	-53.7		10	3.2
175	28	13,282	-60.5		11	3.3
150	28	14,225	-67.9		11	3.7
125	28	15,300	-75.8		10	5.0
100	25	16,563	-83.3		11	7.3
80	21	17,793	-82.2		11	7.2
70	20	18,554	-76.3		10	3.2
60	20	19,455	-70.6		05	.1
50	20	20,553	-64.8		19	.6
40	20	21,931	-60.2		13	1.4
30	20	23,751	-54.9		09	5.8
25	18	24,932	-52.5		09	9.2
20	17	26,378	-50.3		09	11.5
15	15	28,274	-45.2		08	14.5
10	10	31,009	-40.8			
7						

HILO, HAWAII 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	20.2	16.6	24	1.8
1000	31	140	21.6	17.4	22	1.3
950	31	584	18.5	15.7	14	1.5
900	31	1,046	15.4	12.7	13	2.3
850	31	1,530	13.1	6.4	12	2.2
800	31	2,039	11.8	-.2	12	2.5
750	31	2,577	9.4	-5.0	13	2.8
700	31	3,146	6.4	-8.5	13	2.7
650	31	3,750	2.8	-11.6	12	3.1
600	31	4,394	-.9	-15.5	12	2.9
550	31	5,063	-5.3	-20.1	11	2.8
500	31	5,824	-10.4	-25.5	09	2.1
450	31	6,627	-15.9	-28.9	05	2.3
400	31	7,504	-22.1	-35.2	03	1.9
350	31	8,474	-29.4	-41.8	36	2.6
300	31	9,554	-37.5	-48.3	32	2.7
250	31	10,787	-46.8		30	4.4
200	31	12,233	-56.7		30	7.6
175	31	13,072	-60.8		31	9.4
150	31	14,019	-65.7		32	10.3
125	30	15,115	-71.5		33	7.9
100	28	16,416	-76.4		32	5.8
80	27	17,701	-75.2		36	2.5
70	23	18,481	-71.6		02	1.7
60	23	19,401	-67.2		13	.7
50	23	20,512	-63.3		24	.4
40	22	21,899	-59.8		27	.5
30	22	23,719	-54.5		30	2.8
25	22	24,895	-51.9		33	2.1
20	22	26,351	-49.0		10	2.7
15	19	28,240	-47.1		11	3.7
10	13	30,960	-43.6		24	5.0
7	5	33,333	-41.7			

HUNTINGTON W. VA. 988 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	1.9	-2.2	26	.8
1000						
950	30	566	2.3	-2.6	23	4.1
900	30	1,002	.8	-3.6	24	7.4
850	30	1,460	-.6	-6.0	25	8.9
800	30	1,945	-1.5	-8.3	26	10.3
750	30	2,457	-3.0	-11.9	26	10.9
700	30	3,002	-5.2	-15.1	26	13.7
650	30	3,581	-7.7	-17.8	26	16.0
600	30	4,200	-11.2	-20.9	25	17.8
550	30	4,864	-15.0	-24.9	25	19.8
500	30	5,579	-19.5	-28.9	25	20.7
450	29	6,359	-24.6	-34.3	26	21.8
400	28	7,207	-30.8	-40.6	26	23.3
350	28	8,145	-37.7	-45.1	25	27.1
300	28	9,188	-45.0		25	31.1
250	28	10,386	-52.5		26	32.6
200	28	11,808	-57.3		26	33.5
175	28	12,651	-57.8		26	32.3
150	27	13,621	-57.1		26	27.5
125	27	14,770	-59.4		26	24.0
100	27	16,158	-61.7		26	19.2
80	25	17,540	-63.0		26	14.1
70	24	18,365	-62.7		26	12.6
60	24	19,316	-62.3		27	9.8
50	24	20,445	-61.5		27	8.7
40	23	21,835	-60.2		27	7.4
30	23	23,632	-60.1		28	9.5
25	20	24,765	-60.2		28	11.6
20	17	26,161	-59.4		28	14.8
15	12	27,936	-58.4		28	22.9
10						
7						

* INTERNATIONAL FALLS, MINN. 975 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	359	-13.7	-17.8		
1000						
950	31	551	-13.7	-14.1		
900	31	964	-12.1	-14.3		
850	31	1,402	-11.4	-16.2		
800	31	1,867	-11.9	-17.8		
750	31	2,360	-13.0	-19.3		
700	31	2,865	-14.5	-21.0		
650	31	3,444	-16.7	-23.6		
600	31	4,042	-19.6	-25.8		
550	31	4,684	-23.1	-29.2		
500	31	5,377	-27.4	-33.0		
450	31	6,128	-32.3	-36.4		
400	31	6,949	-38.1	-42.3		
350	31	7,859	-43.9			
300	31	8,877	-50.3			
250	31	10,053	-55.1			
200	31	11,477	-54.8			
175	30	12,336	-54.1			
150	30	13,327	-53.7			
125	30	14,498	-54.4			
100	29	15,921	-55.9			
80	29	17,339	-57.0			
70	29	18,183	-57.7			
60	27	19,153	-58.6			
50	24	20,294	-59.1			
40	24	21,694	-59.9			
30	23	23,491	-61.5			
25	23	24,619	-62.5			
20	22	25,995	-64.0			
15	15	27,812	-65.1			
10	12	30,309	-66.5			
7						

JACKSON, MISS. 1007 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	100	5.9	2.2	18	.6
1000	25	172	5.6	.1	24	.8
950	31	576	6.9	-.7	25	3.5
900	31	1,020	6.7	-4.4	26	7.0
850	31	1,490	6.1	-7.0	26	9.6
800	31	1,985	4.0	-9.8	26	11.2
750	31	2,508	2.0	-13.5	26	12.5
700	31	3,061	-.7	-16.7	26	14.0
650	31	3,650	-3.9	-19.8	26	15.8
600	31	4,278	-7.4	-22.7	26	17.2
550	31	4,950	-11.6	-25.9	26	17.9
500	31	5,673	-16.7	-32.1	25	20.6
450	31	6,456	-22.3	-37.0	25	21.8
400	31	7,311	-28.6	-41.5	25	23.2
350	31	8,257	-35.5	-46.1	25	25.5
300	31	9,310	-43.4	-52.9	25	27.2
250	31	10,513	-51.8		25	29.5
200	31	11,937	-57.9		25	31.2
175	31	12,776	-59.8		26	31.9
150	31	13,738	-60.7		26	28.6
125	29	14,865	-62.9		26	25.3
100	29	16,229	-65.6		26	19.9
80	29	17,581	-66.5		25	14.4
70	29	18,391	-65.7		25	12.2
60	28	19,329	-64.5		26	9.0
50	27	20,448	-62.6		26	6.6
40	24	21,832	-60.2		26	7.4
30	23	23,637	-57.8		27	9.2
25	21	24,793	-56.4		27	10.3
20	18	26,208	-54.9		27	12.2
15	15	28,066	-51.8		27	21.5
10	9	30,747	-47.6			
7						

JOHN F. KENNEDY INT. AP NY 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	3.4	-3.1	35	1.9
1000	28	161	2.2	-3.1	[illegible]	3.2
950	31	559	1.4	-3.0	28	4.6
900	31	994	.3	-4.6	26	5.9
850	31	1,452	-.6	-7.5	26	7.8
800	31	1,936	-1.7	-9.9	25	9.6
750	31	2,448	-3.1	-13.6	26	11.1
700	31	2,993	-5.1	-15.2	26	14.0
650	31	3,573	-8.0	-17.4	26	15.9
600	30	4,194	-11.3	-22.0	26	17.8
550	30	4,857	-15.1	-25.9	26	19.4
500	30	5,572	-19.6	-29.4	26	22.0
450	30	6,347	-24.8	-33.5	26	24.1
400	30	7,193	-31.1	-39.9	26	27.1
350	30	8,128	-38.0	-45.9	25	28.0
300	30	9,170	-45.8		25	33.5
250	29	10,375	-53.5		25	37.9
200	29	11,792	-58.3		26	39.2
175	28	12,634	-57.9		26	32.1
150	28	13,605	-58.0		25	28.6
125	26	14,751	-58.9		25	25.0
100	26	16,143	-61.3		26	19.4
80	26	17,527	-61.6		25	16.8
70	26	18,353	-62.0		25	14.6
60	26	19,308	-61.5		26	11.3
50	26	20,438	-61.5		26	10.7
40	25	21,821	-61.5		25	9.9
30	24	23,614	-60.4		26	10.8
25	23	24,748	-60.8		27	13.3
20	22	26,138	-60.6		27	16.6
15	13	27,929	-60.5			
10	9	30,478	-57.3			
7						

JOHNSTON IS., PACIFIC AREA 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	24.8	20.4	08	6.1
1000	31	122	23.7	19.9	08	6.7
950	31	569	20.0	17.8	08	7.3
900	31	1,034	16.9	13.9	08	7.9
850	31	1,520	14.0	9.7	08	7.3
800	31	2,031	12.7	2.0	08	6.7
750	31	2,571	10.5	-2.8	08	5.8
700	31	3,143	7.4	-6.9	08	5.2
650	31	3,749	4.0	-10.7	07	5.6
600	31	4,396	1.1	-15.9	07	5.4
550	31	5,091	-3.2	-19.6	06	5.8
500	31	5,838	-8.3	-24.0	04	6.4
450	31	6,648	-13.4	-28.9	03	7.1
400	31	7,533	-19.6	-34.3	03	9.1
350	31	8,514	-26.7	-41.7	02	8.5
300	31	9,606	-34.7	-49.5	36	9.3
250	30	10,855	-43.9		35	11.5
200	30	12,318	-54.5		34	13.0
175	30	13,162	-60.4		34	12.6
150	30	14,108	-65.8		34	10.9
125	29	15,192	-73.4		34	9.8
100	28	16,481	-78.2		01	6.3
80	28	17,749	-79.0		04	5.1
70	28	18,515	-75.0		05	4.2
60	28	19,424	-69.1		10	2.1
50	28	20,530	-63.6		25	.1
40	28	21,913	-59.5		07	1.8
30	27	23,737	-54.0		06	3.0
25	27	24,913	-51.9		07	4.9
20	27	26,369	-49.4		09	8.0
15	26	28,268	-46.4		09	8.5
10	19	30,977	-43.3		13	4.4
7						

KEY WEST, FLA. 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	19.8	15.4	08	1.8
1000	31	151	19.6	14.2	09	3.0
950	31	592	16.3	12.7	11	3.5
900	31	1,050	13.2	9.6	14	2.6
850	31	1,530	10.5	4.1	18	2.0
800	31	2,034	9.5	-3.5	20	1.7
750	31	2,568	7.5	-6.5	23	2.0
700	31	3,134	5.6	-10.4	26	3.2
650	31	3,737	2.4	-14.4	26	4.7
600	31	4,379	-1.2	-19.5	25	6.2
550	30	5,068	-5.7	-24.2	25	7.8
500	30	5,807	-11.1	-28.7	25	9.4
450	30	6,607	-16.6	-33.3	25	11.5
400	30	7,481	-23.1	-38.5	25	13.9
350	30	8,448	-30.7	-44.5	26	15.4
300	30	9,521	-38.6	-51.4	26	18.9
250	29	10,752	-47.9		26	22.4
200	29	12,192	-57.4		26	24.0
175	29	13,029	-61.2		26	24.6
150	29	13,980	-64.2		26	24.6
125	29	15,086	-68.2		26	22.6
100	29	16,412	-72.2		26	16.2
80	29	17,717	-73.8		25	9.9
70	28	18,501	-71.4		24	6.7
60	26	19,420	-67.9		25	3.2
50	26	20,529	-63.1		27	2.8
40	26	21,917	-58.5		31	2.0
30	26	23,744	-54.0		28	2.0
25	23	24,919	-51.8		27	4.2
20	21	26,377	-49.0		27	7.5
15	18	28,280	-45.0		27	13.6
10	13	31,015	-42.1		26	20.2
7	5	33,490	-40.1			

+ KOROR, CAROLINE IS. 1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	28.1	24.6	08	2.0
1000	31	82	27.2	24.6	08	2.4
950	31	536	24.0	22.1	09	4.5
900	31	1,008	20.9	18.8	09	5.0
850	31	1,502	18.0	14.9	09	5.2
800	31	2,021	15.7	10.6	10	5.1
750	31	2,567	12.6	6.2	10	5.5
700	31	3,145	9.8	3.0	10	5.8
650	30	3,758	6.7	-2.7	10	6.5
600	30	4,412	3.0	-6.2	09	7.7
550	30	5,112	-.9	-10.5	10	8.0
500	30	5,867	-5.5	-15.6	10	8.5
450	30	6,687	-10.1	-20.4	10	9.3
400	30	7,586	-15.5	-27.1	10	9.0
350	30	8,585	-22.0	-44.2	09	8.6
300	30	9,697	-30.5	-42.0	09	8.2
250	29	10,965	-40.8	-50.3	10	8.7
200	29	12,443	-53.2		10	8.6
175	29	13,290	-60.4		10	9.2
150	29	14,232	-68.3		10	10.1
125	29	15,305	-76.5		09	11.2
100	29	16,505	-83.2		10	14.6
80	29	17,816	-78.9		10	7.3
70	28	18,589	-72.5		34	.5
60	28	19,507	-67.9		28	5.3
50	28	20,614	-64.4		28	5.5
40	28	21,993	-59.6		26	3.0
30	26	23,812	-55.4		10	5.5
25	26	24,980	-53.4		09	12.6
20	24	26,426	-50.2		09	17.9
15	21	28,324	-46.7		09	20.9
10	13	31,041	-41.2		09	25.7
7						

KWAJALEIN, MARSHALL IS. 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	27.0	23.7	07	7.1
1000	31	86	26.4	23.1	07	8.4
950	31	538	22.8	20.6	08	11.3
900	31	1,008	19.6	16.8	08	12.0
850	31	1,500	16.9	13.5	09	11.8
800	31	2,016	15.0	8.2	09	11.0
750	31	2,561	12.8	2.5	09	10.8
700	31	3,138	9.9	-2.3	09	10.7
650	31	3,751	6.9	-7.9	09	10.8
600	31	4,404	3.1	-12.0	09	11.4
550	31	5,104	-.9	-18.8	08	12.9
500	31	5,859	-5.3	-23.0	08	14.0
450	30	6,677	-10.6	-27.7	08	13.1
400	30	7,574	-16.2	-33.8	07	10.8
350	30	8,566	-23.0	-39.5	06	8.4
300	30	9,677	-31.5	-46.9	06	4.3
250	30	10,941	-41.6	-54.9	04	1.5
200	30	12,414	-53.9	-65.4	01	1.7
175	30	13,258	-60.8		03	2.4
150	30	14,199	-68.3		09	3.1
125	30	15,271	-76.5		04	4.3
100	24	16,532	-82.9		06	8.9
80	20	17,778	-81.0		08	6.4
70	19	18,540	-76.3		08	.5
60	18	19,439	-70.0		27	4.8
50	16	20,539	-65.0		28	6.0
40	16	21,912	-61.0		29	2.5
30	16	23,719	-56.2		09	8.2
25	16	24,863	-54.1		09	14.4
20	16	26,326	-50.8		09	19.1
15	16	28,217	-46.7		09	20.2
10	12	30,933	-42.1		09	22.0
7	7	33,376	-37.9			

RAWINSONDE DATA

Average monthly values

LAKE CHARLES, LA.
1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	29	5	7.6	5.6	04	.3
1000	29	160	[illegible]	4.3	21	.4
950	29	557	9.6	-.7	24	3.4
900	29	1,035	[illegible]	-4.2	25	5.3
850	29	[illegible]	6.4	-7.3	27	6.6
800	29	[illegible]	4.6	-9.2	27	7.9
750	29	2,524	2.6	-13.8	27	9.9
700	29	3,080	-.3	-17.4	27	11.9
650	29	3,670	-2.9	-19.9	27	[illegible]
600	29	4,300	-6.5	-23.6	27	14.7
550	29	4,974	-10.9	[illegible]	27	16.1
500	29	5,699	-15.7	-32.5	27	17.8
450	29	6,485	[illegible]	-36.2	26	[illegible]
400	29	7,343	-28.0	[illegible]	26	[illegible]
350	29	8,291	-35.0	-46.4	26	24.5
300	29	9,346	-42.8	-53.0	26	24.8
250	[illegible]	[illegible]	-51.6		26	28.2
200	[illegible]	[illegible]	-58.1		26	30.9
175	[illegible]	[illegible]	-59.6		26	31.7
150	[illegible]	13,782	-61.1		26	28.1
125	[illegible]	[illegible]	-64.1		26	24.4
100	[illegible]	[illegible]	-67.2		26	20.3
80	25	[illegible]	-68.4		26	14.3
70	25	18,408	-67.1		25	11.0
60	23	19,345	-65.4		26	9.2
50	23	20,463	-62.1		27	5.1
40	23	[illegible]	-59.9		26	7.1
30	[illegible]	23,663	-56.6		26	7.7
25	[illegible]	[illegible]	-54.7		25	[illegible]
20	21	26,264	-52.3		27	14.3
15	18	[illegible]	-49.1		27	23.1
10	15	30,822	-45.2		27	32.8
7						

LANDER, WYO.
827 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	1,697	-5.9	-11.4	25	1.2
1000						
950						
900						
850						
800	31	1,956	-1.9	-12.4	30	.4
750	31	2,468	-3.6	-14.6	31	2.5
700	31	3,011	-6.4	-15.9	30	6.5
650	31	3,586	-10.0	[illegible]	30	11.3
600	31	[illegible]	-13.5	-23.4	30	13.6
550	31	4,856	-17.8	-28.2	30	[illegible]
500	31	5,562	-22.7	-32.8	30	14.6
450	31	6,327	-28.2	-36.9	30	[illegible]
400	31	7,161	-34.4	-42.5	29	17.7
350	31	8,085	-40.9	-43.7	30	19.8
300	31	9,116	-47.8		30	22.4
250	31	10,300	-54.3		29	24.5
200	31	11,719	-57.4		29	24.3
175	30	12,567	-57.3		29	22.5
150	30	13,542	-57.2		30	20.7
125	30	14,693	-58.4		30	16.7
100	30	16,089	-60.7		29	14.6
80	29	17,474	-60.7		29	10.6
70	27	[illegible]	-60.6		30	8.4
60	27	19,267	-60.9		31	7.2
50	27	[illegible]	-60.1		31	5.2
40	24	21,796	-59.3		32	3.8
30	23	23,607	-58.6		33	6.2
25	21	24,761	-58.3		33	6.5
20	16	26,134	-59.0		32	8.2
15	9	27,946	-59.9			
10	6	30,485	-59.7			
7						

LIHUE, KAUAI, HAWAII
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	36	[illegible]	[illegible]	35	1.5
1000	[illegible]	145	[illegible]	18.0	[illegible]	1.7
950	[illegible]	[illegible]	[illegible]	16.1	[illegible]	[illegible]
900	31	1,052	15.3	12.5	[illegible]	[illegible]
850	31	1,535	13.2	4.7	[illegible]	1.5
800	[illegible]	2,045	[illegible]	[illegible]	[illegible]	[illegible]
750	[illegible]	2,584	9.9	-4.5	[illegible]	.5
700	[illegible]	3,154	6.5	-6.4	[illegible]	.7
650	[illegible]	[illegible]	2.9	-11.4	21	.7
600	31	4,402	-.8	-15.4	23	.4
550	[illegible]	5,092	-4.9	-19.2	33	[illegible]
500	31	5,835	-9.8	-24.6	29	1.4
450	31	6,640	-15.2	-29.1	32	2.2
400	31	7,518	-21.9	[illegible]	34	3.3
350	[illegible]	8,489	-29.5	-41.9	31	[illegible]
300	[illegible]	9,568	-37.8	-49.2	30	3.8
250	31	[illegible]	[illegible]		30	5.1
200	[illegible]	12,246	-56.1		30	10.5
175	[illegible]	13,092	-60.2		31	13.2
150	29	14,042	-65.3		31	11.9
125	[illegible]	15,137	-71.1		31	[illegible]
100	27	16,436	-76.0		32	7.3
80	27	[illegible]	-75.4		35	[illegible]
70	[illegible]	18,503	-72.4		02	1.3
60	[illegible]	19,422	-67.5		03	.7
50	[illegible]	[illegible]	-63.0		32	.7
40	[illegible]	21,919	-59.5		24	[illegible]
30	[illegible]	23,740	-54.5		30	[illegible]
25	24	24,916	-51.2		31	3.6
20	23	26,376	-48.1		29	1.6
15	17	[illegible]	-47.3		22	2.4
10	17	30,983	-43.2		26	9.2
7	[illegible]	33,367	-42.9		26	17.1

LITTLE ROCK, ARK.
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	[illegible]	79	3.6	[illegible]	31	[illegible]
1000	[illegible]	[illegible]	3.3	[illegible]	31	[illegible]
950	31	562	3.5	[illegible]	[illegible]	[illegible]
900	[illegible]	[illegible]	[illegible]	-5.1	[illegible]	6.9
850	[illegible]	[illegible]	3.1	[illegible]	[illegible]	7.7
800	[illegible]	1,954	1.3	[illegible]	[illegible]	9.0
750	[illegible]	2,472	-.5	[illegible]	[illegible]	11.4
700	[illegible]	3,020	-3.7	[illegible]	[illegible]	12.3
650	31	3,602	-6.6	[illegible]	27	14.4
600	[illegible]	4,224	-9.8	-22.5	27	17.2
550	[illegible]	[illegible]	-13.8	[illegible]	[illegible]	18.6
500	[illegible]	5,608	-18.3	[illegible]	[illegible]	19.5
450	[illegible]	6,386	-23.9	[illegible]	[illegible]	19.9
400	[illegible]	7,235	-30.3	[illegible]	27	21.0
350	[illegible]	8,174	-37.4	-46.9	27	23.3
300	[illegible]	9,218	-45.3		26	23.7
250	[illegible]	10,416	-52.2		27	25.2
200	[illegible]	11,844	-56.4		27	28.5
175	31	12,690	[illegible]		27	28.4
150	[illegible]	13,662	-58.0		27	[illegible]
125	[illegible]	14,804	-60.9		27	20.6
100	[illegible]	[illegible]	-63.1		27	16.7
80	[illegible]	17,552	-64.3		26	11.2
70	[illegible]	18,370	-64.0		26	9.7
60	[illegible]	[illegible]	-63.1		27	7.5
50	[illegible]	20,442	-61.8		27	5.8
40	[illegible]	[illegible]	-59.7		27	[illegible]
30	[illegible]	23,636	-57.9		27	[illegible]
25	[illegible]	24,791	-57.0		28	[illegible]
20	23	[illegible]	-55.5		28	12.3
15	[illegible]	[illegible]	-53.1		27	22.3
10	8	30,727	-48.8			
7						

[illegible]
991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	[illegible]	[illegible]	-21.7	-24.3	[illegible]	[illegible]
1000	[illegible]	[illegible]	-14.4	-17.1		
950	[illegible]	[illegible]	-14.0	-16.3	[illegible]	[illegible]
900	31	831	-10.2	[illegible]	[illegible]	[illegible]
850	[illegible]	[illegible]	-8.3	[illegible]	13	[illegible]
800	[illegible]	[illegible]	-10.1	-15.6	[illegible]	[illegible]
750	[illegible]	[illegible]	-12.9	-18.1	17	[illegible]
700	[illegible]	[illegible]	-16.6	-22.8	[illegible]	[illegible]
650	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]
600	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
550	[illegible]	[illegible]	-28.7	[illegible]	[illegible]	[illegible]
500	[illegible]	[illegible]	-33.4	[illegible]	[illegible]	[illegible]
450	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
400	[illegible]	[illegible]	-44.3		[illegible]	[illegible]
350	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
300	[illegible]	[illegible]	[illegible]		18	[illegible]
250	[illegible]	[illegible]	-53.6		[illegible]	[illegible]
200	27	11,231	-50.7		[illegible]	[illegible]
175	[illegible]	[illegible]	-50.3		[illegible]	[illegible]
150	27	13,109	-50.3		[illegible]	[illegible]
125	27	14,298	-50.9		[illegible]	[illegible]
100	26	15,750	-52.1		[illegible]	[illegible]
80	[illegible]	[illegible]	-53.5		25	[illegible]
70	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
60	[illegible]	[illegible]	-55.9		26	[illegible]
50	[illegible]	[illegible]	-57.3		27	[illegible]
40	[illegible]	[illegible]	-58.8		27	[illegible]
30	[illegible]	[illegible]	-60.4		27	[illegible]
25	[illegible]	[illegible]	-61.2		27	[illegible]
20	[illegible]	25,977	-61.5		27	27.7
15	[illegible]	27,821	-61.4			
10						
7						

MAJURO, MARSHALL IS.
1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	3	26.4	23.5	08	5.7
1000	31	86	27.1	22.7	08	7.2
950	31	539	23.5	[illegible]	08	9.4
900	31	1,011	20.4	17.5	08	9.8
850	31	1,504	17.6	12.9	09	10.1
800	31	2,021	15.6	8.1	09	9.0
750	31	2,567	13.2	[illegible]	09	8.5
700	31	3,145	10.1	-2.5	09	7.7
650	31	3,758	6.9	-7.0	09	7.7
600	31	4,412	3.4	-9.2	08	8.5
550	31	5,113	-.4	-14.8	08	9.9
500	31	5,869	-4.8	-20.5	08	11.4
450	31	6,691	-9.4	-26.2	07	11.1
400	31	7,591	-15.2	-31.4	06	8.1
350	31	8,590	-22.0	-37.9	04	5.5
300	31	9,703	-30.0	-44.6	02	2.3
250	31	10,974	-40.3	-52.5	01	.7
200	31	12,456	-52.5		04	1.5
175	31	13,306	-59.2		04	2.1
150	30	14,255	-66.7		01	2.5
125	29	15,337	-74.2		01	3.7
100	29	16,613	-80.6		06	5.4
80	29	17,871	-76.5		05	4.2
70	29	18,642	-73.3		31	3.1
60	29	19,557	-67.9		27	7.6
50	[illegible]	20,566	-62.7		27	7.4
40	27	22,051	-58.8		27	3.2
30	24	23,873	-55.0		09	6.5
25	21	25,041	-52.4		09	12.9
20	19	26,482	-50.0		09	16.4
15	13	28,376	-46.1		09	18.4
10	7	[illegible]	-38.5			

MEDFORD, OREG.
971 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	401	4.9	[illegible]	[illegible]	.3
1000						
950	31	580	5.0	2.8	16	.7
900	31	1,022	4.4	-.7	18	3.9
850	31	1,487	2.8	-3.3	21	5.5
800	31	1,976	.4	-5.6	23	8.4
750	31	2,491	-2.1	-10.4	24	11.1
700	31	3,037	-4.7	-12.6	25	13.3
650	31	3,618	-7.6	-17.4	26	14.9
600	31	4,237	-10.8	-19.4	26	17.7
550	31	4,901	-14.8	-22.9	27	19.2
500	31	5,617	-19.3	-27.6	27	22.7
450	31	6,392	-24.3	-32.3	27	25.3
400	31	7,240	-30.4	-38.1	28	27.7
350	31	8,180	-37.1	-44.0	28	31.0
300	31	9,225	-45.0		28	35.6
250	31	10,420	-53.8		28	37.9
200	31	11,836	-58.3		28	36.4
175	31	12,674	-59.3		28	32.8
150	30	13,636	-59.5		28	29.2
125	30	14,772	-61.4		29	23.2
100	30	16,153	-62.6		28	17.0
80	29	17,525	-62.1		29	10.4
70	27	18,351	-62.1		28	8.1
60	25	19,312	-61.3		29	[illegible]
50	22	20,444	-60.4		30	5.6
40	21	21,834	-60.1		31	4.2
30	19	23,626	-59.6		31	4.7
25	17	24,754	-60.0		31	6.5
20	17	26,145	-60.9		30	7.5
15	12	27,995	-58.9		29	9.2
10	6	30,661	-58.9			

MERIDA, MEXICO
1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	[illegible]	11	[illegible]	15.6	10	.5
1000	[illegible]	148	[illegible]	15.9	10	2.6
950	[illegible]	590	[illegible]	14.1	12	4.1
900	[illegible]	1,052	[illegible]	9.9	13	2.9
850	[illegible]	1,535	12.5	5.5	15	1.5
800	[illegible]	2,043	[illegible]	-2.0	20	1.1
750	[illegible]	2,581	9.5	-5.8	23	1.1
700	[illegible]	3,150	6.7	-10.2	25	1.6
650	[illegible]	3,755	3.3	-13.9	27	2.7
600	[illegible]	[illegible]	-.2	-19.2	26	3.2
550	[illegible]	5,090	-4.6	-22.3	26	4.9
500	[illegible]	5,833	-9.8	-27.3	27	6.5
450	30	6,640	[illegible]	-32.1	26	8.4
400	[illegible]	7,520	[illegible]	-37.8	26	11.1
350	29	8,494	-28.6	-43.9	26	14.2
300	[illegible]	9,576	-37.3	-49.9	26	17.7
250	[illegible]	10,809	-46.8		26	19.5
200	28	12,254	-57.3		26	20.6
175	[illegible]	13,090	-61.5		26	23.9
150	[illegible]	14,037	-65.1		26	26.1
125	[illegible]	[illegible]	[illegible]		26	21.0
100	[illegible]	16,451	[illegible]		26	15.9
80	[illegible]	17,742	-75.5		26	11.1
70	[illegible]	[illegible]	-72.8		25	8.1
60	[illegible]	19,436	-68.2		23	6.2
50	[illegible]	[illegible]	[illegible]		23	3.9
40	[illegible]	21,924	[illegible]		09	1.9
30	[illegible]	23,750	-53.3		08	7.1
25	[illegible]	24,931	[illegible]		08	[illegible]
20	[illegible]	26,395	[illegible]		08	6.2
15	[illegible]	28,311	[illegible]			
10	[illegible]	[illegible]	[illegible]			

MIAMI, FLA.
1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	4	[illegible]	12.3	[illegible]	[illegible]
1000	31	[illegible]	[illegible]	12.4	[illegible]	1.9
950	[illegible]	603	15.3	10.4	12	2.9
900	[illegible]	1,060	12.5	6.5	16	1.7
850	31	1,537	10.1	2.3	21	1.7
800	31	2,041	8.8	-4.6	24	[illegible]
750	31	2,574	7.2	-8.0	[illegible]	[illegible]
700	31	3,139	5.1	-12.1	[illegible]	[illegible]
650	31	3,741	2.4	-16.8	[illegible]	[illegible]
600	31	4,383	-1.1	-20.7	[illegible]	8.1
550	31	5,071	-5.7	-24.2	[illegible]	10.4
500	[illegible]	5,810	-11.2	-29.5	[illegible]	11.0
450	31	6,609	-17.2	-33.7	[illegible]	[illegible]
400	31	7,481	-23.8	-39.3	[illegible]	14.7
350	31	[illegible]	-31.0	-45.0	[illegible]	[illegible]
300	[illegible]	9,517	[illegible]	[illegible]	[illegible]	[illegible]
250	[illegible]	10,745	[illegible]		[illegible]	[illegible]
200	[illegible]	12,189	-57.3		26	27.3
175	[illegible]	[illegible]	[illegible]		26	29.4
150	[illegible]	13,978	[illegible]		[illegible]	[illegible]
125	[illegible]	15,087	-67.1		[illegible]	24.7
100	[illegible]	16,419	[illegible]		26	[illegible]
80	[illegible]	17,729	[illegible]		[illegible]	10.8
70	[illegible]	[illegible]	-71.0		[illegible]	8.5
60	[illegible]	[illegible]	-68.1		[illegible]	[illegible]
50	[illegible]	20,544	[illegible]		27	[illegible]
40	[illegible]	21,930	[illegible]		29	[illegible]
30	[illegible]	23,758	[illegible]		29	[illegible]
25	[illegible]	24,933	-52.3		[illegible]	[illegible]
20	[illegible]	26,387	-49.4		28	[illegible]
15	[illegible]	[illegible]	[illegible]		27	[illegible]
10	[illegible]	31,005	[illegible]			

MIDLAND, TEXAS
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	[illegible]	874	[illegible]	[illegible]	[illegible]	[illegible]
1000						
950						
900	[illegible]	1,021	6.3	[illegible]	[illegible]	[illegible]
850	[illegible]	1,492	7.8	-9.6	29	[illegible]
800	[illegible]	1,991	[illegible]	-10.7	[illegible]	[illegible]
750	[illegible]	2,517	[illegible]	-13.2	[illegible]	[illegible]
700	[illegible]	3,073	[illegible]	-16.5	[illegible]	[illegible]
650	[illegible]	3,664	[illegible]	-19.5	[illegible]	[illegible]
600	[illegible]	[illegible]	-6.3	-21.9	[illegible]	[illegible]
550	[illegible]	4,969	-10.6	-27.0	[illegible]	[illegible]
500	[illegible]	5,695	-15.7	-31.5	[illegible]	[illegible]
450	[illegible]	6,480	-21.5	[illegible]	[illegible]	[illegible]
400	[illegible]	7,337	-28.5	-41.8	28	[illegible]
350	[illegible]	[illegible]	-36.1	[illegible]	[illegible]	[illegible]
300	[illegible]	9,331	[illegible]		[illegible]	[illegible]
250	30	10,528	[illegible]		29	[illegible]
200	29	11,948	[illegible]		29	[illegible]
175	[illegible]	12,788	[illegible]		28	[illegible]
150	[illegible]	13,751	[illegible]		[illegible]	[illegible]
125	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
100	[illegible]	16,237	[illegible]		27	[illegible]
80	[illegible]	17,582	[illegible]		[illegible]	[illegible]
70	[illegible]	18,391	-65.6		[illegible]	[illegible]
60	[illegible]	19,332	-64.2		27	[illegible]
50	[illegible]	[illegible]	-61.8		[illegible]	[illegible]
40	[illegible]	21,836	[illegible]		[illegible]	[illegible]
30	[illegible]	23,646	-56.9		28	[illegible]
25	[illegible]	24,806	-55.2		[illegible]	[illegible]
20	[illegible]	26,237	-53.1		27	[illegible]
15	[illegible]	[illegible]	-50.7		[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]			

MONTERREY, MEXICO
965 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	15	423	9.9	6.1	31	2.4
1000						
950	15	581	14.3	5.2	30	1.5
900	15	1,040	15.2	1.6	22	1.9
850	15	1,523	13.4	-1.4	21	3.7
800	15	2,031	[illegible]	-6.5	27	6.1
750	15	2,567	8.5	-9.6	28	8.1
700	15	3,133	5.3	-14.1	28	7.8
650	15	3,735	2.2	-17.5	28	7.9
600	15	4,376	-2.1	[illegible]	28	7.5
550	15	5,062	[illegible]	-25.8	27	7.7
500	15	5,800	-11.5	-30.1	26	9.9
450	15	6,599	-17.4	-34.6	26	10.8
400	14	7,469	[illegible]	[illegible]		
350	13	8,430	[illegible]	-46.5		
300	13	9,501	-39.8	-52.2		
250	13	10,721	-49.5			
200	13	12,151	-59.0			
175	13	12,982	-62.8			
150	13	13,924	-65.5			
125	13	15,023	-69.5			
100	13	16,344	-72.4			
80	13	17,653	-73.3			
70	13	18,441	-70.2			
60	13	19,364	-68.0			
50	13	20,474	-63.0			
40	13	[illegible]	-59.8			
30	13	23,679	-54.4			
25	13	24,854	-51.9			
20	13	26,314	-48.4			
15	11	28,237	[illegible]			
10	7	30,926	-44.9			
7						

MONETT, MO.
964 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	438	-.7	-3.3	19	.9
1000						
950	30	557	-.2	-3.6	23	2.5
900	31	985	1.0	-4.8	25	7.0
850	31	1,445	.5	-9.2	27	7.5
800	31	1,930	-.4	-11.2	28	8.1
750	31	2,445	-2.0	-14.4	27	9.3
700	31	2,991	-4.6	-16.7	27	11.1
650	31	3,571	-8.3	-19.8	28	12.4
600	31	4,187	-12.1	-22.7	28	13.5
550	31	4,847	-16.5	-27.2	27	16.0
500	31	5,558	-21.2	-31.7	27	16.6
450	31	6,327	-26.6	-36.6	27	17.7
400	30	7,171	-32.5	-42.4	27	19.4
350	30	8,103	-38.8	-46.2	27	21.0
300	30	9,142	-45.7		27	22.3
250	30	10,339	[illegible]		27	24.0
200	30	11,770	-55.3		27	25.2
175	30	12,620	-56.8		27	[illegible]
150	30	13,594	-57.6		27	[illegible]
125	29	14,743	-59.5		27	19.9
100	29	16,130	-61.8		27	15.7
80	[illegible]	17,505	-63.6		27	11.3
70	[illegible]	18,325	-63.4		27	9.8
60	28	19,275	-62.3		27	6.7
50	28	20,403	-61.1		27	5.4
40	25	21,791	-60.3		28	5.6
30	24	23,588	-59.7		28	6.7
25	24	24,729	-58.9		29	[illegible]
20	21	[illegible]	-57.4		29	12.5
15	[illegible]	27,976	-55.5		29	19.2
10	[illegible]	30,572	-53.0		29	36.0

MONTGOMERY, ALA.
1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	57	5.2	1.9	15	[illegible]
1000	31	159	7.2	2.1	[illegible]	.5
950	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
900	31	1,027	[illegible]	[illegible]	24	6.0
850	31	1,495	5.3	-5.5	25	8.2
800	31	1,989	3.8	-8.7	24	10.4
750	[illegible]	2,512	2.0	-11.4	26	[illegible]
700	31	3,066	-.6	-14.4	26	14.2
650	31	3,655	-3.7	-16.9	26	15.3
600	31	4,283	-7.4	-21.2	26	16.3
550	31	4,955	-11.5	-25.0	26	17.3
500	31	5,680	-16.1	-28.9	26	19.4
450	31	6,465	-21.7	-34.6	26	21.0
400	31	7,321	-28.1	-40.0	26	22.6
350	[illegible]	8,266	-35.4	[illegible]	26	24.9
300	[illegible]	9,316	[illegible]	[illegible]	26	27.1
250	28	[illegible]	-51.7		26	29.9
200	28	11,947	-57.6		26	31.9
175	28	12,785	-60.0		26	31.4
150	28	13,744	-61.4		26	28.5
125	[illegible]	14,871	-63.6		26	26.1
100	[illegible]	16,233	-65.7		26	20.4
80	[illegible]	17,583	-67.1		26	13.0
70	[illegible]	[illegible]	-66.1		26	10.7
60	27	19,329	-64.4		26	7.9
50	[illegible]	20,448	-62.7		26	6.7
40	[illegible]	21,833	-60.1		27	6.5
30	[illegible]	23,636	-57.7		27	[illegible]
25	[illegible]	24,794	-56.2		27	10.7
20	[illegible]	26,218	-54.0		27	15.9
15	[illegible]	[illegible]	-51.3		[illegible]	[illegible]
10	[illegible]	30,766	-46.0			

NASHVILLE, TENN.
997 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	[illegible]	[illegible]	[illegible]	[illegible]	21	[illegible]
1000	[illegible]	212	[illegible]	[illegible]	[illegible]	[illegible]
950	[illegible]	570	[illegible]	[illegible]	[illegible]	[illegible]
900	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.5
850	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
800	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.3
750	[illegible]	2,465	[illegible]	[illegible]	[illegible]	11.5
700	[illegible]	3,011	[illegible]	[illegible]	[illegible]	13.5
650	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.3
600	[illegible]	4,212	[illegible]	[illegible]	[illegible]	17.4
550	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.5
500	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20.6
450	[illegible]	[illegible]	-24.6	[illegible]	[illegible]	[illegible]
400	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24.1
350	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25.5
300	[illegible]	[illegible]	[illegible]		[illegible]	28.2
250	[illegible]	[illegible]	[illegible]		[illegible]	31.0
200	[illegible]	[illegible]	[illegible]		[illegible]	29.8
175	[illegible]	[illegible]	[illegible]		[illegible]	30.4
150	[illegible]	[illegible]	[illegible]		[illegible]	27.5
125	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
100	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
80	30	[illegible]	[illegible]		[illegible]	[illegible]
70	30	[illegible]	[illegible]		[illegible]	[illegible]
60	30	[illegible]	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
40	[illegible]	[illegible]	[illegible]		[illegible]	6.6
30	[illegible]	[illegible]	[illegible]		[illegible]	9.0
25	[illegible]	[illegible]	[illegible]		[illegible]	10.7
20	[illegible]	[illegible]	[illegible]		[illegible]	13.8
15	[illegible]	[illegible]	[illegible]		[illegible]	24.5
10	[illegible]	[illegible]	[illegible]		[illegible]	41.1
7	[illegible]	[illegible]	[illegible]			

NOME, ALASKA
[illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed
SURFACE	31	[illegible]	[illegible]	-18.1	[illegible]	[illegible]
1000	[illegible]	[illegible]	[illegible]	-18.9	[illegible]	[illegible]
950	[illegible]	413	[illegible]	-16.4	[illegible]	[illegible]
900	[illegible]	827	[illegible]	-17.2	[illegible]	[illegible]
850	[illegible]	1,265	[illegible]	-18.4	[illegible]	[illegible]
800	[illegible]	1,727	[illegible]	-20.5	[illegible]	[illegible]
750	[illegible]	2,215	-16.2	-22.9	[illegible]	[illegible]
700	[illegible]	2,731	-19.4	-26.6	[illegible]	[illegible]
650	[illegible]	3,279	-22.6	-30.5	[illegible]	[illegible]
600	[illegible]	[illegible]	-26.3	-33.7	15	[illegible]
550	[illegible]	4,486	-30.2	-38.1	15	[illegible]
500	[illegible]	[illegible]	-34.7	[illegible]	[illegible]	[illegible]
450	[illegible]	[illegible]	-39.7	-44.7	16	[illegible]
400	[illegible]	6,683	-44.8	-45.8	16	[illegible]
350	[illegible]	7,569	-49.6		[illegible]	[illegible]
300	[illegible]	8,567	-52.9		[illegible]	[illegible]
250	[illegible]	9,742	-53.1		[illegible]	[illegible]
200	[illegible]	11,182	-51.0		[illegible]	[illegible]
175	[illegible]	12,053	-50.5		[illegible]	[illegible]
150	[illegible]	13,057	-51.2		[illegible]	[illegible]
125	30	14,241	-51.8		[illegible]	[illegible]
100	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
80	29	17,139	-53.1		[illegible]	[illegible]
70	[illegible]	[illegible]	-53.8		[illegible]	[illegible]
60	[illegible]	[illegible]	-54.6		[illegible]	[illegible]
50	[illegible]	[illegible]	-56.7		[illegible]	[illegible]
40	[illegible]	[illegible]	-57.7		[illegible]	[illegible]
30	[illegible]	[illegible]	-59.5		26	[illegible]
25	19	24,554	-57.5		27	[illegible]
20	15	25,982	-57.3		26	[illegible]
15	11	27,867	-58.7		[illegible]	[illegible]
10	7	30,371	-60.1			

RAWINSONDE DATA

Average monthly values

DECEMBER 1973

NORTH PLATTE, NEBR. 916 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	847	-7.5	-10.1	34	1.9
900	31	968	-4.2	-8.2	32	4.3
850	31	1,443	-.9	-8.8	34	7.9
800	31	1,927	-1.4	-10.7	33	8.9
750	31	2,439	-3.7	-13.6	32	9.7
700	31	2,981	-6.6	-17.3	32	10.3
650	31	3,557	-9.8	-19.8	31	11.5
600	31	4,170	-13.6	-22.4	31	12.9
550	31	4,827	-17.5	-25.5	30	13.9
500	31	5,535	-22.0	-30.4	30	15.4
450	31	6,302	-27.4	-36.2	30	15.9
400	30	7,133	-34.2	-41.1	29	16.4
350	29	8,055	-40.8	-43.4	29	18.2
300	29	9,065	-47.9		29	19.9
250	29	10,270	-53.6		29	20.9
200	29	11,595	-56.3		29	22.1
175	29	12,542	-56.4		29	21.9
150	29	13,523	-55.6		29	19.8
125	29	14,682	-57.3		28	17.3
100	29	16,088	-59.3		28	15.0
80	29	17,481	-60.6		29	10.2
70	29	18,311	-61.1		29	8.6
60	29	19,270	-60.9		30	6.6
50	29	20,405	-60.0		30	4.7
40	28	21,800	-59.3		31	4.8
30	25	23,601	-59.4		32	5.6
25	24	24,746	-59.4		30	6.3
20	24	26,144	-59.4		31	8.9
15	20	27,953	-59.4		30	12.8
10	5	30,549	-57.6			

OAKLAND, CALIF. 1021 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	6	8.4	7.0	13	1.0
1000	31	176	9.6	6.8	15	1.3
950	31	602	8.8	3.9	24	1.0
900	31	1,049	7.6	.2	27	2.4
850	31	1,520	6.8	-5.3	28	4.6
800	31	2,017	5.1	-6.9	28	7.1
750	31	2,541	2.8	-8.4	28	9.6
700	31	3,097	.1	-11.5	29	12.1
650	31	3,668	-2.9	-14.8	29	13.7
600	31	4,318	-6.5	-18.1	29	15.8
550	31	4,992	-10.8	-21.6	29	17.7
500	31	5,718	-15.7	-25.4	29	18.7
450	28	6,507	-20.7	-32.6	29	20.9
400	25	7,367	-26.8	-37.9	28	22.7
350	24	8,322	-34.3	-44.2	29	24.0
300	22	9,370	-43.1		29	27.1
250	21	10,585	-52.2		28	30.2
200	19	11,997	-60.6		28	33.3
175	19	12,824	-62.8		28	30.5
150	19	13,771	-63.8		28	30.7
125	19	14,884	-65.1		28	21.7
100	19	16,237	-67.1		28	14.8
80	17	17,589	-66.6		28	11.5
70	16	18,399	-66.1		29	9.9
60	16	19,337	-64.6		29	6.6
50	16	20,456	-62.7		30	5.8
40	16	21,835	-61.7		33	3.9
30	14	23,640	-59.1		35	3.7
25	14	24,786	-58.2		33	3.6
20	12	26,196	-56.5		31	5.5
15	10	28,011	-55.7		28	12.7

OMAHA, NEBR. 968 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	403	-6.8	-9.0	01	1.4
950	31	545	-5.6	-7.7	34	2.0
900	31	971	-3.4	-6.7	31	4.5
850	31	1,426	-1.9	-9.8	31	5.4
800	31	1,908	-2.4	-10.9	31	7.7
750	31	2,419	-4.4	-13.4	31	9.5
700	31	2,959	-7.2	-15.9	30	9.9
650	31	3,534	-10.5	-18.3	30	10.9
600	31	4,146	-14.1	-20.8	30	12.0
550	31	4,801	-18.0	-25.3	30	12.1
500	31	5,507	-22.5	-30.4	30	12.9
450	31	6,273	-27.8	-35.9	30	13.2
400	31	7,109	-33.9	-40.9	30	14.6
350	31	8,034	-40.6	-43.6	29	15.9
300	31	9,065	-47.8		29	19.5
250	31	10,252	-53.4		28	21.4
200	31	11,678	-55.7		28	22.7
175	31	12,530	-55.4		28	22.2
150	31	13,514	-55.1		28	18.9
125	31	14,675	-56.6		28	17.4
100	30	16,081	-58.8		29	14.3
80	29	17,478	-60.0		28	10.9
70	29	18,311	-60.3		28	9.3
60	27	19,276	-60.2		29	7.1
50	25	20,418	-59.7		30	6.4
40	21	21,817	-59.5		30	5.6
30	17	23,614	-59.7		30	7.1
25	16	24,761	-59.6		30	8.0
20	13	26,151	-60.0		31	9.8
15	8	27,994	-58.9			

* PAGO PAGO, AMERICAN SAMOA 1009 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	5	28.9	24.4	07	2.8
1000	31	89	26.9	20.7	06	3.3
950	31	541	23.5	17.6	04	4.4
900	31	1,012	20.1	14.2	03	4.5
850	31	1,504	17.2	10.3	04	4.4
800	31	2,020	14.8	7.0	05	4.0
750	31	2,564	12.1	3.4	05	3.2
700	31	3,139	8.9	-.2	06	2.7
650	31	3,750	5.8	-4.3	06	3.2
600	31	4,402	2.3	-8.2	07	3.1
550	31	5,100	-1.6	-11.7	08	2.3
500	31	5,853	-5.8	-17.2	08	2.6
450	31	6,672	-10.5	-22.2	09	3.4
400	31	7,569	-16.2	-28.8	10	3.4
350	31	8,563	-23.1	-36.0	11	2.9
300	31	9,670	-31.7	-44.2	12	3.4
250	31	10,932	-42.1	-51.0	15	3.2
200	31	12,402	-54.2		17	5.0
175	31	13,245	-60.9		18	6.6
150	31	14,188	-67.8		18	7.6
125	30	15,267	-74.5		17	7.9
100	30	16,548	-78.9		14	6.8
80	29	17,822	-75.5		11	7.0
70	29	18,603	-72.1		10	7.7
60	29	19,520	-67.9		09	8.7
50	28	20,629	-63.6		09	9.0
40	28	22,015	-59.5		09	10.4
30	26	23,836	-53.3		09	13.8
25	24	25,017	-50.6		08	14.8
20	23	26,461	-48.1		09	18.9
15	22	28,395	-43.7		09	23.1
10	17	31,151	-39.6		09	26.3
7	7	33,605	-38.0			

* PEORIA, ILL. 994 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	30	200	-5.6	-7.6	05	.3
1000	5	243	-7.5	-9.3		
950	30	551	-4.2	-6.6	27	.9
900	30	978	-3.8	-8.2	27	2.9
850	30	1,430	-3.9	-10.3	27	5.0
800	30	1,908	-4.9	-11.7	27	5.7
750	30	2,414	-5.9	-13.9	27	8.1
700	30	2,953	-8.1	-16.1	27	9.4
650	30	3,525	-10.9	-18.5	27	10.9
600	30	4,137	-14.2	-22.3	27	12.3
550	30	4,792	-18.2	-26.0	27	14.2
500	30	5,497	-22.8	-31.0	27	15.7
450	30	6,262	-28.2	-36.5	27	16.6
400	30	7,096	-34.4	-42.5	27	18.1
350	30	8,019	-41.3	-46.4	27	21.0
300	30	9,047	-48.0		27	22.3
250	29	10,239	-53.8		27	24.9
200	29	11,664	-55.8		27	23.9
175	29	12,513	-56.3		27	24.2
150	29	13,493	-56.4		27	21.4
125	28	14,647	-57.4		27	18.0
100	27	16,055	-59.9		27	16.5
80	25	17,441	-61.4		27	12.3
70	25	18,270	-61.4		27	9.3
60	21	19,229	-61.8		27	8.6
50	19	20,355	-61.6		27	7.1
40	15	21,734	-61.5		27	7.7
30	13	23,525	-61.3		27	7.2
25	11	24,645	-61.2		27	11.1
20	10	26,032	-61.3		26	14.7
15	6	27,811	-61.0			
10	5	30,361	-58.0			
7	5	32,628	-53.4			

* PITTSBURGH, PA. 975 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	359	-.4	-4.1	23	.7
950	31	563	-.9	-4.7	24	2.7
900	31	993	-2.4	-5.5	25	6.1
850	31	1,447	-3.4	-8.8	26	8.4
800	31	1,926	-4.2	-11.4	27	10.3
750	31	2,434	-5.3	-13.0	27	12.6
700	31	2,974	-7.3	-14.4	26	14.7
650	31	3,549	-10.0	-18.3	26	16.1
600	31	4,163	-13.2	-22.2	26	18.0
550	31	4,821	-16.8	-25.8	26	19.3
500	31	5,531	-21.3	-30.9	26	21.1
450	31	6,300	-26.5	-35.8	26	23.3
400	30	7,146	-32.5	-40.7	26	24.9
350	30	8,077	-39.1	-45.0	25	27.8
300	30	9,114	-46.4		25	28.7
250	30	10,305	-53.4		25	36.6
200	30	11,727	-56.9		26	35.5
175	30	12,572	-57.1		26	31.0
150	30	13,548	-57.3		26	26.7
125	28	14,698	-59.0		26	23.9
100	28	16,092	-60.5		26	19.4
80	25	17,483	-61.6		26	17.2
70	25	18,310	-62.0		26	13.0
60	24	19,263	-61.4		26	11.8
50	24	20,395	-61.2		27	11.3
40	24	21,780	-61.4		28	11.0
30	22	23,568	-61.1		27	12.4
25	20	24,697	-61.1		28	12.6
20	20	26,082	-61.3		28	16.8
15	14	27,857	-60.7		28	26.8
10	9	30,411	-55.5			
7	7	32,669	-50.4			

+ PONAPE, CAROLINE IS. 1004 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	39	28.1	24.1	08	3.9
1000	31	72	27.0	23.4	08	4.4
950	31	525	23.6	21.3	09	8.4
900	31	997	20.3	18.3	09	9.8
850	31	1,490	17.6	14.7	09	9.9
800	31	2,008	15.7	10.0	09	8.8
750	31	2,554	13.0	4.9	09	8.2
700	31	3,131	9.6	-.2	09	8.5
650	31	3,744	6.5	-4.1	09	9.6
600	31	4,397	3.0	-8.8	09	11.0
550	31	5,097	-.9	-14.3	09	11.3
500	31	5,852	-5.2	-18.4	09	12.1
450	31	6,673	-9.9	-22.2	09	11.3
400	31	7,573	-15.2	-28.5	08	10.0
350	31	8,571	-22.0	-35.6	08	7.3
300	31	9,684	-30.4	-43.7	09	4.8
250	31	10,953	-40.6	-50.3	11	4.1
200	31	12,433	-53.0		12	2.5
175	31	13,281	-59.9		10	2.6
150	31	14,226	-67.7		08	3.9
125	31	15,302	-75.7		07	6.1
100	31	16,566	-83.0		08	10.1
80	31	17,809	-80.8		08	6.4
70	31	18,575	-74.5		30	1.4
60	31	19,467	-68.8		27	6.9
50	29	20,592	-64.1		27	6.7
40	28	21,970	-60.2		26	4.9
30	29	23,784	-55.7		08	5.4
25	26	24,950	-54.3		09	13.3
20	23	26,390	-50.6		09	19.6
15	22	28,284	-46.8		09	20.2
10	16	31,018	-41.5		09	27.2

PORTLAND, MAINE 1015 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	20	-1.2	-4.5	30	1.2
1000	28	152	-.6	-5.3	30	1.5
950	31	546	-1.7	-6.6	26	3.5
900	31	977	-2.2	-8.0	24	6.4
850	31	1,430	-3.3	-9.8	25	9.0
800	31	1,910	-4.0	-10.5	25	11.1
750	31	2,418	-5.8	-12.6	25	13.1
700	31	2,956	-8.1	-14.6	25	15.7
650	30	3,529	-10.5	-18.4	26	18.0
600	30	4,142	-13.7	-22.2	26	20.1
550	30	4,799	-17.7	-26.5	26	22.9
500	30	5,506	-22.3	-30.4	25	24.1
450	30	6,272	-27.5	-35.7	25	26.5
400	30	7,109	-33.3	-40.4	25	31.4
350	30	8,038	-39.8	-44.1	25	34.8
300	30	9,072	-47.0		25	35.9
250	30	10,262	-53.5		25	37.0
200	29	11,679	-56.5		26	33.1
175	29	12,525	-56.8		26	30.6
150	29	13,503	-56.5		26	26.5
125	29	14,657	-58.0		26	23.2
100	29	16,058	-59.5		26	18.6
80	29	17,450	-60.7		27	15.2
70	28	18,280	-61.2		27	13.6
60	27	19,234	-61.5		27	12.3
50	27	20,363	-61.9		27	11.7
40	27	21,744	-62.4		27	11.0
30	25	23,516	-62.9		27	13.4
25	24	24,643	-63.1		27	15.4
20	23	26,014	-63.5		27	19.1
15	19	27,782	-64.2		28	24.7
10	14	30,280	-62.5		27	34.3
7	6	32,524	-57.1			

* QUILLAYUTE, WASH. 1007 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	58	5.4	4.1	14	1.3
1000	25	134	6.0	4.3	16	1.6
950	31	528	4.5	2.2	18	5.9
900	31	967	1.9	.0	19	7.9
850	31	1,426	-.4	-4.9	20	8.7
800	31	1,910	-2.4	-8.6	21	8.6
750	31	2,420	-5.1	-13.5	22	8.9
700	31	2,959	-8.1	-19.1	23	9.3
650	31	3,531	-11.3	-21.4	24	10.4
600	31	4,141	-14.8	-23.8	25	11.9
550	31	4,795	-19.0	-27.2	25	13.3
500	31	5,498	-23.4	-31.7	25	15.9
450	31	6,261	-28.5	-35.9	27	18.8
400	31	7,095	-34.2	-41.3	27	21.3
350	31	8,020	-40.7	-44.1	27	25.3
300	31	9,050	-48.1		27	30.3
250	31	10,235	-53.9		27	31.0
200	31	11,660	-55.8		27	28.5
175	30	12,513	-55.9		27	26.1
150	29	13,496	-54.7		28	22.3
125	29	14,659	-55.9		28	19.1
100	29	16,073	-57.4		28	15.0
80	28	17,478	-58.4		28	10.4
70	28	18,318	-58.3		28	8.5
60	26	19,297	-58.0		28	7.3
50	25	20,447	-57.8		29	5.0
40	22	21,875	-56.7		30	4.2
30	21	23,696	-56.5		34	4.4
25	18	24,858	-56.7		34	6.0
20	16	26,266	-56.8		35	6.5
15	13	28,132	-58.4		36	10.2
10	9	30,820	-59.2			
7	7	33,096	-61.5			

RAPID CITY, S. DAK. 903 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	966	-4.4	-9.9	33	2.7
900	21	1,019	-4.3	-10.1	33	4.6
850	31	1,444	-1.3	-10.3	32	6.5
800	31	1,926	-3.0	-11.8	32	8.7
750	31	2,435	-5.6	-14.5	31	10.4
700	31	2,973	-8.5	-18.4	31	11.5
650	31	3,545	-11.5	-21.4	31	12.0
600	31	4,155	-14.8	-23.8	30	12.3
550	31	4,809	-18.9	-28.1	30	13.6
500	31	5,512	-23.6	-32.5	30	14.3
450	31	6,274	-29.3	-35.3	29	14.6
400	31	7,105	-35.5	-39.9	29	15.1
350	31	8,024	-42.0	-44.5	29	16.7
300	30	9,045	-48.7		29	19.0
250	30	10,228	-54.4		29	20.9
200	30	11,648	-55.9		29	22.0
175	28	12,507	-56.8		29	21.4
150	28	13,486	-56.0		30	18.9
125	27	14,647	-56.6		29	16.4
100	27	16,056	-58.7		29	14.6
80	26	17,455	-59.9		29	10.3
70	26	18,288	-60.3		30	8.4
60	26	19,251	-59.8		30	7.9
50	25	20,370	-59.6		30	7.4
40	24	21,790	-59.7		31	6.7
30	22	23,566	-60.2		31	8.1
25	21	24,725	-59.9		31	9.4
20	20	26,118	-60.3		31	10.8
15	9	27,937	-60.4			

ST CLOUD, MINN. 980 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	30	316	-10.8	-13.4	03	.7
950	30	557	-10.4	-12.0	10	.8
900	30	974	-9.2	-12.4	22	.6
850	30	1,418	-7.9	-13.3	26	2.1
800	30	1,890	-8.2	-15.4	28	3.6
750	30	2,390	-9.3	-15.8	29	5.5
700	30	2,922	-11.4	-18.3	29	7.2
650	30	3,468	-13.5	-21.9	29	8.5
600	30	4,093	-16.8	-25.7	29	10.1
550	30	4,742	-20.9	-28.8	29	10.6
500	30	5,440	-25.2	-33.1	29	12.5
450	30	6,198	-30.2	-38.0	29	14.3
400	30	7,026	-36.3	-42.6	28	17.5
350	30	7,942	-42.9	-45.1	28	19.2
300	30	8,963	-49.5		28	21.3
250	30	10,141	-55.0		28	21.9
200	30	11,562	-55.9		28	21.3
175	30	12,413	-55.6		28	20.1
150	30	13,348	-55.1		28	17.6
125	30	14,561	-55.9		28	16.1
100	30	15,978	-57.0		28	13.5
80	30	17,354	-58.6		28	12.5
70	30	18,223	-58.9		28	10.5
60	29	19,168	-59.5		29	9.5
50	28	20,328	-59.8		29	8.7
40	28	21,719	-60.8		30	8.3
30	25	23,517	-61.2		30	9.3
25	17	24,656	-61.7		30	11.3
20	13	26,065	[illegible]		31	12.5
15	8	27,843	-63.0			

* ST PAUL IS., ALASKA 994 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	10	-1.9	-4.8	01	2.9
1000	10	68	-3.0	-6.8	34	5.3
950	30	384	-4.4	-6.6	02	3.4
900	31	794	-7.5	-9.1	36	2.8
850	31	1,237	-10.6	-13.1	36	3.8
800	31	1,701	-13.0	-18.0	36	3.1
750	31	2,191	-15.3	-21.4	35	3.1
700	31	2,709	-18.0	-26.0	33	3.1
650	31	3,260	-21.1	-29.1	31	2.7
600	31	3,847	-24.5	-32.4	31	2.7
550	31	4,475	-28.7	-36.1	32	2.6
500	31	5,150	-33.3	-40.0	30	2.3
450	29	5,883	-38.2	-43.5	28	2.7
400	29	6,684	-43.9		29	3.5
350	29	7,574	-48.8		28	5.1
300	29	8,575	-52.4		29	6.4
250	29	9,753	-52.3		28	6.5
200	29	11,205	-50.1		26	7.3
175	29	12,060	-48.8		26	8.0
150	27	13,100	-48.6		25	8.2
125	27	14,298	-49.1		25	9.7
100	27	15,762	-49.2		25	10.6
80	27	17,222	-50.2		25	11.7
70	25	18,096	-50.4		25	11.1
60	25	19,101	-51.1		25	11.4
50	25	20,265	-51.5		25	11.9
40	25	21,731	-52.4		25	14.1
30	24	23,574	-53.7		26	15.9
25	23	24,748	-54.3		26	15.7
20	21	26,185	-55.2		26	17.2
15	18	28,022	-56.0		27	18.4
10	15	30,635	-56.3		27	26.6
7	5	32,942	-58.3			

SALEM, ILL. 996 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	30	174	-1.6	-3.7	13	.4
1000	9	211	-5.2	-7.3		
950	30	549	-.1	-4.2	22	3.2
900	30	982	-.8	-7.0	24	5.4
850	30	1,438	-1.4	-9.3	24	6.9
800	30	1,921	-2.1	-10.4	26	7.7
750	30	2,433	-3.8	-14.0	26	8.8
700	30	2,976	-5.9	-16.6	26	10.4
650	30	3,554	-8.6	-19.2	27	12.3
600	30	4,170	-12.4	-22.1	27	13.9
550	30	4,830	-16.3	-25.0	27	15.8
500	30	5,541	-21.0	-30.5	27	17.8
450	30	6,312	-26.2	-35.3	26	19.8
400	30	7,153	-32.6	-40.6	26	21.5
350	30	8,083	-39.4	-45.2	26	23.4
300	30	9,120	-46.4		26	25.4
250	30	10,313	-52.7		27	25.1
200	30	11,740	-56.1		26	24.6
175	30	12,588	-56.8		26	24.7
150	30	13,564	-56.8		26	25.1
125	30	14,717	-58.2		26	18.9
100	29	16,107	-60.8		26	15.4
80	29	17,492	-61.5		27	11.3
70	29	18,319	-61.9		26	8.7
60	27	19,271	-61.5		27	8.2
50	26	20,403	-60.1		27	5.6
40	26	21,793	-60.3		27	6.7
30	24	23,593	-59.9		28	7.7
25	23	24,729	-59.4		28	8.7
20	19	26,134	-58.8		28	14.0
15	17	27,932	-58.4		28	21.5
10	10	30,486	-54.2			

SALEM, OREG. 1009 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	30	61	6.1	3.8	18	2.9
1000	25	158	6.6	4.8	19	3.8
950	30	556	6.0	2.7	20	8.3
900	30	998	3.8	.0	21	10.5
850	30	1,461	1.4	-3.0	22	11.3
800	30	1,947	-.8	-6.6	23	11.8
750	30	2,461	-3.3	-10.4	24	12.2
700	30	3,004	-6.1	-13.3	25	13.1
650	30	3,581	-9.3	-16.1	25	13.9
600	30	4,196	-12.8	-19.4	26	15.2
550	30	4,855	-17.0	-24.7	26	17.2
500	30	5,564	-21.5	-29.0	27	19.6
450	30	6,333	-26.6	-34.8	27	21.8
400	30	7,174	-32.5	-40.3	28	25.9
350	30	8,105	-39.1	-43.4	28	28.0
300	30	9,142	-46.5		28	30.2
250	30	10,333	-53.7		28	35.7
200	30	11,753	-57.6		28	33.7
175	30	12,596	-57.7		28	29.2
150	29	13,568	-57.7		28	27.5
125	28	14,714	-59.4		28	22.7
100	26	16,110	-59.8		28	18.2
80	25	17,501	-60.1		28	12.3
70	25	18,337	-59.5		29	8.5
60	25	19,301	-59.8		28	8.8
50	24	20,441	-58.8		29	7.1
40	23	21,844	-58.2		33	3.8
30	21	23,672	-57.6		33	4.9
25	18	24,838	-57.6		34	5.5
20	16	26,276	-56.7		36	5.4
15	13	28,125	-57.5		36	7.5

SALT LAKE CITY, UTAH 874 MB

Standard pressure surface mb	No of observations	Dynamic height	Temperature	Dew Point +	Resultant Wind Direction	Resultant Wind Speed M.P.S.
SURFACE	31	1,288	-.9	-5.0	16	1.7
850	31	1,515	-.1	-6.3	19	2.1
800	31	2,000	-1.4	-9.7	22	3.3
750	31	2,512	-4.0	-12.1	26	4.0
700	31	3,053	-7.0	-14.8	28	6.9
650	31	3,628	-9.8	-17.4	29	9.8
600	31	4,243	-12.9	-21.8	29	13.3
550	31	4,902	-16.8	-26.1	29	15.8
500	31	5,611	-21.3	-31.3	29	18.6
450	31	6,380	-26.4	-35.4	30	20.9
400	31	7,222	-31.9	-41.2	30	22.9
350	31	8,155	-38.8	-44.3	30	26.7
300	31	9,194	-46.2		30	30.9
250	29	10,380	-53.4		30	31.7
200	29	11,799	-57.5		30	28.6
175	29	12,642	-58.3		30	26.2
150	29	13,610	-58.9		30	24.6
125	29	14,752	-60.5		30	20.7
100	29	16,137	-62.0		29	14.0
80	29	17,516	-62.5		30	9.3
70	29	18,339	-62.7		30	7.3
60	29	19,291	-61.6		32	6.7
50	28	20,422	-61.2		32	4.9
40	27	21,811	-60.1		33	4.3
30	27	23,611	-59.4		33	5.1
25	25	24,749	-59.3		32	6.7
20	19	26,125	-59.9		30	9.4
15	15	27,934	-58.9		30	13.1

RAWINSONDE DATA

Average monthly values

SAN DIEGO, CALIF. 1004 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	124	9.4	5.0	06	1.1
1000	31	158	11.2	2.4	06	1.0
950	31	589	13.2	-.1	34	.2
900	31	1,043	12.1	-4.3	30	1.1
850	31	1,520	10.5	-8.5	30	2.5
800	31	2,023	9.1	-9.9	31	4.7
750	31	2,555	7.0	-11.5	31	6.5
700	31	3,119	4.3	-14.1	31	8.9
650	31	3,719	1.2	-17.2	30	10.6
600	31	4,358	-2.9	-21.4	30	11.3
550	31	5,041	-7.7	-24.5	30	13.2
500	31	5,774	-13.1	-28.7	30	15.4
450	31	6,568	-19.0	-33.1	30	16.2
400	31	7,433	-25.7	-39.6	30	17.6
350	31	8,340	-33.2	-46.0	30	19.0
300	31	9,451	-41.9	-51.4	30	21.6
250	31	10,659	-51.8		31	23.3
200	31	12,074	-61.1		30	25.1
175	31	12,899	-63.2		30	24.4
150	31	13,842	-65.4		30	22.3
125	31	14,949	-66.9		29	18.3
100	30	16,286	-69.7		30	14.1
80	30	17,616	-69.4		30	9.6
70	29	18,420	-67.2		31	7.2
60	29	19,259	-65.1		32	4.4
50	28	20,477	-62.9		33	3.5
40	29	21,861	-60.4		01	2.3
30	27	23,667	-57.0		36	[illegible]
25	27	24,825	-55.6		29	2.3
20	27	26,253	-53.7		27	7.1
15	29	28,110	-51.5		28	14.3
10	12	30,733	-49.1		27	28.9
7						
5						

SAN JUAN, P. R. 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	6	23.4	17.6	10	2.1
1000	31	147	22.8	18.0	07	4.9
950	31	593	19.5	16.3	07	7.2
900	31	1,057	16.1	13.0	07	7.4
850	31	1,541	12.7	8.6	06	6.7
800	31	2,048	10.1	4.6	06	5.2
750	31	2,585	9.0	-4.5	06	3.4
700	31	3,154	6.7	-9.4	06	2.9
650	31	3,760	4.4	-15.1	05	2.8
600	31	4,407	.6	-19.4	05	2.7
550	31	5,099	-4.0	-23.5	04	2.4
500	31	5,844	-9.0	-27.7	01	2.0
450	30	6,652	-13.9	-31.7	33	3.3
400	30	7,525	-20.2	-37.2	30	7.0
350	30	8,515	-27.3	-42.6	29	10.2
300	30	9,603	-35.5	-49.6	29	15.6
250	30	10,847	-45.1		28	19.7
200	30	12,303	-55.5		28	22.1
175	30	13,146	-60.1		29	22.9
150	30	14,097	-64.6		29	19.8
125	30	15,198	-69.8		30	15.8
100	30	16,508	-75.0		31	9.7
80	30	17,796	-76.3		33	4.3
70	29	18,571	-73.6		01	3.0
60	28	19,483	-69.0		03	2.0
50	27	20,590	-62.4		04	1.7
40	26	21,983	-57.8		04	2.0
30	23	23,824	-52.2		07	2.2
25	23	25,009	-50.1		07	2.7
20	20	26,476	-47.1		09	3.4
15	15	28,385	-45.1		11	6.2
10	6	31,094	-42.4			
7						
5						

• **SAULT STE MARIE, MICH.** 990 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	221	-8.3	-11.7	07	1.5
1000	9	247	-11.3	-16.4		
950	31	544	-8.7	-11.2	10	1.2
900	31	963	-9.0	-12.6	28	.4
850	31	1,405	-10.1	-16.0	28	3.0
800	31	1,871	-11.2	-18.8	28	4.7
750	31	2,366	-12.3	-21.6	28	6.0
700	31	2,891	-13.9	-22.9	28	8.1
650	31	3,453	-15.8	-24.6	28	9.9
600	31	4,053	-18.7	-28.2	29	12.0
550	31	4,647	-22.2	-31.9	28	14.1
500	31	5,392	-26.2	-35.8	28	16.5
450	31	6,147	-31.3	-39.7	28	19.0
400	31	6,971	-37.2	-44.3	27	21.2
350	31	7,884	-43.4	-46.8	27	23.3
300	31	8,913	-50.0		27	25.1
250	31	10,083	-54.1		26	26.8
200	31	11,512	-54.1		26	25.3
175	30	12,366	-53.6		27	23.3
150	30	13,357	-53.9		27	20.5
125	30	14,525	-55.1		27	18.6
100	30	15,945	-56.6		27	16.2
80	29	17,353	-58.3		27	12.7
70	29	18,193	-58.5		27	11.5
60	27	19,159	-59.5		28	10.9
50	26	20,296	-60.4		28	10.6
40	26	21,683	-61.5		28	[illegible]
30	25	23,464	-63.3		29	12.8
25	24	24,577	-63.7		29	15.0
20	23	25,945	-64.8		29	19.6
15	20	27,697	-65.2		29	21.9
10	18	30,145	-63.1		28	31.6
7	16	32,367	-58.0		28	46.7
5	7	34,560	-51.2			

• **SHREVEPORT, LA.** 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	79	4.1	2.0	21	.5
1000	27	164	5.3	.9	24	1.0
950	31	571	6.6	-1.1	24	4.9
900	31	1,015	6.3	-5.0	25	7.5
850	31	1,463	4.9	-9.5	27	[illegible]
800	31	1,976	3.6	-12.2	27	10.2
750	31	2,498	.9	-14.6	27	11.3
700	31	3,049	-1.7	-17.3	27	12.5
650	31	3,636	-4.6	-19.4	27	13.9
600	31	4,262	-6.1	-23.8	27	16.0
550	31	4,932	-12.4	-28.2	27	17.8
500	31	5,653	-17.4	-32.5	27	19.6
450	31	6,434	-22.8	-37.9	27	20.8
400	31	7,287	-29.3	-43.3	26	22.9
350	31	8,229	-36.3	-47.9	27	24.0
300	30	9,279	-43.8	-52.8	27	26.5
250	30	10,481	-52.0		27	27.0
200	30	11,906	-57.6		27	30.4
175	30	12,746	-59.2		27	29.1
150	30	13,709	-60.7		27	28.1
125	30	14,839	-63.0		26	24.4
100	30	16,202	-66.1		27	21.1
80	30	17,554	-66.3		26	13.8
70	30	18,363	-66.5		26	10.8
60	30	19,301	-64.7		25	8.0
50	27	20,421	-62.2		27	6.4
40	28	21,806	-60.2		26	5.8
30	28	23,612	-57.4		27	7.3
25	26	24,765	-56.6		27	9.1
20	25	26,183	-55.0		28	12.9
15	21	28,027	-52.2		27	19.1
10	18	30,663	-49.6		27	30.1
7	8	33,046	-47.7			
5	6	35,325	-42.4			

SPOKANE, WASH. 932 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	[illegible]	.2	[illegible]	[illegible]	2.4
1000						
950						
900	31	[illegible]	.8	[illegible]	[illegible]	4.1
850	31	1,454	-1.0	[illegible]	[illegible]	6.0
800	31	1,936	-3.5	-8.6	24	[illegible]
750	31	2,444	-5.9	-11.5	25	8.0
700	31	2,982	-9.0	[illegible]	26	9.0
650	31	[illegible]	-12.0	-18.6	26	10.2
600	31	4,162	-15.1	-21.6	27	12.0
550	31	4,815	-19.2	-25.1	27	14.1
500	31	5,517	-23.9	-31.2	28	15.9
450	31	6,278	-29.4	-35.6	28	17.4
400	31	7,109	-35.2	-39.4	28	[illegible]
350	31	8,030	-41.6	-41.9	28	24.6
300	31	9,057	-48.7		28	28.0
250	31	10,240	-54.4		28	31.6
200	31	[illegible]	-56.0		28	29.9
175	31	12,511	-55.7		29	25.5
150	31	13,494	-55.2		28	22.5
125	[illegible]	[illegible]	-56.0		29	18.8
100	[illegible]	16,066	-58.2		28	14.9
80	[illegible]	17,469	-58.6		28	11.8
70	[illegible]	18,307	-59.3		29	9.7
60	29	19,273	-58.9		29	8.8
50	[illegible]	20,419	-58.8		30	7.1
40	28	21,823	-58.6		30	6.7
30	[illegible]	23,650	-58.0		32	7.0
25	[illegible]	24,812	-58.4		31	6.5
20	[illegible]	26,233	-59.1		34	8.4
15	[illegible]	28,005	-61.3			
10						
7						
5						

• **SWAN ISLAND, W. I.** 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	10	24.6	19.7	06	3.0
1000	31	132	24.1	19.0	06	3.9
950	31	550	20.4	17.4	06	5.1
900	31	1,045	17.0	13.6	07	4.3
850	31	1,531	13.9	9.7	07	3.6
800	31	2,041	11.5	4.4	08	2.2
750	31	2,579	9.6	-2.2	07	1.3
700	31	3,149	7.2	-7.7	15	.2
650	31	3,756	3.9	-10.7	27	1.0
600	31	4,402	.4	-15.6	26	2.0
550	31	5,095	-3.5	-20.8	25	2.5
500	31	5,842	-7.8	-25.6	27	3.9
450	31	6,654	-12.8	-30.3	27	5.6
400	31	7,540	-19.8	-35.9	28	8.5
350	31	8,519	-27.3	-42.0	27	10.8
300	30	[illegible]	-36.3	-49.0	26	14.5
250	30	10,847	-45.7		25	18.2
200	29	12,301	-55.3		26	24.5
175	29	13,144	-59.8		26	25.3
150	29	14,095	-64.8		26	22.1
125	28	15,194	-70.1		26	16.9
100	28	16,501	-76.2		26	9.5
80	26	17,734	-77.0		24	2.9
70	25	18,557	-74.3		24	1.4
60	25	19,467	-69.3		28	.2
50	22	20,569	-64.1		34	.7
40	24	21,960	-57.6		05	1.6
30	20	23,796	-53.5		07	2.7
25	20	24,974	-51.7		07	2.6
20	19	26,428	-48.9		08	6.0
15	16	28,346	-44.9		09	8.4
10	13	[illegible]	-42.1		13	4.5
7	10	33,482	-40.6			
5	5	35,809	-35.9			

TAMPA, FLA. 1019 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	8	12.1	9.4	07	1.2
1000	31	168	14.1	9.0	10	1.6
950	31	601	13.2	7.8	19	2.5
900	31	1,055	11.2	4.3	21	3.7
850	31	1,531	9.1	1.1	23	4.4
800	31	2,032	7.7	-4.8	24	4.5
750	31	2,562	5.6	-7.4	24	6.1
700	31	3,124	3.0	-11.8	25	7.8
650	31	3,721	.1	-15.6	26	9.4
600	31	4,359	-3.4	-19.4	26	11.7
550	31	5,041	-7.9	-24.4	26	13.4
500	31	5,775	-13.0	-28.7	26	13.8
450	31	6,569	-18.6	-33.5	26	15.6
400	31	7,436	-25.1	-39.1	25	16.9
350	31	8,394	-32.6	-43.9	25	19.0
300	31	9,459	-40.6	-49.4	26	22.3
250	31	10,678	-49.2		26	24.3
200	31	12,111	-57.6		26	26.2
175	31	12,948	-61.0		26	28.2
150	30	13,900	-63.5		26	26.1
125	30	15,013	-66.0		26	25.2
100	30	16,353	-69.9		26	19.5
80	30	17,676	-70.6		25	11.4
70	30	18,472	-69.2		25	8.6
60	30	19,399	-66.5		25	6.3
50	30	20,513	-62.9		27	4.7
40	29	21,897	-59.1		27	3.3
30	27	23,721	-54.7		27	5.4
25	26	24,887	-53.3		27	7.9
20	25	26,333	-50.5		27	15.1
15	21	28,227	-46.8		27	19.1
10	16	30,955	-42.7		27	29.4
7	6	33,365	-43.0			
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TOPEKA, KANS. 984 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	268	-2.7	-5.5	35	1.0
1000						
950	31	547	-1.7	-5.6	28	2.2
900	31	979	-.7	-7.7	29	4.3
850	31	1,436	-.4	-10.4	30	6.0
800	31	1,921	-1.2	-12.2	30	7.6
750	31	2,434	-3.4	-14.7	29	8.8
700	31	2,976	-6.2	[illegible]	29	[illegible]
650	31	3,553	-9.4	-21.4	29	11.1
600	31	4,167	-13.1	-23.7	29	12.6
550	31	4,825	-17.2	-28.2	29	13.4
500	31	5,533	-22.3	-33.0	28	14.1
450	31	6,299	-27.4	-37.6	29	14.2
400	31	7,137	-33.2	-42.9	29	15.0
350	31	8,067	-39.4	-45.1	29	17.4
300	31	[illegible]	-46.9		28	17.9
250	31	10,293	-52.9		27	19.9
200	30	11,723	-55.4		27	23.5
175	30	12,574	-55.9		27	22.1
150	30	13,555	-56.2		27	19.3
125	30	[illegible]	-57.8		28	18.4
100	28	16,108	-60.1		28	13.4
80	26	17,488	-60.6		28	10.1
70	25	18,320	-61.1		28	8.9
60	[illegible]	19,276	-60.0		29	7.7
50	21	20,416	-59.5		29	6.1
40	[illegible]	21,819	-58.9		29	4.4
30	17	23,638	-58.2		31	5.2
25	16	24,782	-58.5		31	5.5
20	14	26,189	-58.0		29	9.8
15	[illegible]	[illegible]	-57.2		28	14.8
10	7	30,582	-56.3			
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• **TRUK, CAROLINE IS.** 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	2	28.8	24.2	07	3.7
1000	31	87	27.8	22.6	07	4.5
950	31	541	24.1	21.4	08	7.7
900	31	1,014	21.1	17.8	09	8.9
850	31	1,507	18.0	13.8	09	8.7
800	31	2,026	15.7	10.5	09	8.6
750	31	2,573	13.3	6.2	10	9.1
700	31	3,151	10.2	1.6	09	[illegible]
650	31	3,765	7.3	-4.7	09	10.1
600	31	4,420	3.6	[illegible]	09	10.4
550	31	5,121	-.5	-12.4	09	10.4
500	31	5,878	-4.8	-17.6	[illegible]	11.8
450	31	6,699	-9.4	-22.3	09	11.0
400	31	7,601	-15.0	-28.7	09	9.4
350	31	8,601	-21.7	-35.7	08	7.4
300	31	9,715	-29.9	-42.5	08	5.4
250	31	10,986	-40.3	-50.5	09	3.9
200	31	12,467	-52.9		10	4.2
175	31	13,315	-59.9		10	4.2
150	31	14,260	-67.7		09	4.7
125	31	15,335	-75.8		09	7.3
100	31	16,600	-82.6		09	11.8
80	31	17,847	-80.2		09	6.9
70	30	18,614	-74.0		33	.7
60	30	19,527	-68.9		27	5.0
50	30	20,632	-63.7		27	6.5
40	[illegible]	[illegible]	-60.0		27	3.3
30	[illegible]	23,832	-55.5		09	[illegible]
25	24	25,001	-53.1		[illegible]	13.8
20	23	26,452	-49.5		09	19.1
15	20	28,355	-46.3		[illegible]	19.7
10	10	31,055	-41.5			
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• **TUCSON, ARIZ.** 927 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	789	5.8	-7.8	14	2.4
1000						
950						
900	31	1,036	11.3	-7.5	13	3.2
850	31	1,512	9.8	-9.2	17	1.5
800	31	[illegible]	[illegible]	-10.8	25	2.6
750	31	2,541	4.7	-13.0	28	[illegible]
700	31	3,100	2.0	-16.0	29	7.1
650	31	3,695	-.9	-19.1	29	9.4
600	31	4,329	-4.8	-22.4	30	11.5
550	31	5,008	-8.9	-25.9	30	13.9
500	31	5,740	-13.0	-30.1	30	16.3
450	31	6,532	-19.4	-34.8	30	16.8
400	31	7,395	-26.4	-40.2	30	19.2
350	30	8,344	-34.2	-46.9	31	20.8
300	[illegible]	9,400	-42.8		30	21.7
250	29	10,606	-52.2		30	21.7
200	28	12,019	-60.3		30	24.3
175	26	12,846	-62.2		30	23.1
150	25	13,797	-63.1		30	21.2
125	25	[illegible]	-65.5		29	17.8
100	25	16,258	[illegible]		29	15.1
80	24	17,596	-68.0		30	10.5
70	23	18,404	-66.5		30	7.6
60	22	19,344	-64.2		29	5.6
50	22	20,465	-62.4		31	4.6
40	22	21,851	-59.9		32	3.2
30	22	23,661	-57.0		29	4.7
25	21	[illegible]	-55.4		28	6.5
20	21	26,252	-53.1		28	[illegible]
15	20	28,118	-51.2		27	18.0
10	[illegible]	30,766	-48.5		27	28.9
7	[illegible]	33,120	-47.7		26	42.4
5						

• **VANDENBERG AFB, CALIF.** 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	[illegible]	9.0	5.5	03	.5
1000	31	174	10.4	5.4	34	1.4
950	31	604	12.4	.3	34	3.6
900	31	1,056	11.3	-4.3	34	4.2
850	31	1,532	9.5	-6.3	32	5.1
800	31	2,034	8.3	-8.6	32	6.7
750	31	2,564	6.1	-10.4	32	8.4
700	31	3,127	3.3	-11.9	31	10.6
650	31	3,724	.2	-14.7	31	12.4
600	31	4,361	-3.6	-18.6	30	13.6
550	31	5,043	-8.2	-23.4	30	14.9
500	31	5,775	-13.5	-27.3	29	17.1
450	31	6,569	-19.1	-31.7	30	19.3
400	31	7,434	-25.5	-37.7	29	20.4
350	31	[illegible]	-32.8	-44.7	30	22.3
300	31	9,453	-41.8		30	22.6
250	31	10,662	-51.6		30	24.9
200	31	12,077	-60.9		30	26.8
175	31	12,902	-63.2		29	25.4
150	31	13,846	-64.7		30	23.3
125	30	14,953	-66.6		30	19.8
100	[illegible]	16,289	-68.5		30	14.6
80	[illegible]	17,631	-67.2		30	8.8
70	[illegible]	18,439	-65.9		30	6.4
60	24	19,341	-64.6		31	5.5
50	24	[illegible]	-62.5		33	3.1
40	[illegible]	21,892	[illegible]		33	[illegible]
30	[illegible]	23,698	[illegible]		34	2.9
25	[illegible]	24,855	-56.4		31	3.5
20	[illegible]	26,278	-54.6		28	7.4
15	19	28,123	-52.7		28	13.3
10	14	30,767	-49.9		28	25.6
7	7	33,092	-48.6			
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VICTORIA, TEXAS 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	33	8.6	5.6	01	1.1
1000	31	145	12.7	4.5	06	.8
950	31	575	12.2	3.1	21	3.2
900	31	1,028	11.1	-2.4	23	4.8
850	31	1,503	8.8	-5.2	25	5.7
800	31	2,004	7.3	-10.9	27	6.8
750	31	2,532	4.8	-12.9	27	8.1
700	31	3,092	1.9	-16.7	27	10.4
650	31	3,686	-.8	-20.3	28	12.7
600	31	4,321	-4.4	-22.9	28	14.6
550	31	5,000	-8.9	-26.8	28	15.5
500	31	5,731	-14.2	-30.8	28	17.7
450	31	6,522	-19.8	-35.6	27	18.9
400	31	7,384	-26.4	-41.2	27	20.2
350	31	8,338	-33.9	-48.1	27	22.4
300	31	9,396	-42.2	-53.4	27	24.2
250	31	10,607	-50.7		28	28.5
200	31	12,036	-57.7		26	30.3
175	31	12,873	-60.5		26	29.3
150	31	13,828	-62.7		27	28.2
125	31	14,947	-65.0		26	24.7
100	31	16,296	-68.6		26	19.6
80	30	17,628	-68.9		26	13.4
70	30	18,429	-67.8		26	10.2
60	29	19,358	-64.9		26	8.4
50	29	20,477	-62.1		27	5.6
40	28	21,865	-59.8		26	5.9
30	26	23,681	-55.8		27	7.4
25	[illegible]	24,850	-53.4		27	9.6
20	25	26,294	[illegible]		28	13.3
15	[illegible]	28,174	[illegible]		27	19.5
10	16	30,858	-45.4		27	26.9
7						
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• **WAKE IS., PACIFIC AREA** 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	5	26.1	22.6	08	6.1
1000	31	141	25.1	21.0	08	7.1
950	31	591	21.3	18.9	08	8.7
900	31	1,058	17.8	15.2	09	7.8
850	31	1,546	15.3	9.7	10	7.7
800	31	2,060	15.0	1.7	10	[illegible]
750	31	[illegible]	13.7	-4.0	09	6.7
700	31	3,183	10.7	-8.2	09	6.3
650	31	3,797	7.2	-11.5	09	[illegible]
600	31	4,451	3.3	-15.7	08	5.1
550	31	5,150	-1.0	-20.3	[illegible]	[illegible]
500	31	5,904	-5.7	-24.2	[illegible]	4.7
450	31	6,721	-11.3	-28.4	[illegible]	[illegible]
400	31	7,613	-17.7	-34.1	06	[illegible]
350	31	8,601	-25.1	-40.6	04	[illegible]
300	31	9,699	-33.3	-47.9	02	[illegible]
250	31	10,955	-42.8		36	5.7
200	31	12,423	-54.2		35	[illegible]
175	31	13,268	-60.4		35	5.7
150	31	14,212	-67.5		35	5.7
125	31	15,290	-75.0		36	[illegible]
100	31	16,563	-81.1		[illegible]	[illegible]
80	[illegible]	17,809	-82.3		[illegible]	[illegible]
70	[illegible]	18,561	-79.0		09	[illegible]
60	[illegible]	19,455	-72.4		[illegible]	[illegible]
50	[illegible]	20,551	-64.9		[illegible]	2.7
40	[illegible]	21,932	-59.4		09	[illegible]
30	[illegible]	23,751	-55.0		[illegible]	1.7
25	[illegible]	24,926	-51.4		[illegible]	[illegible]
20	[illegible]	26,382	-49.7		06	1.5
15	[illegible]	28,283	-45.9		11	[illegible]
10	[illegible]	[illegible]	-43.2			
7						
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• **WALLOPS IS., VA. NASA** 1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	31	4	4.8	1.8	33	2.2
1000	[illegible]	160	6.0	[illegible]	30	2.3
950	31	546	4.7	-.5	27	3.7
900	31	1,007	3.9	-3.2	26	6.3
850	31	1,471	2.7	-6.2	[illegible]	9.4
800	31	1,960	1.0	-9.2	25	11.5
750	31	2,477	-.7	-11.8	25	13.5
700	31	3,026	-3.3	-15.8	25	14.2
650	31	3,610	-6.2	-18.1	25	15.4
600	31	4,232	-9.6	-20.6	25	18.2
550	31	4,899	-13.8	-25.0	25	19.8
500	31	5,617	-18.2	-32.1	25	21.9
450	31	6,395	-23.8	-35.9	[illegible]	23.1
400	31	[illegible]	[illegible]	-41.1	24	[illegible]
350	[illegible]	[illegible]	-36.7	-45.8	24	[illegible]
300	[illegible]	[illegible]	-44.6		25	28.1
250	31	10,431	-53.1		25	31.5
200	31	11,847	-59.6		26	32.0
175	31	12,682	-59.7		26	29.7
150	[illegible]	[illegible]	-59.9		26	[illegible]
125	30	14,783	-61.5		[illegible]	23.3
100	[illegible]	16,163	-64.0		[illegible]	20.5
80	25	17,535	-64.1		26	16.9
70	[illegible]	18,355	-63.4		[illegible]	12.5
60	[illegible]	19,301	[illegible]		26	9.9
50	[illegible]	20,422	-61.8		[illegible]	8.1
40	23	21,802	-61.0		27	[illegible]
30	[illegible]	23,594	[illegible]		29	10.2
25	[illegible]	24,734	-59.7		29	[illegible]
20	[illegible]	26,124	-58.9		27	[illegible]
15	15	27,935	-57.9		28	21.2
10	13	[illegible]	-53.5		[illegible]	[illegible]
7	9	32,844	-46.5			
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WASHINGTON DULLES INT. AP 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed M.P.S.
SURFACE	30	85	.0	-4.6	33	2.0
1000	27	168	1.4	-4.4	[illegible]	2.0
950	30	566	.8	-4.8	[illegible]	4.5
900	30	999	-.2	-6.1	28	5.5
850	30	1,457	.2	-8.9	27	7.6
800	30	1,943	-.2	-10.4	26	9.7
750	[illegible]	2,458	-1.9	-12.6	26	11.5
700	[illegible]	3,004	-4.5	-14.8	25	13.8
650	30	3,585	-7.2	-16.7	25	16.1
600	30	4,205	-10.8	[illegible]	[illegible]	18.0
550	30	4,869	-15.1	-23.7	25	18.6
500	30	5,583	-19.8	-29.0	25	20.8
450	30	6,358	-24.6	-34.9	25	23.2
400	[illegible]	7,205	[illegible]	[illegible]	[illegible]	24.7
350	30	8,141	-38.0	-45.2	25	26.5
300	[illegible]	[illegible]	-45.2		[illegible]	[illegible]
250	[illegible]	10,360	-52.8		25	32.6
200	[illegible]	11,798	-57.9		26	[illegible]
175	[illegible]	[illegible]	-57.9		[illegible]	29.4
150	29	13,606	-58.4		26	[illegible]
125	29	14,750	-59.8		[illegible]	25.6
100	29	16,137	-61.8		26	19.7
80	[illegible]	17,516	-62.1		[illegible]	15.2
70	[illegible]	18,340	-62.2		[illegible]	13.5
60	26	19,293	-62.2		26	9.4
50	26	20,422	-61.2		[illegible]	10.4
40	[illegible]	21,809	-60.6		26	9.7
30	22	23,605	-60.1		27	10.0
25	22	24,743	-60.1		28	13.4
20	21	[illegible]	-60.4		28	14.7
15	19	[illegible]	-59.3		[illegible]	21.7
10	15	30,506	-55.7		[illegible]	[illegible]
7	7	32,784	-53.2			
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RAWINSONDE DATA

Average monthly values

WAYCROSS, GA.
1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	44	6.6	4.0	26	.6
1000	31	158	9.6	3.3	27	.8
950	31	584	9.3	1.7	23	3.6
900	31	1,033	8.5	-1.1	23	5.7
850	31	1,504	7.2	-3.0	24	7.7
800	31	2,002	5.4	-6.4	25	9.3
750	31	2,528	3.3	-10.2	25	10.3
700	31	3,064	.4	-14.0	25	11.2
650	31	3,676	-2.3	-16.2	25	12.9
600	31	4,307	-5.9	-20.7	25	14.2
550	31	4,984	-10.0	-24.3	25	16.0
500	31	5,712	-14.8	-29.7	25	17.1
450	31	6,501	-20.3	-34.4	25	18.7
400	31	7,362	-26.7	-40.1	25	21.8
350	31	8,315	-33.8	-44.7	25	23.7
300	31	9,374	-42.0	-49.4	26	25.8
250	31	10,584	-50.9		26	28.3
200	29	12,013	-57.5		26	34.7
175	29	12,850	-60.4		26	33.7
150	29	13,808	-61.5		26	31.0
125	28	14,939	-63.5		26	27.6
100	27	16,295	-67.0		26	21.1
80	27	17,635	-68.4		25	14.0
70	27	18,438	-67.3		25	12.0
60	27	19,372	-65.4		25	9.7
50	27	20,492	-61.8		25	6.7
40	26	21,882	-59.0		26	6.8
30	24	23,701	-56.4		26	8.8
25	24	24,863	-54.9		26	12.8
20	23	26,294	-53.2		27	17.3
15	18	28,157	-50.7		27	25.0
10	7	30,817	-47.3			

WINNEMUCCA, NEV.
873 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,312	-.2	-4.3	17	.8
1000						
950						
900						
850	30	1,525	1.7	-4.4	19	2.3
800	30	2,013	.2	-7.7	22	4.9
750	30	2,528	-2.5	-10.4	25	5.9
700	30	3,073	-4.9	-14.4	27	9.0
650	30	3,653	-7.7	-16.7	28	10.4
600	30	4,271	-11.3	-20.3	28	13.3
550	30	4,934	-15.0	-24.1	29	14.2
500	30	5,649	-19.3	-27.7	29	17.4
450	30	6,425	-24.3	-31.7	29	20.1
400	30	7,274	-30.3	-37.3	29	23.9
350	30	8,213	-37.1	-44.2	30	27.4
300	30	9,258	-45.3		30	28.6
250	30	10,451	-54.1		30	28.8
200	29	11,861	-59.9		29	29.7
175	29	12,694	-60.4		29	27.4
150	29	13,655	-60.7		29	24.9
125	29	14,788	-61.8		29	21.8
100	24	16,162	-63.7		29	16.5
80	25	17,534	-64.2		29	10.0
70	25	18,354	-62.8		29	7.9
60	24	19,303	-62.5		29	6.2
50	21	20,431	-62.2		30	5.5
40	14	21,813	-61.2		31	4.5
30	17	23,607	-59.7		33	4.3
25	16	24,750	-59.4		31	5.2
20	14	26,149	-58.6		30	7.2
15	11	27,973	-57.7			

WINSLOW, ARIZ.
854 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,487	-4.2	-8.9	22	.9
1000						
950						
900						
850	29	1,541	-1.9	-8.4	22	.2
800	31	2,014	2.5	-9.3	29	3.3
750	31	2,534	1.0	-12.6	30	4.9
700	31	3,087	-.9	-15.4	30	7.5
650	31	3,676	-3.8	-18.7	30	9.5
600	31	4,304	-7.0	-21.4	30	12.1
550	31	4,977	-11.4	-25.5	30	14.6
500	31	5,701	-16.4	-29.1	30	17.2
450	30	6,481	-21.7	-34.4	30	20.7
400	30	7,338	-27.9	-39.6	31	23.3
350	30	8,285	-35.5	-46.1	31	25.4
300	30	9,336	-44.1		31	29.0
250	30	10,536	-52.8		31	30.0
200	29	11,957	-59.2		31	30.5
175	27	12,797	-60.7		30	24.9
150	26	13,750	-61.3		30	22.6
125	25	14,875	-63.7		30	20.5
100	23	16,237	-66.9		30	15.4
80	23	17,584	-67.0		31	8.5
70	22	18,391	-65.7		31	7.3
60	22	19,331	-64.2		31	5.5
50	20	20,451	-62.2		31	4.0
40	16	21,847	-60.1		35	2.6
30	15	23,643	-58.1		30	3.4
25	15	24,796	-56.2		31	4.5
20	15	26,218	-55.1		29	3.5
15	14	28,074	-53.4		28	13.8
10	7	30,694	-49.4			

YAKUTAT, ALASKA
1001 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	-1.2	-4.1	09	1.3
1000	17	93	.6	-4.0	11	2.5
950	31	435	.5	-3.9	12	5.0
900	31	866	-2.3	-6.1	14	4.5
850	31	1,318	-5.2	-9.1	15	4.2
800	31	1,792	-8.2	-12.1	16	4.0
750	31	2,290	-11.1	-15.6	17	4.9
700	31	2,817	-14.3	-19.4	17	4.5
650	31	3,376	-17.5	-22.6	17	5.1
600	31	3,970	-21.4	-27.4	18	6.1
550	31	4,607	-25.7	-30.9	19	6.2
500	31	5,291	-30.5	-35.6	20	7.3
450	31	6,031	-35.9	-39.2	20	7.8
400	31	6,840	-41.9	-42.9	19	9.1
350	31	7,735	-48.2		19	9.8
300	30	8,735	-53.6		20	9.9
250	30	9,902	-55.0		22	8.3
200	29	11,340	-51.8		24	10.0
175	29	12,209	-51.1		24	10.4
150	28	13,213	-50.7		24	11.0
125	28	14,398	-51.7		25	10.7
100	28	15,841	-52.9		25	11.7
80	26	17,276	-54.1		25	12.4
70	27	18,137	-54.5		26	12.1
60	27	19,122	-55.6		26	13.2
50	26	20,290	-56.2		27	14.1
40	26	21,706	-57.4		28	14.8
30	21	23,554	-58.3		28	16.0
25	18	24,761	-56.8		28	17.1
20	18	26,170	-58.3		29	19.4
15	9	28,074	-56.3			

YAP, CAROLINE IS.
1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	14	28.0	24.1	09	3.7
1000	31	63	27.0	23.9	09	4.5
950	31	537	23.6	21.6	09	7.5
900	31	1,009	20.7	17.2	09	7.9
850	31	1,502	18.1	13.0	09	7.7
800	31	2,021	15.8	8.9	09	7.6
750	31	2,567	13.2	4.6	09	8.1
700	31	3,145	10.0	-.8	10	7.7
650	31	3,758	7.0	-4.9	10	8.5
600	31	4,412	3.2	-8.0	10	8.6
550	31	5,112	-.8	-12.1	10	8.7
500	31	5,868	-5.1	-17.3	10	9.7
450	31	6,669	-9.8	-23.0	09	9.7
400	31	7,588	-15.4	-28.5	10	10.2
350	31	8,587	-22.2	-34.4	09	9.7
300	31	9,699	-30.5	-42.3	09	7.6
250	31	10,967	-40.8	-51.3	09	6.1
200	31	12,445	-53.2		10	5.6
175	31	13,292	-60.1		10	5.4
150	31	14,237	-67.8		09	7.0
125	31	15,312	-75.6		09	9.1
100	31	16,578	-82.8		10	13.2
80	31	17,823	-80.1		10	8.0
70	31	18,589	-74.2		09	1.1
60	30	19,503	-67.8		28	3.7
50	29	20,610	-64.4		28	3.9
40	29	21,989	-60.1		27	.9
30	27	23,310	-54.4		10	6.4
25	27	24,983	-52.8		09	11.9
20	27	26,434	-49.7		09	15.8
15	24	28,328	-46.3		09	18.9
10	13	31,058	-40.9		10	22.1

YUCCA FLAT, NEV.
885 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,198	-3.3	-8.2	33	1.1
1000						
950						
900						
850	31	1,522	4.6	-7.8	35	2.5
800	31	2,014	2.8	-10.0	32	1.0
750	31	2,535	1.6	-12.6	29	3.5
700	31	3,089	-.2	-14.6	29	7.1
650	31	3,679	-3.2	-17.9	30	9.9
600	31	4,308	-6.9	-20.9	30	13.0
550	31	4,982	-11.2	-23.8	30	15.9
500	31	5,707	-16.0	-29.3	30	17.9
450	30	6,496	-21.2	-33.3	30	19.3
400	30	7,355	-27.4	-38.9	30	21.0
350	30	8,304	-34.8	-44.8	30	23.6
300	30	9,358	-43.3		30	25.0
250	31	10,561	-52.5		30	27.1
200	29	11,980	-59.8		30	28.5
175	29	12,811	-61.8		30	26.3
150	29	13,763	-62.9		30	24.1
125	29	14,883	-64.2		30	20.4
100	29	16,241	-66.5		30	15.7
80	28	17,588	-66.7		30	9.5
70	28	18,400	-64.8		30	6.3
60	28	19,343	-63.7		31	5.3
50	28	20,466	-62.4		32	2.0
40	25	21,857	-59.8		01	3.5
30	22	23,668	-58.1		01	3.3
25	22	24,819	-57.1		01	3.6
20	23	26,238	-55.3		33	4.6
15	14	28,081	-54.6		30	7.9
10	12	30,682	-53.8			

SOLAR RADIATION INTENSITIES

Tabulated in langleys per minute on a surface normal to the direction of the sun.

Date	Sun's zenith distance								
	A M				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°

[illegible]

Date	Air mass								
	[illegible]	[illegible]	[illegible]	[illegible]	*	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1.05	--	---	1.41	----	---	[illegible]	[illegible]	[illegible]
[illegible]	1.02	[illegible]	1.21	1.30	----	----	[illegible]	----	---
[illegible]	----	----	----	1.30	[illegible]	[illegible]	---	1.10	--
[illegible]	1.07	1.16	1.24	1.40	[illegible]	1.39	[illegible]	1.20	----
[illegible]	1.08	[illegible]	1.28	1.39	[illegible]	(1.40)	[illegible]	1.16	1.05
[illegible]	1.05	[illegible]	1.23	1.38	1.39	1.35	[illegible]	1.07	1.00
[illegible]	1.03	[illegible]	1.21	1.38	----	[illegible]	1.23	1.12	----
[illegible]	--	----	1.31	1.44	[illegible]	1.44	1.31	1.22	1.14
[illegible]	1.02	[illegible]	1.25	1.41	1.41	1.37	(1.26)	1.15	1.02
[illegible]	1.10	[illegible]	1.29	1.42	1.43	----	----	---	----
11	---	---	---	1.38	1.43	1.42	1.27	1.14	[illegible]
12	----	----	1.24	1.40	1.41	1.39	(1.25)	(1.13)	----
[illegible]	----	----	----	----	----	1.46	----	----	----
[illegible]	----	----	--	(1.37)	1.41	1.42	[illegible]	----	----
[illegible]	----	[illegible]	1.25	----	----	----	----	----	----
[illegible]	1.04	1.16	1.27	----	1.43	1.36	----	1.12	[illegible]
[illegible]	1.08	1.18	1.28	1.40	1.43	1.43	1.24	1.15	1.05
[illegible]	1.14	1.23	1.32	1.46	1.47	1.47	1.33	1.17	[illegible]
[illegible]	--	----	----	----	1.44	1.42	1.29	1.18	1.08
[illegible]	1.12	1.23	1.34	1.48	1.50	1.49	1.33	1.22	1.15
[illegible]	----	(1.16)	(1.30)	----	----	----	----	----	----
29	1.05	1.16	1.27	1.39	1.40	----	----	----	----
30	----	(1.09)	(1.21)	----	----	----	----	----	----
Averages	1.06	1.16	1.27	1.40	1.42	[illegible]	[illegible]	1.15	[illegible]

MAUNA LOA OBSERVATORY, HAWAII

Date	Air mass								
	[illegible]	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Dec.									
[illegible]	1.13	1.22	1.31	1.43	1.52	1.43	1.32	1.23	1.16
[illegible]	1.16	1.25	1.35	1.47	1.56	1.44	1.33	1.21	1.16
6	1.21	1.29	1.38	1.50	1.58	1.49	1.38	1.29	1.22
9	1.25	1.33	1.42	1.53	1.62	1.52	1.41	1.33	1.24
10	----	----	----	----	1.55	----	1.38	----	----
11	----	----	----	----	1.54	----	----	----	----
15	1.24	1.32	1.41	1.52	1.60	1.49	1.37	1.27	1.18
16	1.22	1.30	1.41	1.52	1.59	1.48	1.39	1.30	1.23
17	1.27	1.34	1.43	1.53	1.60	1.50	1.37	1.25	1.16
18	1.24	1.32	1.41	1.52	1.60	1.50	1.37	1.27	1.15
19	1.27	1.34	1.43	1.53	1.61	1.51	1.40	1.30	1.22
20	1.24	1.32	1.41	1.52	1.61	1.53	1.42	1.32	1.25
21	1.27	1.35	1.43	1.54	1.63	1.54	1.42	1.32	1.24
22	1.26	1.33	1.42	1.54	1.61	----	----	----	----
23	1.26	1.33	1.43	1.54	1.60	----	----	----	----
[illegible]	1.24	1.32	1.40	1.51	1.59	1.49	1.37	1.28	1.20
26	1.26	1.33	1.42	1.52	1.61	1.51	1.39	1.30	1.23
27	1.26	1.34	1.43	1.54	1.62	1.47	1.39	1.31	1.23
28	1.17	1.26	1.35	----	----	----	----	----	----
Averages	1.23	1.31	1.40	1.52	1.59	1.49	1.38	1.29	1.21

OMAHA, NEBR.

Date	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78

[illegible]

MADISON, WIS.

Date	Air mass								
	[illegible]	[illegible]	[illegible]	[illegible]	*	[illegible]	[illegible]	[illegible]	[illegible]
Dec.									
16	----	----	----	---	--	--	[illegible]	1.11	[illegible]
[illegible]	---	----	----	----	[illegible] 1.13	----	[illegible]	[illegible] 1.00	[illegible]
21	S .97	S 1.08	[illegible]	----	[illegible] 1.27	----	[illegible] 1.20	K 1.00	[illegible]
[illegible]	----	S 1.05	[illegible]	----	[illegible] 1.26	----	[illegible]	S 1.10	[illegible]
[illegible] S	1.02	S 1.12	[illegible]	---	[illegible] 1.50	---			
Averages	[illegible]	[illegible]	[illegible]	--	[illegible]	--	[illegible]	[illegible]	[illegible]

TUCSON, ARIZ.

Date	Air mass								
	[illegible]	[illegible]	[illegible]	[illegible]	*	[illegible]	[illegible]	[illegible]	[illegible]
Dec.									
1	[illegible]	----	1.27	[illegible]	1.45	1.40	1.23	1.12	[illegible]
2	----	----	----	----	[illegible]	1.40	1.26	1.14	[illegible]
3	.99	1.09	1.21	----	1.38	1.28	1.21	----	[illegible]
4	.96	1.07	1.26	1.41	1.43	1.39	1.20	1.08	[illegible]
5	[illegible]	1.02	1.21	1.37	1.40	1.32	1.13	1.05	[illegible]
6	93	1.04	1.14	1.35	1.39	1.31	1.18	98	[illegible]
7	1.06	1.16	1.29	1.43	1.47	1.42	1.24	----	----
8	----	----	----	----	----	1.36	1.16	1.04	[illegible]
9	1.00	1.11	1.24	1.39	1.43	1.39	1.23	1.10	[illegible]
10	1.10	1.19	1.30	1.44	1.47	[illegible]	1.26	1.11	[illegible]
11	1.01	1.11	1.26	1.40	1.42	1.34	1.17	1.04	[illegible]
12	.93	1.02	1.17	1.33	1.38	----	1.13	1.03	[illegible]
13	.94	1.01	1.15	1.35	1.40	1.31	1.16	1.05	[illegible]
15	91	---	1.08	1.31	1.37	1.28	1.08	97	[illegible]
16	1.05	1.16	1.29	1.38	1.46	1.37	1.22	1.06	[illegible]
17	----	1.07	----	----	1.37	1.32	1.14	1.03	[illegible]
18	99	1.08	1.17	1.30	1.31	1.31	1.11	98	[illegible]
19	97	1.06	1.20	1.36	1.36	1.23	1.09	.97	[illegible]
20	1.07	1.17	1.28	1.39	1.40	1.43	1.29	1.15	[illegible]
21	1.16	1.25	1.36	1.49	1.51	1.41	1.24	1.07	[illegible]
22	----	----	---	----	----	1.27	1.11	1.00	----
23	----	----	---	----	1.36	1.31	1.09	---	[illegible]
24	98	[illegible]	1.21	1.33	[illegible]	1.28	1.14	1.01	-
25	----	----	----	1.35	[illegible]	----	1.24	1.10	[illegible]
26	1.00	1.13	1.27	1.41	[illegible]	1.38	1.24	1.10	[illegible]
27	.99	1.09	1.22	1.38	[illegible]	[illegible]	1.23	1.11	[illegible]
28	----	1.06	----	----	----	----	----	1.07	----
29	.98	----	----	1.36	----	----	----	--	----
30	----	1.10	----	----	----	[illegible]	----	1.05	----
31	----	1.02	----	----	----	----	1.13	----	----
Averages	1.00	[illegible]	1.23	1.38	1.41	1.34	1.18	[illegible]	[illegible]

NET RADIATION

[illegible] at [illegible], Alaska

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	18	28	- 1[illegible]	16	4	21	[illegible]	- 67	- 39	[illegible]	- 5[illegible]	88	- 60	- 11	79	4	- 17	- 17	- 14	- 39	- 18	- 33	29	- 12	41	- 4	8[illegible]	- 84	- 1[illegible]	[illegible]	[illegible]	[illegible]

SOLAR ULTRA-VIOLET RADIATION DATA

[illegible]

Date. . .	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Av.
Langleys.	1.61	1.87	1.40	[illegible]	1.6[illegible]	[illegible]	5.41	3.00	1.96	7.24	1.26	[illegible].11	3.65	2.[illegible]	1.38	7.72	1.38	2.92	4.48	6.21	6.69	5.85	1.99	7.21	1.82	[illegible]	4.8[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.41

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code $xs\bar{\omega}\bar{\omega}\bar{\omega}$ defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli atmo cms.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O3

NO DATA RECEIVED

STORM SUMMARY – LATE REPORTS

FEBRUARY 1973	
Delaware	WINDSTORMS: Property - 4
Maryland	WINDSTORMS: Property - 4; ALL OTHERS: Deaths - 1; Property - 4
MARCH 1973	
Delaware	WINDSTORMS: Property - 4
Maryland	WINDSTORMS: Injuries - 2; Property - 5; HEAVY SNOWSTORMS AND BLIZZARDS: Property - 3
APRIL 1973	
Maine	ALL OTHERS: Deaths - 2; Injuries - 3; Property - 6
Maryland	TORNADOES: Number - 1; Days - 1; Damage - 4; HAILSTORMS: Property - 3; LIGHTNING: Property - 3 ALL OTHERS: Property - 4
JUNE 1973	
Alaska	None Reported
JULY 1973	
Nevada	TORNADOES: Number - 1; Days - 1; Injuries - 1; Damage - 1

CORRECTIONS

DATE	TABLE	STATE	CORRECTION
FEBRUARY 1973	STORM SUMMARY	MAINE	WINDSTORMS: Property - 4
APRIL 1973	STORM SUMMARY	DELAWARE	NONE REPORTED
APRIL 1973	STORM SUMMARY	MISSOURI	TORNADOES: Deaths - 1; Injuries - 66
APRIL 1973	STORM SUMMARY	PACIFIC AREA	NONE REPORTED
MAY 1973	STORM SUMMARY	NEVADA	NONE REPORTED
MAY 1973	STORM SUMMARY	PACIFIC AREA	NONE REPORTED
JUNE 1973	STORM SUMMARY	CALIFORNIA	NONE REPORTED
JUNE 1973	STORM SUMMARY	NEVADA	NONE REPORTED
JUNE 1973	STORM SUMMARY	PACIFIC AREA	NONE REPORTED
JULY 1973	STORM SUMMARY	PACIFIC AREA	NONE REPORTED
JULY 1973	STORM SUMMARY	SOUTH DAKOTA	TORNADOES: Deaths - 0; WINDSTORMS: Deaths - 1
AUGUST 1973	STORM SUMMARY	PACIFIC AREA	NONE REPORTED
SEPTEMBER 1973	STORM SUMMARY	PACIFIC AREA	NONE REPORTED

FLOOD STAGE DATA – LATE REPORTS

		Above Flood Stages Dates		[illegible]	
River and Station	Flood Stage Ft.	From	To	Stage Ft.	Date
East Fork Trinity:					
Crandall, Tex.	13	June 4 June 20	June 16 June 23	19.4 23.4	June 5 June 22
Wabash:					
Lafayette, Ind.	11	Nov 30	Nov 30	11.30	Nov 30

SOLAR RADIATION INTENSITIES LATE REPORTS

Tabulated in langleys per minute on a surface normal to the direction of the sun.

Date	Sun's zenith distance								
	A M				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°

MAUNA LOA OBSERVATORY, HAWAII

	Air mass								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	*	1.34	[illegible]	2.69	[illegible]
[illegible]	1.16	1.23	1.32	1.42	----	----	--	----	----
[illegible]	1.15	1.24	1.34	1.44	----	----	---	---	---
[illegible]	1.19	1.26	1.35	1.46	----	----	----	----	----
[illegible]	[illegible]	1.23	1.31	1.41	1.54	1.43	[illegible]	1.27	1.20
[illegible]	1.18	1.27	1.35	1.47	1.60	1.39	1.28	1.19	1.13
[illegible]	1.20	1.27	1.36	1.46	----	----	----	----	----
[illegible]	1.22	[illegible]	[illegible]	1.49	[illegible]	[illegible]	[illegible]	----	--
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MAUNA LOA OBSERVATORY, HAWAII

	Air mass								
1973 Sept.	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
1------	1.15	1.24	1.32	1.44	1.54	1.40	1.29	1.20	1.12
[illegible]	1.12	1.22	1.34	1.47	1.59	1.44	1.35	1.29	1.22
4------	1.22	1.32	1.42	1.54	1.66	1.48	1.38	1.31	1.23
[illegible]	1.32	1.41	1.51	1.59	1.70	1.53	1.41	1.32	[illegible]
[illegible]	1.25	1.34	1.45	[illegible]	1.70	1.55	1.43	1.24	1.27
7------	----	----	----	1.58	1.71	1.51	1.42	1.35	1.28
8------	1.31	1.40	1.50	----	----	----	----	----	----
[illegible]	1.28	1.37	1.48	1.59	----	----	----	----	---
[illegible]	1.29	1.38	1.48	1.59	1.70	[illegible]	1.42	[illegible]	[illegible]
11-----	1.33	1.43	1.53	1.65	1.72	----	----	----	----
[illegible]	1.18	1.28	1.38	1.49	----	----	----	----	----
[illegible]	1.10	1.18	1.27	1.40	1.53	1.39	1.27	1.19	1.14
[illegible]	1.19	1.26	1.35	1.47	1.59	1.45	1.36	1.27	1.21
24----	1.23	1.31	1.40	1.51	1.62	1.50	1.40	1.32	1.25
[illegible]	1.23	1.30	1.39	1.49	----	----	1.32	1.21	1.17
[illegible]	1.17	1.25	1.35	1.45	----	----	----	----	----
[illegible]	1.23	1.30	1.39	1.50	----	--	--	----	----
[illegible]	1.25	1.32	1.40	1.51	1.59	1.46	1.39	1.28	1.22
[illegible]	----	1.24	1.33	1.44	----	1.41	1.27	----	----
[illegible]	1.16	1.23	1.32	1.44	1.55	1.44	1.32	1.23	1.16
Aver- ages	1.22	[illegible]	[illegible]	[illegible]	[illegible]	1.47	1.36	1.27	1.22

Date	Sun's zenith distance								
	A M				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°

MAUNA LOA OBSERVATORY, HAWAII

	Air mass								
1973 Aug.	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
1------	1.21	1.30	1.39	1.48	1.60	1.43	1.35	1.28	1.21
2------	1.22	1.30	1.39	1.49	1.57	1.42	1.32	1.23	1.16
3------	1.17	1.26	1.35	1.44	1.54	----	1.24	1.16	1.10
4------	1.10	1.24	1.32	1.43	----	----	----	----	----
5------	1.16	1.24	1.33	1.43	1.58	1.40	1.29	1.20	1.12
6------	1.15	1.23	1.31	1.42	1.55	1.41	1.30	1.21	1.14
7------	1.18	1.26	1.35	1.45	1.57	1.39	1.25	1.14	1.06
8------	1.17	1.26	1.35	1.45	----	----	----	1.14	1.07
9------	----	---	1.34	1.46	----	----	---	----	----
12-----	1.05	1.14	1.24	1.36	----	----	----	----	----
13-----	1.08	1.17	1.27	1.38	----	----	----	----	----
14-----	1.07	1.17	1.26	1.37	----	----	----	----	----
16-----	1.19	1.25	1.33	1.43	1.53	1.37	1.25	1.18	1.09
17-----	----	---	---	--	1.51	----	----	----	----
18-----	----	1.28	1.38	----	---	----	----	----	----
21-----	1.11	1.19	1.32	1.44	----	----	----	----	----
24-----	----	----	----	---	----	1.34	1.20	----	----
25-----	1.13	1.20	1.29	1.40	1.52	1.39	1.27	1.19	1.11
26-----	1.21	1.28	1.35	1.46	1.58	1.40	1.30	1.23	1.14
27-----	1.20	1.27	1.36	1.46	1.55	1.42	1.33	1.25	1.18
29-----	---	----	----	--	----	1.40	1.30	1.20	1.15
30-----	1.23	1.30	1.38	1.48	1.57	----	--	---	----
31-----	----	----	----	1.43	1.53	1.37	1.26	1.17	1.09
Aver- ages	1.15	[illegible]	[illegible]	1.43	1.56	1.40	1.28	1.20	1.12

MAUNA LOA OBSERVATORY, HAWAII

	Air mass								
1973 Oct.	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
1------	1.18	1.26	1.35	1.46	1.56	1.44	1.32	----	----
2------	1.19	1.27	1.36	1.47	---	----	----	----	----
3------	1.19	1.27	1.36	1.47	1.56	----	1.27	1.18	1.12
5------	1.15	1.23	1.33	1.44	1.57	1.47	1.35	1.25	1.18
7------	1.19	1.26	1.36	----	1.59	1.48	1.38	1.29	1.22
9------	1.25	1.32	1.41	1.52	----	----	1.31	1.22	1.13
11-----	1.06	1.15	----	----	----	----	----	----	----
14-----	1.24	1.31	1.39	1.48	1.57	----	----	----	1.15
15-----	1.25	1.32	1.38	1.45	----	----	----	----	----
17----	1.18	1.25	1.34	1.45	----	1.43	1.30	1.19	1.09
18-----	1.27	1.32	1.40	1.49	----	----	----	----	----
19-----	1.25	1.31	1.39	1.47	----	----	----	----	----
22-----	1.25	1.32	1.41	1.52	1.60	1.47	1.37	1.28	1.20
23-----	1.24	1.31	1.40	1.51	----	----	----	----	----
25-----	1.24	1.32	1.40	1.52	----	1.50	1.35	1.18	----
26-----	1.25	1.33	1.42	1.57	1.62	1.47	1.37	1.29	1.24
27-----	1.25	1.33	1.42	1.52	1.62	1.49	1.39	1.31	1.24
28-----	1.28	1.33	1.42	1.54	1.57	1.53	1.44	1.35	1.05
29-----	1.21	1.28	1.37	1.49	1.57	1.44	1.33	1.25	1.12
31-----	1.30	1.35	1.41	1.48	1.49	----	----	----	----
Aver- ages	1.22	1.29	1.39	1.49	1.58	1.47	[illegible]	1.25	1.16

REFERENCE NOTES

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES: Dates in the table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown (See individual State publication for time of observations).

+	And also on an earlier date or dates.
D	Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch of water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA - METRIC UNITS: Data from airport unless otherwise specified.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile data can be evaluated.

B	Number of days maximum 21.1°C. or above for Alaskan Stations.
Y	Peak Gust.
+	And also on an earlier date or dates.
U	Indicates Urban site.
R	Indicates Rural site.
Ø	Station pressures apply to elevations shown in the "Elevations" table of the annual issue of this publication.

Conversion formulae to English Units are as follows:

1 foot = 0.3048 meters
°F. = $\frac{9}{5} \times {}^{\circ}C + 32$
1 inch = 25.4 millimeters
1 mile per hour = 0.447 meters per second

HEATING DEGREE DAYS: Data from airport unless otherwise specified.

U	Indicates Urban site.
R	Indicates Rural site.

COOLING DEGREE DAYS: Data from airport unless otherwise specified.

U	Indicates Urban site.
R	Indicates Rural site.

STORM SUMMARY:

°	Includes crop damage.
C	Crop damage.
*	No occurrence of storms or unusual weather phenomena reported.
@	Includes heavy sleet storm.
#	Freezing drizzle and freezing rain, commonly known as glaze.
Ø	For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
‡	No Storm Data Report received for this State.
<>	Report Incomplete.
†	Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5 Million
7	$5 Million to $50 Million
8	$50 Million to $500 Million
9	$500 Million to $5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS:

1/	Flooding continued at the end of the month.
NA	Not available.

FLOOD STAGE DATA:

#	Highest Stage Observed
1/	Continued at end of month
___	Highest Stage of Record
E	Estimated
P	Provisional (Flood Stage)
U	Unknown

RAWINSONDE DATA (Average Monthly Values):

All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon. The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors. These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

*	Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.
+	Observations for these stations are scheduled at 0000 G.C.T.
†	Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION INTENSITIES: Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

()	Clouds Present
*	Values corresponding to true solar noon
BD	Blowing Dust
BN	Blowing Sand
D	Dust
DI	Intense Dust
DM	Moderate Dust
DS	Slight Dust
F	Fog
GF	Ground Fog
H	Haze
HI	Intense Haze
HM	Moderate Haze
HS	Slight Haze
I	Intense Haze-indeterminable
K	Smoke
KI	Intense Smoke
KM	Moderate Smoke
KS	Slight Smoke
M	Moderate Haze-indeterminable
N	Sand
S	Slight Haze-indeterminable

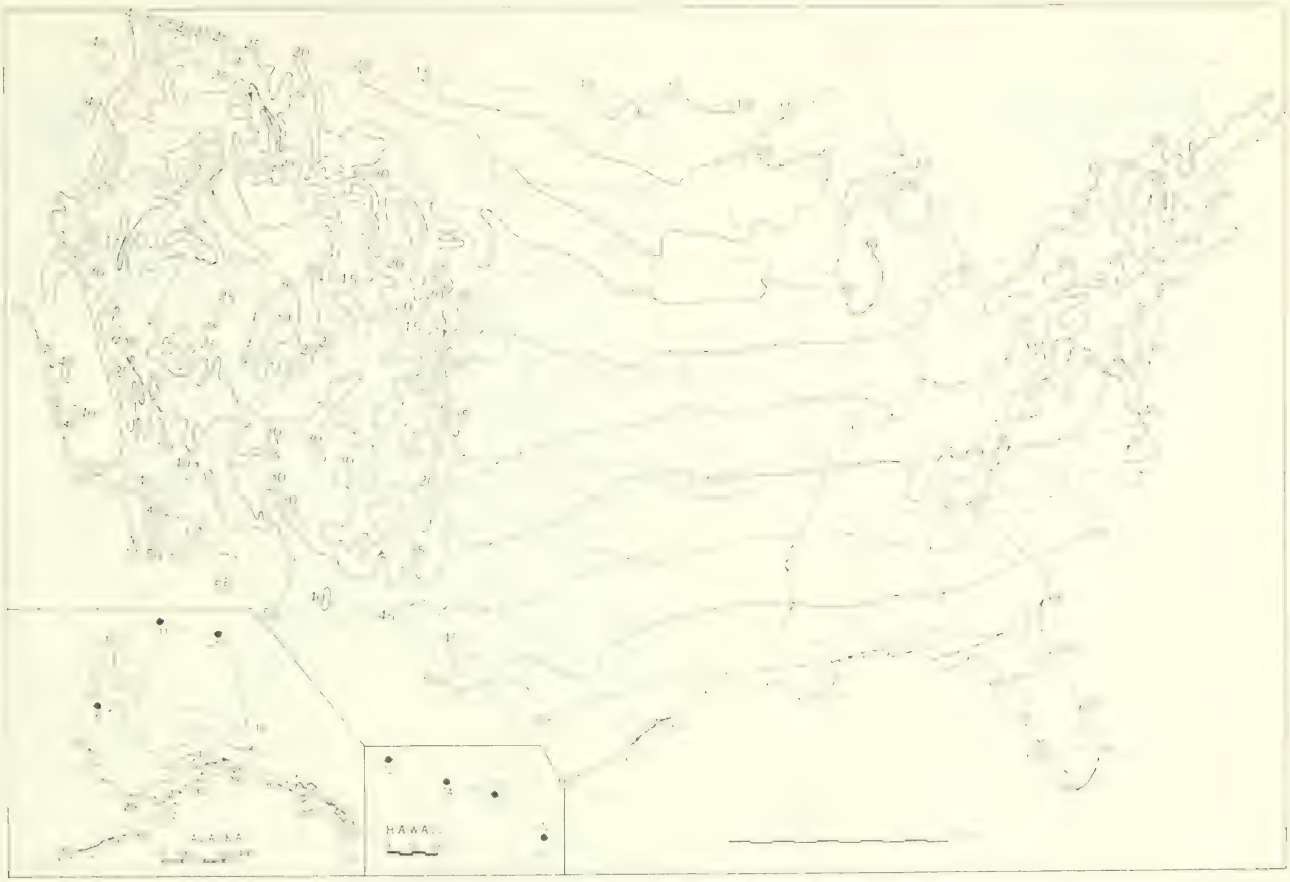
NET RADIATION: The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA: These data are from an U-V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder. This instrument has not been checked by the NOAA, National Weather Service.

TOTAL OZONE DATA: The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded $\Omega\ \Omega\ \Omega$) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λs designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), December


ALASKA
HAWAII

B. Temperature Departure from 30 - Year Mean (°F 1931-60), December 1973

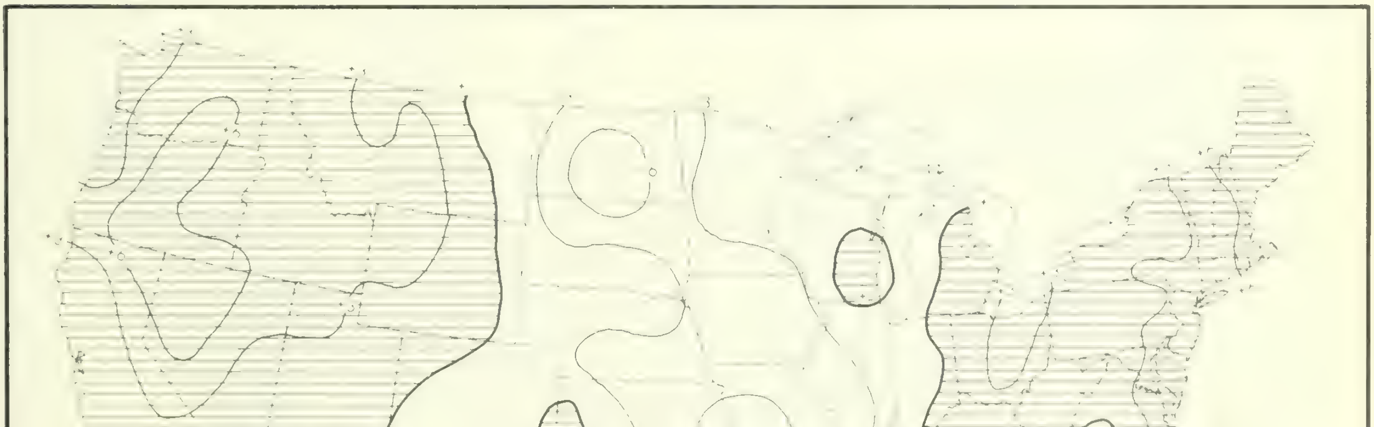
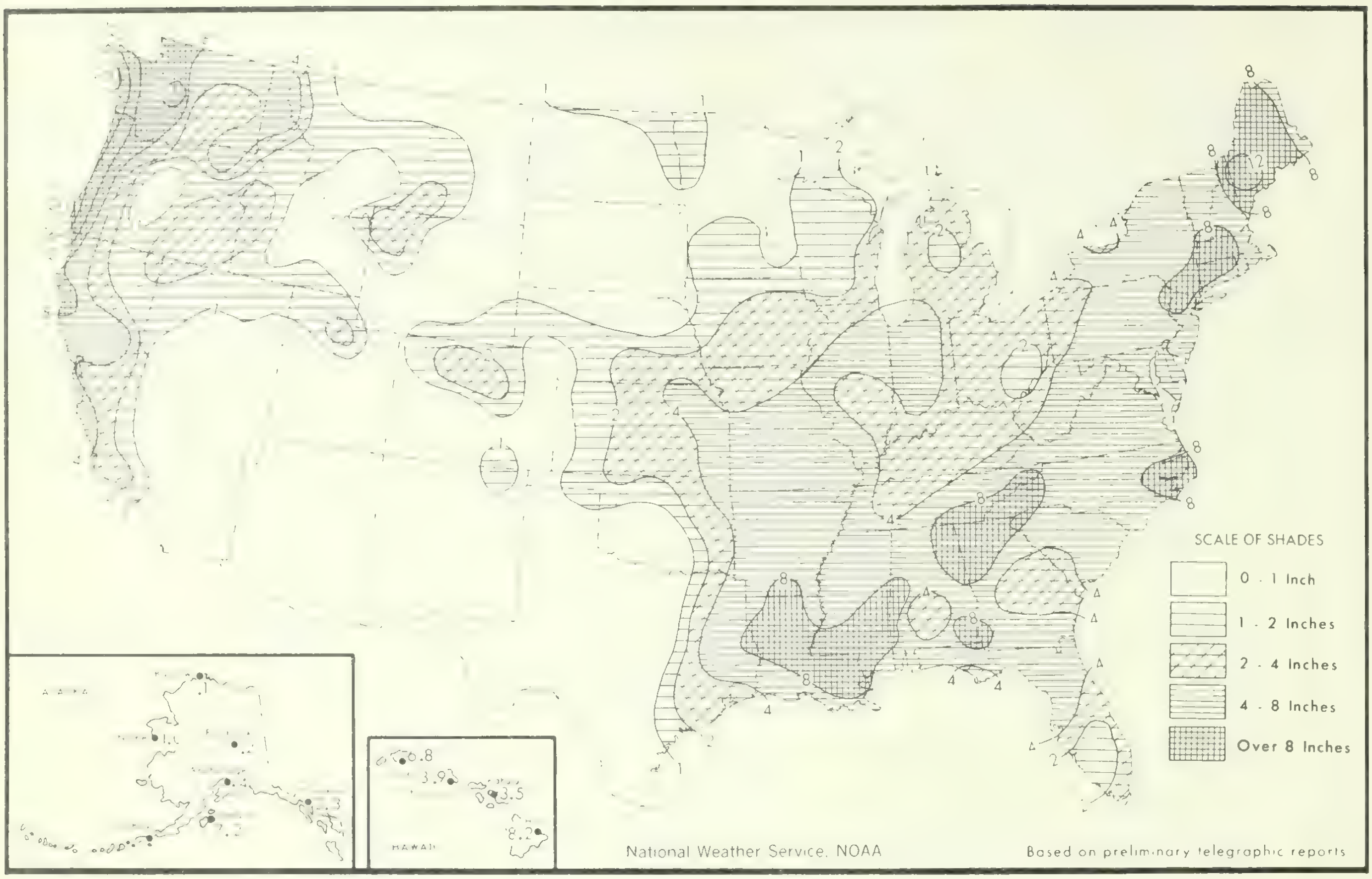

ALASKA
HAWAII
Shaded Areas Normal or Above
National Weather Service, NOAA
Based on preliminary telegraphic reports

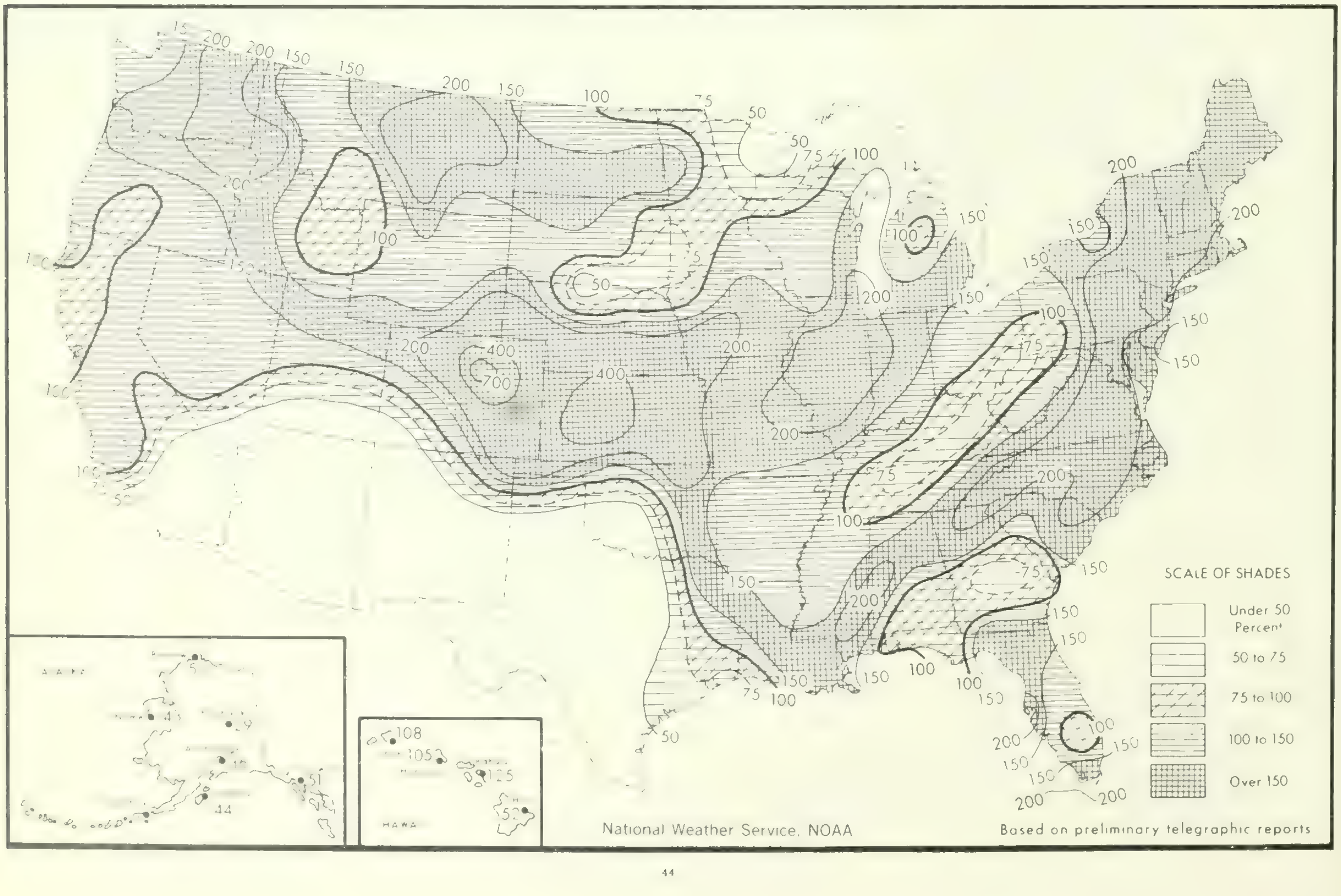
Chart II. A. Total Precipitation (Inches), December 1973


SCALE OF SHADES
0 - 1 Inch
1 - 2 Inches
2 - 4 Inches
4 - 8 Inches
Over 8 Inches
HAWAII
0.8
3.9
3.5
8.2
12
8
4
2
1

National Weather Service, NOAA

Based on preliminary telegraphic reports

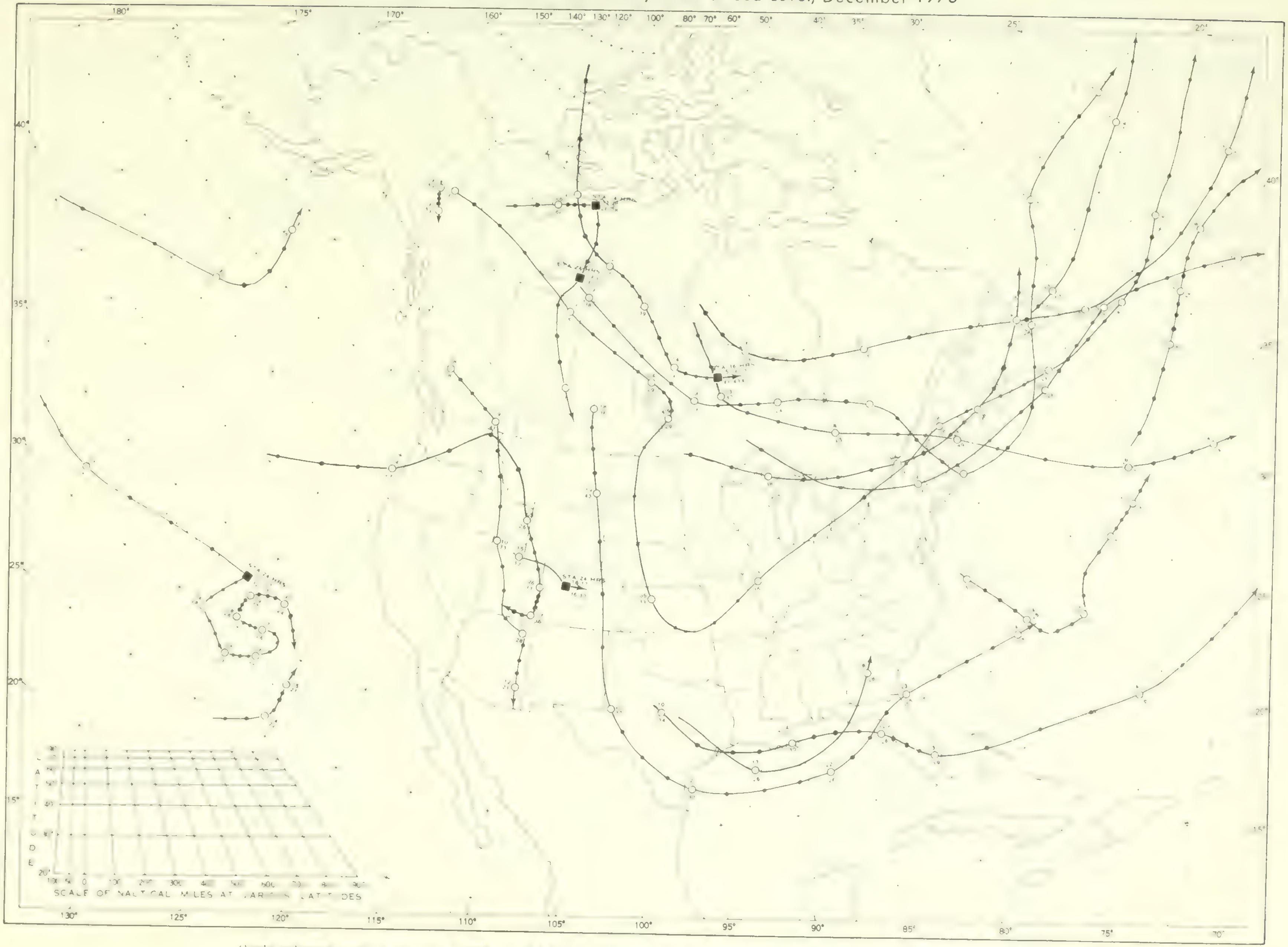
B. Percentage of Normal Precipitation, December 1973


SCALE OF SHADES
Under 50 Percent
50 to 75
75 to 100
100 to 150
Over 150
HAWAII
108
105
125
52
51
44
700
400
200
150
100
75
50

National Weather Service, NOAA

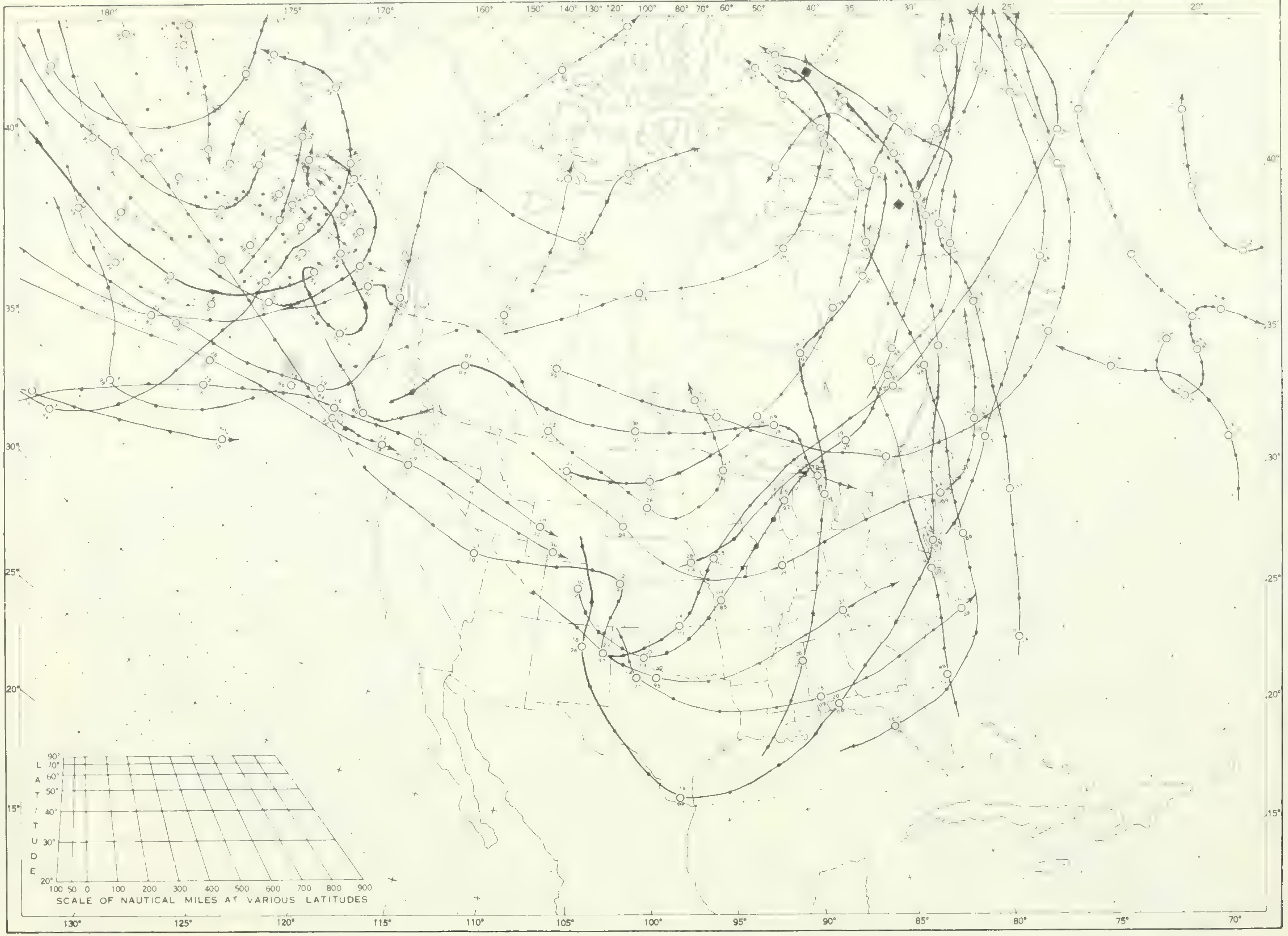
Based on preliminary telegraphic reports

Chart III. Tracks of Centers of Anticyclones at Sea Level, December 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35°
30°
25°
20°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
STA 24 HRS
LATITUDES
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, DECEMBER 1973


180°
175°
170°
160°
150°
140°
130°
120°
100°
80°
70°
60°
50°
40°
35
30°
25°
20°
40°
35°
30°
25°
20°
15°
130°
125°
120°
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
L
A
T
I
T
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D
E
90°
70°
60°
50°
40°
30°
20°
100 50 0 100 200 300 400 500 600 700 800 900
SCALE OF NAUTICAL MILES AT VARIOUS LATITUDES

Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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Environmental Data Service

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

YEAR 1973

GENERAL SUMMARY OF WEATHER CONDITIONS

Dr. Richard E. Felch, Climatologist

THE YEAR IN BRIEF: Except for the Central and Southern Plains, the Desert Southwest, and along the Pacific Coast, the Nation enjoyed a much warmer than usual year. This was due primarily to mild conditions early and late in the year.

Moisturewise, totals for the year varied from 1.89 inches at Yuma, AZ, to 101.77 at Quillayute, WA. Percentage wise, most of the departures occurred on the plus side, although significant droughts occurred during the year in many areas. Most of the Nation's midsection had 125 to 150 percent of normal precipitation. Most of Kansas had 150 percent of normal or more. Topeka, KS, received 60.89 inches, compared to a normal of 34.66. This was the greatest annual total ever received at Topeka. Other annual precipitation records included Meridian, MS, with 79.03 inches, and LaCrossee, WI, with 44.11 inches.

Significant droughts occurred during the year in both the Northwest and Southwest, although precipitation totals were near normal for the year. The Pacific Northwest region was in a very serious drought for the first 8 months of the year. A very wet fall ended the drought, but a drought situation was rapidly developing in the Southwest. The Desert Southwest had enjoyed one of its wettest springs in many years, but the year ended on a very dry note.

WINTER: After a bitter December over the western two-thirds of the Nation, which included heavier than normal precipitation, some relief occurred in January. Temperatures during January were well above normal across the northern third of the Country, but much below to the south. Much of Colorado, Wyoming, and Utah averaged 6° to 12° below normal. Frequent snows accumulated to record depths in many areas, leading to strong nocturnal radiational cooling. Grand Junction, CO, averaged 11.5° for the month, the coldest January in a 74-year record.

Over the northern Plains, one of the warmest Januarys in recent years occurred. Minneapolis-St. Paul, MN, averaged 17.4°, the warmest since 1964. Aberdeen, SD, averaged 17.0°, the warmest since 1958. On the 18th, Sault Ste. Marie, MI, reached an afternoon high of 45°, the highest January maximum in 41 years, and the fourth highest since 1888.

Most of the stormy weather in January occurred early and late in the month. The month began on a stormy note and variable weather continued into the second week. Rain fell along the Pacific Coast, snow flurries in the Great Lakes region, and a mixture of snow, sleet, freezing rain, and freezing drizzle over much of the South.

The last week of January was stormy along the Pacific Coast. Heavy snow fell from the Pecos River to the Hill country in Texas. As the precipitation spread eastward, blizzards occurred in the Great Plains, and snow fell in the Northeast.

Overall, Montana, northern Idaho, Washington, and Oregon experienced one of the driest Januarys on record. However, to the south, far wetter than normal conditions were experienced, at least in terms of snowfall. A trace of precipitation at Havre, MT, was the driest in its 93-year record. Williston, ND, received only 0.03 inches, the driest in 65 years. Pendleton, OR, received only 0.50, the driest in 12 years. However, Billings, MT, received 1.30 inches, the sixth wettest in 39 years, and Lander, WY, received 25.7 inches of snow, the second greatest in its 81-year record.

The least snowfall for January in the past 24 years fell at Detroit, MI, 2.4 inches, and Chicago, IL, 0.8 inches. A total snowfall of 0.2 inches at Milwaukee, WI, was the least in 101-year record.

February was generally drier than usual in most areas. The major exceptions were the Desert Southwest where 2 to 4 times the expected precipitation fell, parts of Iowa and Missouri, and the southeastern tier of States.

Temperaturewise, the West warmed markedly except for the Rocky Mountain States, where temperatures continued from 3° up to 9° below normal. Most eastern States were also well below normal.

The Far West was warmer than normal most of the month. The western slopes of the central Rocky Mountains were cool through most of the month. Temperatures over the Great Plains changed irregularly in response to the storms crossing them. Brisk Canadian air cooled the Great Plains at the beginning of the second week of February. The temperatures at Butte, MT, plunged to 36° below zero the morning of the 7th. Freezing temperatures reached all the way south to Mexico. Brownsville, TX, registered 26° on the 10th. Sub-freezing temperatures also reached Florida. Tallahassee registered 18° on the 12th.

The Great Plains warmed during the final week, but the South and much of the East continued cool. On the afternoon of the 22d, Bismarck, ND, reached 53°, which was warmer by 1° than the maximum at Atlanta, GA.

The heaviest rains in February fell along the Pacific Coast and over a broad area from southern Texas to New England and southward to the Gulf of Mexico. Totals were mostly a fraction of an inch from the Great Basin across the Rocky Mountains and northern and central Great Plains to the upper Great Lakes region. Many stations in the area received less than 0.25 inches of moisture in February.

A variety of winter weather covered the eastern half of the Nation in early February. The unpleasant weather dropped snow in the North, rain in the South, and freezing drizzle sandwiched in between. Cyclogenesis occurred over the eastern Gulf early on the 9th. The new storm intensified, crossed the Florida peninsula, and dropped a once-in-a-century type snowfall from Alabama to North Carolina and lesser amounts in Mississippi and Virginia. From 12 to 20 inches fell in parts of Alabama, Georgia, and South Carolina.

On February 11, a storm intensified over the Great Basin. It dumped heavy snow in the western mountains and lighter amounts in the western Great Plains. Depths of 10 to 12 inches were common along the Mogollon Rim in Arizona and 20 inches accumulated south of Flagstaff. Many mountain areas in Utah received over 2 feet of new snow and 8 to 10 inches in lower areas. As the storm moved over the Great Plains, it dumped from 6 to 10 inches from the central Great Plains to the Great Lakes. Strong northerly winds drifted the snow, hampering highway travel. As the storm continued eastward, snow, sleet, rain, and dangerous mixtures of these elements slowed travel.

SPRING: Most of the Nation experienced a wetter than normal Spring, with record flooding throughout the Mississippi River Valley and adjoining areas. The notable exception was the Northwest, where severe drought continued to develop. In addition, portions of Texas, the eastern Dakotas and southern Florida were considerably below normal.

As a whole, temperatures were below normal in most of the western half of the Nation and parts of the South, and the Appalachians. The remainder of the Country experienced above normal temperatures. However, the distribution of temperatures at various times during the period was quite different. March temperatures were exceptionally warm, while temperatures during April and May were considerably below normal.

Wet was the word to describe March precipitation patterns. Almost the entire Nation received above normal precipitation during the month. The only areas receiving below normal precipitation were the Pacific Northwest, Montana, North Dakota, northern Minnesota, parts of New England, and the southern tip of Texas. Yakima, WA, received only 0.01 inches and Havre, MT, 0.03 inches.

From two to four times the normal precipitation for March fell on the southern portions of the western Great Plains, the Desert Southwest, and portions of the South. Rains were frequent and heavy in many areas, setting new monthly records, or tying old ones. Dodge City, KS, received 8.84 inches, Alamosa, Co, 1.42; Wichita Falls, TX, 3.89; Columbia, MO, 10.09; and Madison, WI, 5.04 inches. Most of the soils in the areas receiving this heavy moisture were already saturated from plentiful moisture last fall, and at the month's end some flooding was occurring along many of the tributaries of the Missouri and Mississippi Rivers. Most of the snowcover in the northern States had already melted early in the month due to exceptionally warm temperatures.

Temperatures in March were warmer than normal over the entire Nation except for the Southwest. The Great Plains averaged 9° to 12° above normal while the South and Atlantic Gulf Coasts were generally 3° to 6° above normal. Bismarck, ND, averaged 39.4°, the warmest March since 1910. It was the earliest harbor opening since 1953 at Duluth, MN.

During early March the entire Nation was much warmer than usual except for the New England States and a few isolated areas in the western States. The northern Great Plains were 12° to 21° above normal, resulting in an early removal of existing snow cover.

Temperatures were at least 9° above normal in this area the entire month.

Temperatures during the second week of March were again warmer than normal over the entire Nation except for the Southwest. Except for a few areas along the Atlantic Coast, temperatures east of a line from Mobile, AL, to Havre, MT, were at least 9° above normal with the greatest departures over Ohio, Indiana, Kentucky, and parts of West Virginia and Pennsylvania. Temperatures were 18° to 24° above normal in this area.

Temperatures continued to average 6° to 12° warmer than usual over the eastern two-thirds of the Nation until late in the month, but the very warm pattern returned again at the end of the month.

Precipitation in April was highly variable, but generally on the heavy side, particularly along the Mississippi River, the Deep South, and the New England areas. Much of the moisture came as late snowfall, particularly over the mountains and in Iowa. Nearly 20 inches of snow fell in parts of Iowa on April 8-10 in one of the worst snowstorms on record for any time of the year. Over 8 inches of rain fell over much of the Lower Mississippi River Valley resulting in record flooding. To the north, parts of Iowa, Wisconsin, and Illinois again received more than twice the normal precipitation: LaCrosse, WI, 261 percent; Moline, IL, 353 percent; and Rockford, IL, 319 percent. On April 28, at St. Louis, MO, the Mississippi River crested at 43.4 feet, breaking the old record of 42.0 feet established in 1785. This crest came after some of the heaviest precipitation of the month which fell on the 16-22d, when a sprawling low pressure system, which extended from the Texas Gulf Coast to the Great Lakes, dropped heavy precipitation over the entire area.

Nearly all of Montana and Wyoming received from 150 to 450 percent of normal precipitation. Most of the moisture came from a snowstorm which dumped several feet of snow in many areas beginning on the 19th. This storm broke many existing records for a single snowstorm at any time of the year. For the month, Lander, WY, recorded 66.0 inches of snow, a new record. Great Falls, MT, received 21 inches in the storm on the 19th alone, a record for a single storm dating back to 1893.

Numerous precipitation records were also set in the New England area: Caribou, ME, 5.26 inches, Portland, ME, 9.90; Syracuse, NY, 6.91; Bridgeport, CT, 8.14; and Harrisburg, PA, 6.23 inches.

The West Coast was dry the entire month, with little or no precipitation. Drought conditions in the Pacific Northwest continued to deteriorate as precipitation was from 0 to 50 percent of normal. Less than 0.50 fell during April in much of this area.

With the exception of the third week of April, temperatures during the month were generally below normal over most of the Nation. Much of New Mexico and the Texas Panhandle was 6° to 8° below normal. A mean temperature of 59.7° at Tucson, AZ, was the coolest April since 1920.

Temperatures were well below normal except along the Pacific Coast, the north central States, New England, and southeastern Florida. At Yuma, AZ, 80° was reached for the first time in 1973 on April 5, a new late record. The previous record for the latest first 80° occurrence was March 14, 1891.

The month started with temperatures far below normal, particularly in the Southwest where temperatures were 6 to 12° below normal. During the week of April 9-15, winterlike conditions struck much of the Nation. The eastern half of the Nation was 6° to 12° below normal with freezing temperatures reaching almost to the Gulf. On April 11 McComb, MS, reported 30°, Birmingham, AL, and Atlanta, GA, 26°. A 24° at El Paso on the 9th marked the coldest April reading since records began in 1879.

Very mild temperatures returned to the Nation during the 3d week. Temperatures were 6° to 18° above normal in much of the Northeast. Temperatures again cooled as the month ended.

The heavy rains continued into May, with a much needed respite occurring at mid-month. As a whole, precipitation was above normal from the Mississippi eastward, while the western half of the Nation was below normal except for a narrow band extending from Iowa to Arizona.

Considerable violent weather was experienced, particularly at the end of May. Tornadoes, high winds, and torrential rains occurred in many areas. Between the 26th and 29th of May, at least 195 tornadoes occurred.

Conditions remained very dry over much of the Pacific Northwest during the entire period, prolonging the period of below normal precipitation which began last year. By May fourteen of the past 15 months at Helena, MT were below normal in rainfall.

The month began with a continuation of the heavy rains which had fallen during March and

April. The Lower Mississippi Valley, already flooded, received an additional 2 to 4 inches during the first week of May. Parts of Oklahoma, Kansas, Missouri, and Illinois, and nearly all of Iowa and Wisconsin received over 2 inches of rain, delaying fieldwork for another week.

While parts of the Corn Belt received a brief respite from the rains, violent weather continued in many areas during the second week of May. Much of the Deep South received an additional 2 to 4 inches. On the 7th and 8th a low pressure system moved across the Corn Belt. Ahead of a cold front associated with the low, violent weather struck southeast Texas, Louisiana, Arkansas, and western Tennessee. Another storm system later in the week repeated the weather of the first. When the storm finally cleared the East Coast, the first week of really clear, dry weather in many months covered the Nation's midsection.

Except for some rainfall over the Rockies, the western two-thirds of the Nation received virtually no rainfall during the week ending May 21. The remains of the previous storm dropped heavy rains on portions of the East Coast early in the week, but once it cleared the entire Nation was dry.

The last decade of May was again wet in many areas. Heavy rains fell over the Upper Mississippi Valley and the Ohio River southward to the Gulf with a slightly drier area between. A large low pressure system over Canada brought cold to much of the Nation over the Memorial Day weekend. Violent weather in the South caused several deaths. On the 26th some 40 tornadoes were reported, mostly in Oklahoma, Kansas, Missouri, Arkansas, and Florida.

From the Rockies eastward, temperatures were below normal for the month, while to the west, temperatures were 3° to 6° above normal. Temperatures were generally below normal during the first week of May over the entire Nation. The only exceptions were the New England area and parts of the California coast. Temperatures in most areas were 3° to 6° below normal, with the Rocky Mountain area 6° to 9° above normal. Stockton, CA, averaged 71.3°, a new high record for May.

Most of the Nation's midsection and the Northwest continued below normal as the result of a large high late in the second week. Warmer than average temperatures prevailed over most of the East and West Coasts, the Gulf areas of the Deep South, and the Southwest.

The middle week brought both extreme warmth and cold, depending on which half of the country one lived. From the Rockies westward, temperatures were generally 3° to 12° above normal, while to the east, temperatures were 3° to 12° below normal.

As the month ended, temperature variations were large, with conditions generally averaging below normal.

SUMMER: Rainfall during the summer season was generally normal to above east of the Mississippi, but generally below normal to the west. The most notable exceptions in the west occurred over eastern Nevada and northwestern Utah and most of Texas. San Antonio, TX, received 18.64 inches, which was 250 percent of normal. The greatest rainfall over the 3-month period was 37.50 inches at Charleston, SC.

The generally wet conditions of spring continued through much of the Nation during the beginning of summer and did not begin to fall off until August. For example, most of eastern Texas had twice its normal rain during June and July but fell below average only in August, resulting in a season much wetter than normal. The summer ended with many drying areas in the country. Southern New York, Pennsylvania, eastern Ohio, Maryland and northern Virginia and eastward to the coast all averaged below normal rain -- some of these areas, as little as half the average amount.

The areas that were already experiencing drought conditions at the beginning of summer saw a persistence of that condition as rainfall continued far below normal and the drought became worse. Northern California, Oregon, Washington, northern Idaho, western Montana, central North and South Dakota all had less than half the normal amount of rain and many gauges recorded nothing for the period.

Most of the Corn Belt States, western Ohio, Indiana, all but southern Illinois, and eastern Iowa, had above normal rain for the period.

Some corn-producing areas did have a dry spell during the initial silking stage but the excess subsoil moisture seemed to have enabled the deeprooted corn to fare well.

The western and northwestern drought area experienced a continual danger from forest fires. As many as 14 major fires were burning at one time.

The average temperature for the summer season varied but warmer than normal areas were somewhat more predominant. The Northeast and North Central States were above normal, with highest departures being 3° to 4° in New England and around Lake Michigan. Other areas that averaged warmer than normal for the season were the Gulf Coast, with maximum departures 2° from Mobile to New Orleans, and the mountain areas where the drought dominated and departures were 2° to 4° above normal. Great Falls, MT, hit 105° on July 10 parching the already dry area. These areas were above normal in each of the three summer months.

Summer mean temperatures were below normal in Texas and westward to eastern Arizona and northward through Oklahoma, Missouri, western Arkansas, and eastern Kansas. Wyoming and southern Montana were cool. The southeastern States were below normal with the greatest departure being centered in northern Alabama and Georgia.

The distribution of precipitation during June was highly variable. West of a line from El Paso, TX, to Saginaw, MI, precipitation was below normal except for a portion of northern Wisconsin, northern Montana, the coasts of Oregon and Washington and much of New Mexico, eastern Arizona, western Colorado, southern Utah, and eastern Nevada. Albuquerque, NM, received 1.37 inches or 233 percent of normal. To the east, precipitation was above normal except along the Lower Mississippi River Valley and much of Mississippi and Alabama. Much of Florida also received below normal precipitation. The northern Appalachians and adjoining areas were also below normal. The Pacific Northwest drought continued. Lewiston, ID, received 0.24 inches, the driest June on record, and Pendleton, OR, 0.15, the second driest on record.

After a very wet spring, parts of the Plains turned exceptionally dry. Records for June included 0.64 inches at Rapid City, SD, 0.81 at Madison, WI, both the driest on record. Record heavy rainfall fell in parts of the Northeast: Columbus, OH, 8.77, second wettest ever; Burlington, VT, 7.69, second wettest ever; and, Columbia, SC, 14.81, wettest on record.

The month started clear and dry. During the first full week the western third of the Nation received virtually no precipitation. Thunderstorm activity brought 2 to 4 inches of rain to parts of the Corn Belt, the Deep South, and eastern Texas. Much of this activity was associated with a slowly moving cold front which took almost a week to move across the eastern half of the Nation.

Rainfall was more general at midmonth with excessive amounts in Texas, Georgia, and South Carolina. Charleston, SC, received 11.30 inches of rain during the week ending on the 17th, while Houston, TX, received 9.95 inches.

Heavy rains continued in many areas during the next week, associated mainly with thunderstorm activity. Virtually no rain fell in the West while south Texas and the Carolinas received 4 inches or more. On the 18th, Quincy, IL, received 5.26 inches of rain.

The month ended with dry conditions in the West and heavy rains in many portions of the eastern half of the Nation. The Mississippi River was bank-bound along its entire length for the first time since early March.

Except for an area over the Dakotas and Nebraska, temperatures for June averaged above normal for the northern two-thirds of the Nation. From Arizona westward, temperatures were below normal in the South except for southern portions of Mississippi, Alabama, and Florida. Most of Texas averaged 3° to 5° below normal.

Temperatures during the month were highly variable. The month began on the cool side, but quickly turned warm as a large high over the Southeast brought unseasonably warm temperatures to much of the Nation. Only Texas and adjoining States remained below normal.

At midmonth temperatures continued above normal east of a line from Louisiana to Montana, while temperatures were below normal over the western States.

A slowly moving cold front during the week ending on June 24 brought cooler temperatures to much of the Nation except for the western states and much of New England. As the month ended this cold air mass continued to keep the eastern half of the Nation cool, but temperatures were above normal from the Rockies westward.

During July, precipitation was generally above normal from the Rockies to the Appalachians, with virtually no precipitation to the West and generally below normal precipitation along the eastern seaboard. Actual totals ranged from nothing over much of the western third to over 8 inches in parts of Iowa, Missouri, and Kansas. Some records included 5.16 inches at Alpena, MI, wettest July ever; Fort Worth, TX, wettest ever with 11.13; and, Lewiston, ID 0.01, the driest since 1953. The first week of July was on the dry side, but heavy thunderstorms in some areas produced heavy rains and violent weather. On the 2d, 16 tornadoes struck South Dakota, Minnesota, and Nebraska. Hailstones 1 inch in diameter and winds up to 100 m.p.h. also struck Nebraska. The heaviest rains of the month came at mid-month. Along the Kansas-Nebraska border 6 inches or more fell, with an area stretching from Wyoming to the Appalachians receiving 2 inches or nore. This heavy moisture was triggered by thunderstorm activity along a cold front extending from a low located over the Hudson Bay. Thunderstorm activity continued to be the major source of rainfall as the month ended. Scattered but intense thundershowers struck from the Rockies to the East Coast. Heavy rains struck Appalachia and the Deep South on the 26th. Millington, TN, received 2.01 inches in an hour, Chattanooga had 1.99 inches of rain, while Macomb, MS, got 1.44 inches. The Pacific Northwest continued to be very dry. Rainfall has been below normal for well over a year in many areas.

Temperatures over the Nation as a whole were about normal in July, with cooler than normal conditions in the Nations midsection and above normal temperatures to the east and to the west. The month began with a traditionally hot week of the 4th. Independence Day itself was hot and clear in most parts of the Nation except where thunderstorm activity occurred locally. On the 6th Rapid City, SD registered 110°; Valentine, NE, 106°; and Denver, CO, 103°; the latter a record for July. Temperatures for the week averaged 3° to 6° above normal over much of the Nation. The remainder of the month was generally below normal over the Rockies and Great Plains, with above normal temperatures confined to the West and eastern parts of the Country. Several record highs and lows were recorded as large variations in temperature occurred. On July 10 the Atlantic City airport registered a record 92°, and Great Falls, MT, hit 105°. Just two days later record lows were observed in these same areas as a large high brought cool air to the Nation's midsection. Record lows on the 12th included Bradford, PA, 33°, Baltimore, MD, 54°, El Paso, TX, 59° and Cleveland, OH, 48°. The same distribution of temperatures occurred through mid-July. Temperatures averaged 6° to 9° below normal over a six-State area during the week ending on the 22d. Above normal temperatures continued to plague the droughty Northwest, which received virtually no July rainfall.

August rainfall was below normal except for a few scattered areas. Notable areas above normal include: New England, the Ohio River Valley, the southeastern Seaboard and Florida, southern Texas, Minnesota and Wisconsin and a narrow area extending from Oklahoma through Utah and Nevada. Rainfall amounts in the last area, however, were generally small. While Reno, NV, received over 200 percent of normal, that resulted in only 0.48 inches of rain. Duluth, MN, received 8.46 inches and the second greatest on record. Record low totals included 0.09 inches at Scottsbluff, NE, and a trace at Phoenix, AZ.

August began with the most heavy precipitation in New England and along the Atlantic Coast, although some scattered thunderstorms occurred over the rest of the Nation. The Passaic River brought death and destruction when it reached record heights at Chatam, NJ. Thunderstorm activity was locally heavy, for example, Florence, SC, had 5.54 on the 3d.

A slowly moving front brought thundershowers to the Nation's eastern half during the week ending on the 12th. One storm dumped 2.10 inches of rain at Randolph, IA, in 45 minutes; another, 2.81 inches at Baileyville, KS, in 1½ hours.

At midmonth, the western half was dry, with thunderstorm activity in the east. During the last decade of the month, the weather was dominated by a massive high located over the Southeast. Rainfall was spotty during the week of the 20th; the Gulf States, the southern Great Plains and Texas received no rain. Rainfall was associated with thunderstorm activity: Peterson, IA, had 9.61 on the 22d, 8 inches of it in 6 hours, and Sheldon measured 5.50 inches. Shower activity was heavy at month's end along a slowly moving cold front located over the Dakotas and Wyoming.

Temperatures in August across the Nation mostly averaged above normal, but below normal temperatures occurred in the south-central and southeastern States, and along the Pacific coast. Monthly averages included 68.2° at International Falls, MN warmest on record, and 59.5° at Olympia, WA equaling coldest on record.

Average temperatures varied greatly. August began with subnormal temperatures except along the coasts and the Pacific northwest, but ended with an intense heat wave which roasted areas from the Rockies to the Atlantic.

The month began with a large Canadian high bringing cool, dry air southward to the Gulf, setting many record lows: Omaha, NE, 53° on the 2d; Fort South, AR, 57° on the 3d. As the high moved eastward, temperatures warmed markedly, but a second cold air mass kept temperatures below normal over the Rockies and Plains States for the third consecutive week. Temperatures averaged 3° to 6° below normal in much of this area, while from the Mississippi eastward and over the western mountains they were 3° to 6° above normal.

The midmonth temperature pattern reversed itself except over the western mountains, the Atlantic Coast, and New England. A large high over the northern Appalachians brought warm air as far north as the Dakotas and Canada: Philip, SD, 105° and, Glasgow, MT, 102°. Starting on the 16th Dakotans endured extreme temperatures for several days.

The Plains continued above normal through the rest of August; temperatures averaged from 6° to 16° above normal across the northern Plains, the Corn Belt and southern Kentucky-Virginia northward. A large high over the southeast pumped hot, humid air northward. In the Upper Great Lakes area, temperatures averaged 16° above normal. Milwaukee, WI weathered its hottest day in 18 years with a record 99° on the 27th; Bismarck, ND hit 107°, and Pierre, SD 110°. Meanwhile, temperatures over the far western States averaged 3° to 6° below normal as cool Canadian air moved southward. However, the large high over the southeast blocked the cooler air's eastward advance.

FALL: The Atlantic Seaboard and the Southwest were generally below in precipitation during the fall months, while the remainder of the Nation received above normal precipitation. The drought in the Pacific Northwest finally broke as good rains began to fall there. However, a drought situation n began to develop in the Desert Southwest.

Temperatures over the eastern half of the Nation averaged warmer than normal during the fall months, but below normal over the western half.

September precipitation was considerably above normal over most of the Plains States with rainfall amounts generally normal to below normal over the eastern third of the Nation. Much of the above normal precipitation, particularly in the southern Plains, was associated with tropical storm Delia. During the month Lake Charles, LA, received 19.96 inches, Alexandria, LA, received 9.53 inches, the greatest since 1913. Particularly large amounts in the western States included 4.68 inches at Lander, WY, the wettest since 1923; Salt Lake City, Utah received 4.07 inches, the wettest September since 1874.

Tropical storm Delia came ashore near Galveston, TX on the 3d, meandered in the areas for several days and finally moved northward up through Missouri and Iowa before breaking up. By the time the storm had cleared away, over 9 inches had fallen in the Port Arthur, TX area, and over 6 inches had fallen in surrounding areas.

Most significant rainfall during the remainder of the month was associated with thunderstorm activity which was very active. At midmonth, two distinct storm systems brought heavy rainfall to the Gulf Coast and the Great Plains. From 2 to 6 inches fell along the Gulf Coast and upwards to 2 inches fell over most of the Great Plains. Heavy rains also caused flooding and some damage in the Carolinas where over 6 inches fell in some locations.

The month ended very wet, as a slowly moving cold front dumped monsoon-like rains on the Nation's midsection. Considerable violent weather was associated with the front -- 20 tornadoes touched down in Kansas in a single afternoon. By the end of the month, Topeka, KS, had received over 46 inches of precipitation so far in 1973.

Temperatures averaged cooler than normal during September in the western half of the Nation, but were warmer than normal in the eastern half. The greatest departures in the West occurred over the Rocky Mountains and the western Plains. Goodland and Concordia, KS, and North Platte, NE, all averaged more than 5° below normal. In the East the greatest departures occurred down through the Ohio River Valley, western Kentucky and Tennessee and southeastward through Georgia to the Atlantic and Gulf Coasts.

This same pattern was apparent as the month began with the greatest departures occurring in the Oklahoma and Texas Panhandles where temperatures were 9° below normal. At the same time, temperatures in the Pacific Northwest and New England were running 3°to 6° above normal. Temperatures had been running much above normal over the East for several days and the extreme heat finally broke with the passage of a long delayed cold front. By the end of the first decade, temperatures were considerably below normal over nearly the entire Nation.

This change in temperature conditions proved to be the pattern for the next two weeks as the Nation continued to be much cooler than usual. By the end of the second decade, frost had occurred through most of the northern tier of States. Temperatures over the northern Plains averaged 6° to 9° below normal during most of the period.

The month ended with temperatures above normal over the eastern half of the Nation, the northern Rockies and the Pacific Coast, but much below normal over New England and most western States.

Precipitation during October was mostly above normal over the central United States and the Pacific Northwest. Large areas in the Corn Belt and in east Texas and Arkansas received twice the normal rainfall for October. Some Texas totals included Waco with 9.36 inches, a new record, Houston with 9.31, the greatest since 1957, and Corpus Christi with 9.95 inches, the second greatest on record.

Areas receiving less than normal precipitation included the Atlantic States, the extreme northern Plains, and most of the Southwest. It was the driest October in over 10 years in the Southeast. Lakeland, FL, recorded 0.11 inches, the least on record. Cape Hatteras, NC, received 1.34 inches, the driest since 1941.

Most of October's precipitation fell during the first 2 weeks. Torrential rains during October 8 to 14 drenched a strip stretching from Texas to Minnesota with 2 to 6 inches. These wet conditions through midmonth delayed winter wheat seeding in the southern Great Plains for the fifth straight week, and also halted the Texas cotton harvest for the third week.

The third week of October turned sunny and dry almost everywhere except for heavy rains in East Texas, Arkansas, and Mississippi. The sunny, dry weather continued over the Nation's midsection until the end of the month when numerous thunderstorms and showers broke out from east Texas to Michigan. The two weeks of clear autumn weather permitted rapid harvest progress through the Corn Belt. Rains caused some interruptions in the Northwest, but greatly benefited small grains and pastures.

The last week in October brought joy to skiers and other snow lovers as snow accumulated in the northern Rockies, the northern Plains and eastward into New York.

October temperatures averaged near or slightly above normal over the entire Nation. Most of the Corn Belt and Lower Mississippi River Valley averaged 3° above normal. The upper Great Lakes and northern Great Plains were also unusually warm. International Falls, MN, averaged 47.7°, and Rochester, MN, 53.9°, both the warmest October since 1963.

Warmer than normal temperatures were persistent throughout most of the month in most areas. The month began with below normal temperatures restricted to the Pacific Northwest, California and Nevada, and parts of Arizona, New Mexico, Kansas, and Nebraska. The Pacific Northwest averaged 6° to 9° below normal for the first week. The pattern generally persisted during the second week of October, but the extremes were intensified. West of the Continental Divide, temperatures were generally 3° to 6° below normal, while to the east temperatures were far above normal. Most of the Corn Belt and the Deep South averaged 6° to 12° above normal.

During the third week of October, the temperature patterns reversed themselves, with the eastern States below normal, and the Plains westward were warmer than normal. Several record highs were set in the Southwest. Except for parts of the Far West, the Nation ended the month well above normal.

The month of November was extremely variable for both temperature and precipitation. The entire East Coast was well below normal in precipitation. Virtually no rain fell over most of Texas and New Mexico. Meanwhile, much of the South, the Ohio River Valley, Arizona, and the entire Pacific Northwest received over twice the normal rainfall. Over 8 inches fell in Arkansas, western Tennessee and Kentucky, and southern Missouri. From 2 to 8 inches fell in the Pacific Northwest, helping to alleviate and break the drought there. Kalispell, MT, received 2.80 inches, the wettest November since 1959; 4.13 at Walla Walla, WA, was the second greatest on record. Other records in the area included Salem, OR, 15.23; Eugene, OR, 20.48; Eureka, CA, 16.58; Oakland, CA, 7.42; and San Francisco, 7.80 inches.

Much of New England was quite dry. Concord, NH, measured 1.82, and Boston, MA, 1.74, both the driest since 1952.

The heaviest rains in most areas fell early and late in the month, except along the Pacific Coast where they were a daily nuisance. The first major snowstorm of the season occurred on the 2d, dumping 7 to 10 inches over Montana, Wyoming, and Colorado.

During the week ending on the 25th, a series of rapidly moving cold fronts brought heavy rainfall to the central tier of States; 9.92 inches at Ft. Smith, AK. Over 6 inches fell in parts of Oklahoma, Missouri, and Arkansas. Rainfall was heavy from east Texas to western Pennsylvania. Flood stage was reached at Cairo, IL, on the 30th. This was the first November flood on records which date back to 1871.

Temperaturewise, November began much colder than usual, ended unusually warm, and experienced very marked variations in between. Overall, the Nation was generally warmer than normal except for the northern Rockies and Great Plains, California, and parts of New England and Florida. Glasgow, MT, and Williston, ND, averaged 21.3° and 20.2°, respectively, the coldest November since 1955 at both locations. It was the warmest November on record along the Texas-Louisiana coast. New records included the following: Corpus Christi, TX, 72.9°; Galveston, 70.4: New Orleans, LA, 66.6°; and Mobile, AL, 63.3°.

The first decade was generally below normal except in the Deep South and Southwest, and the eastern tier of Atlantic States and New England early in the period. Many record lows occurred in Idaho and Montana where temperatures averaged 12° to 21° below normal for the period. A great contrast existed during the week ending the 11th. The entire Southwest, northward to the Montana border, averaged 6° to 12° above normal while northern Montana averaged 21° below normal.

Midmonth found the entire Nation well above normal with many areas 6° to 12° above. Temperature records were shattered all through the Northeast. The eastern half of the Nation continued very warm through Thanksgiving week, but the West turned very cold.

The month ended on a warm note over the entire Nation. On the 28th, record highs occurred at several locations in the East: Norfolk, VA, 83°; Washington, DC, 74°; Rochester, NY, 67°.

Total precipitation during December was highly variable, ranging from over 20 inches along the Washington-Oregon Coast to no precipitation in much of Arizona, New Mexico, and Texas. Many new precipitation records were established: Caribou, ME, 7.97 inches, Pendleton, OR, 4.68.

Precipitation during the first decade was light to moderate in most areas except from Iowa to the Gulf and along the Atlantic Seaboard where 2 inches or more fell. A large low developed on the 3d, bringing severe weather to most of the Nation's midsection. Snow and sleet, driven by high winds, blanketed the Central Plains. To the east, 84 m.p.h. winds were measured at Carbondale, IL. Most of the heavy rain along the coast was associated with a large storm which moved northward as the decade ended. Heavy rain fell from the Carolinas to New England, with snow over the Appalachians.

The period from the 10th to the 15th was fairly dry, but two major storms developed during the following 5 days bringing heavy precipitation to the eastern half of the Nation. On the 15th-16th, a low pressure system moved up the Atlantic Coast bringing heavy rain to much of New England. Washington received 10 inches or more of snow. A second storm paralyzed traffic in the Central States.

The month ended relatively dry except in the Southeast and parts of California. From 1 to 4 inches fell from Louisiana to Tennessee and Georgia.

The eastern and western third of the Nation averaged warmer than normal in December, while the central third was below normal, particularly over the northern Plains and western Corn Belt. It was one of the warmest Decembers on record in parts of New England and the Northwest. Caribou, ME averaged 23.9°, the warmest on record.

The first decade was much warmer than usual in the East and Northwest. Temperatures averaged 6° or more above normal northeast of a line from Wilmington, NC, to Chicago, IL. Burlington, VT, was 14° above normal during this period. Record highs were experienced in many eastern cities on several days during this period as a large high off the Atlantic Coast pushed warm air northward.

During the second decade the cold hand of winter took hold over the Nation except in the West and parts of New England. The freeze line dropped well into Texas and Florida during the period as two distince cold waves affected the areas. Initially two lows over the Great Lakes and eastern Canada teamed up to push cold air to the Gulf. These storms were replaced by a massive high which extended from Canada into Mexico, bringing frigid Artic air southward. Early morning lows on the 21st included 26° at Mobile, AL, 24° at Lake Charles, LA. The next morning Corpus Christi, TX, reached a record-breaking 18°, the coldest December temperature ever recorded there.

Temperatures warmed markedly during the final decade of December, and the year ended with much warmer than usual weather across the Country except for the central and northern Plains. Overall, December favored the heating fuel situation as the most heavily populated areas averaged much above normal most of the month.

MAXIMUM SHORT DURATION PRECIPITATION

YEAR 1973

This table contains statistics of maximum amounts of precipitation during the calendar year indicated. Data presented are from stations equipped with recording gages. Stations are at airport locations unless otherwise noted.

Beginning with data for 1973, only the maximum amount of precipitation that occurred during the month for each of the 12 time periods shown were determined. These amounts may or may not be at the threshold intensities previously used for determining excessive precipitation, and may be from different storms.

The ending time and date is included in the table for each monthly maximum amount except in cases of zero and trace events. Maximum amounts for the year with month of occurrance are also indicated for each of the 12 time periods.

Publication of Data: A summary of maximum precipitation data for the years prior to 1896 was published in the annual report of the Chief of the Weather Bureau for 1895-1896. Excessive precipitation data for the period 1881-1896 were published in the annual report of the Chief of the Weather Bureau 1896-1897. Data for the years 1897 through 1934 have been published in the appropriate annual reports of the Chief of the Weather Bureau. For the years 1935 through 1949 these data were published in the appropriate issue of the United States Meteorological Yearbook. The annual issues of this publication present Excessive Precipitation each year 1950-1972 and Maximum Precipitation for 1973 and succeeding years.

MAXIMUM SHORT DURATION PRECIPITATION

MAXIMUM SHORT DURATION PRECIPITATION

FORT SMITH, ARKANSAS

JAN	[illegible]	[illegible]	[illegible]	.21	.32	[illegible]	.43	.52	.58	[illegible]	[illegible]	.78
DATE	[illegible]	[illegible]	[illegible]	31	31	[illegible]	3	[illegible]	[illegible]	31	21	21
TIME	[illegible]	[illegible]	[illegible]	2043	[illegible]	2045	2047	[illegible]	2133	[illegible]	2205	2221
FEB	[illegible]	[illegible]	[illegible]	.11	.11	[illegible]	.14	.17	.22	.25	.31	.37
DATE	[illegible]	[illegible]	07	07	07	[illegible]	07	07	07	07	07	07
TIME	[illegible]	[illegible]	[illegible]	1037	[illegible]	[illegible]	[illegible]	[illegible]	1500	[illegible]	1615	[illegible]
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.51	[illegible]	.83	[illegible]	1.08	[illegible]	1.20
DATE	[illegible]	24	[illegible]	13	[illegible]	24	[illegible]	[illegible]	[illegible]	[illegible]	11	11
TIME	[illegible]	[illegible]	1925	[illegible]	1955	2000	[illegible]	0315	[illegible]	0350	[illegible]	0355
APR	[illegible]	[illegible]	[illegible]	.38	.55	.73	.82	[illegible]	[illegible]	1.10	1.15	1.25
DATE	[illegible]	[illegible]	[illegible]	15	[illegible]	15	[illegible]	[illegible]	15	15	15	[illegible]
TIME	[illegible]	[illegible]	1838	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1838	[illegible]	[illegible]	[illegible]
MAY	[illegible]	.25	[illegible]	[illegible]	.52	[illegible]	.58	.64	.73	[illegible]	.80	.85
DATE	[illegible]	[illegible]	[illegible]	23	23	[illegible]	[illegible]	23	[illegible]	23	07	06
TIME	[illegible]	[illegible]	0319	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0319	[illegible]	0130	2340
JUN	[illegible]	[illegible]	.32	.35	[illegible]	[illegible]	1.00	[illegible]	1.28	1.37	1.55	[illegible]
DATE	[illegible]	02		02		03	[illegible]	03	[illegible]	[illegible]	03	03
TIME	[illegible]	2250	2250	[illegible]	0050	0050	0050	0050	0050	0050	0050	0050
JUL	.15	[illegible]	[illegible]	[illegible]	[illegible]	.54	.56	.57	[illegible]	.57	.57	.57
DATE	[illegible]	[illegible]	15	15	[illegible]	[illegible]	15	[illegible]	15	15	15	[illegible]
TIME	[illegible]	[illegible]	1410	1410	[illegible]	1410	1410	1410	[illegible]	[illegible]	[illegible]	[illegible]
AUG	[illegible]	[illegible]	[illegible]	.09	[illegible]	[illegible]	[illegible]	.11	.13	.15	.16	.17
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	10	10	10
TIME	[illegible]	[illegible]	2210	[illegible]	[illegible]	2210	[illegible]	2210	2210	2210	2210	2210
SEP	.16	[illegible]	[illegible]	.50	.51	.52	.53	.64	.82	[illegible]	.92	[illegible]
DATE	[illegible]	27	[illegible]	[illegible]	27	27	27	27	27	27	28	28
TIME	[illegible]	[illegible]	0547	[illegible]	0547	0547	0547	[illegible]	[illegible]	0547	[illegible]	0407
OCT	[illegible]	[illegible]	.40	[illegible]	[illegible]	.58	[illegible]	.69	.72	.80	.85	[illegible]
DATE	[illegible]	11	[illegible]	[illegible]	11	[illegible]	[illegible]	13	13	13	13	[illegible]
TIME	[illegible]	0917	[illegible]	[illegible]	0917	0917	0000	[illegible]	[illegible]	0000	0000	[illegible]
NOV	.25	.57	.70	[illegible]	[illegible]	1.55	1.80	1.90	[illegible]	1.95	2.00	2.10
DATE	23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24	[illegible]	24	[illegible]	24	24
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1400	1345	1400	1415	1440	[illegible]	1530	[illegible]
DEC	.14	.28	[illegible]	.39	.62	.68	.80	.92	1.01	1.25	[illegible]	1.34
DATE	[illegible]	[illegible]	[illegible]	[illegible]	03	03	03	03	03	[illegible]	03	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1917	[illegible]	[illegible]	1928	[illegible]	1926	[illegible]	2000	2015
YEAR	[illegible]	[illegible]	.70	.83	1.14	1.55	1.80	1.90	1.94	1.95	2.00	2.10
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]	11	[illegible]

BISHOP, CALIFORNIA

JAN	M	M	M	M	M	M	M	M	M	M	M	.92*
DATE												18
TIME												1700
FEB	[illegible]	[illegible]	[illegible]	[illegible]	.11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.23	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	06	[illegible]	[illegible]	10	[illegible]
TIME	[illegible]	2003	2005	2000	2010	2025	2040	[illegible]	1145	1200	1245	[illegible]
MAR	.02	[illegible]	.03	.03	[illegible]	.06	[illegible]	.07	[illegible]	[illegible]	.09	.10
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	06	07	07	07	07	07	[illegible]
TIME	2355	[illegible]	2355	[illegible]	2355	2355	0000	0017	0017	0017	[illegible]	[illegible]
APR	[illegible]	[illegible]	.01	.01	[illegible]	[illegible]	[illegible]	.01	.02	[illegible]	.02	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20*	[illegible]	20*	[illegible]	[illegible]	20	20
TIME	[illegible]	0930	[illegible]	0930	[illegible]	1600	1600	1600	2045	2045	2045	[illegible]
MAY	[illegible]	[illegible]	[illegible]	.13*	[illegible]	[illegible]	[illegible]	.14	[illegible]	[illegible]	.14	.14
DATE	[illegible]	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27	27	27	27	27
TIME	[illegible]	[illegible]	0155	0155	0155	0155	0155	0300	[illegible]	[illegible]	0300	[illegible]
JUN	[illegible]	[illegible]	[illegible]	.00	[illegible]	.00	[illegible]	.00	.00	.00	.00	.00
DATE												
TIME												
JUL		T	[illegible]	[illegible]	.01	.01	.01	[illegible]	.01	.01	.01	.01
DATE			[illegible]	[illegible]	26	26	[illegible]	[illegible]	26	26	26	[illegible]
TIME			1215	1215	1215	1215	1215	1215	1215	1215	[illegible]	1215
AUG	.00	.00	.00	.00	[illegible]	[illegible]	.00	[illegible]	.00	.00	[illegible]	.00
DATE												
TIME												
SEP	[illegible]	[illegible]	[illegible]	.00	.00	[illegible]	.00	.00	.00	[illegible]	.00	.00
DATE												
TIME												
OCT	[illegible]	[illegible]	.12	[illegible]	.20	.27*	.34	[illegible]	.48*	.57	.65	.75
DATE	[illegible]	[illegible]	17	[illegible]	17	17	17	[illegible]	17	17	[illegible]	[illegible]
TIME	[illegible]	2005	2005	2010	2015	[illegible]	2050	2110	[illegible]	2150	[illegible]	[illegible]
NOV	[illegible]	[illegible]	[illegible]	.07	.10	[illegible]	.15	.17	.20	.23	.27	[illegible]
DATE	01	01	[illegible]	01	[illegible]	01	01	[illegible]	[illegible]	[illegible]	01	01
TIME	0715	0720	0720	0725	[illegible]	[illegible]	0735	[illegible]	[illegible]	0840	0855	0900
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	M	[illegible]	[illegible]	[illegible]	[illegible]	M	[illegible]	.82*
MONTH												01

FRESNO, CALIFORNIA

JAN	[illegible]	.05	[illegible]	.08	.11	[illegible]	.18	.21	.24	[illegible]	.31	.32
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	08	[illegible]	[illegible]	[illegible]	08	08
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0535	2127	[illegible]	2151	[illegible]	2228	[illegible]
FEB	.12	[illegible]	[illegible]	[illegible]	[illegible]	.28	[illegible]	.39	[illegible]	.44	.48	.54
DATE	[illegible]	27	[illegible]	[illegible]	27	[illegible]	[illegible]	27	27	27	11	11
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1935	[illegible]	2005	2025	2045	2040	0538	0530
MAR	[illegible]	[illegible]	.14	[illegible]	.18	[illegible]	.20	[illegible]	[illegible]	.37	[illegible]	.55
DATE	10	10	[illegible]	10	[illegible]	10	[illegible]	20	20	20	[illegible]	20
TIME	[illegible]	2028	2029	[illegible]	2044	2059	[illegible]	0224	0214	0205	0225	[illegible]
APR	.01	.02	[illegible]	.04	[illegible]	.06	[illegible]	.07	[illegible]	.08	[illegible]	[illegible]
DATE	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]
TIME	[illegible]	[illegible]	1718	1717	1727	1742	1800	[illegible]	[illegible]	1800	[illegible]	[illegible]
MAY	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
JUN	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
JUL	[illegible]	[illegible]	[illegible]	[illegible]	.00	.00	.00	.00	.00	.00	.00	.00
DATE												
TIME												
AUG	T	[illegible]	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
SEP	[illegible]	[illegible]	.00	[illegible]	.00	[illegible]	.00	.00	.00	[illegible]	.00	.00
DATE												
TIME												
OCT	[illegible]	[illegible]	[illegible]	.07	.10	[illegible]	[illegible]	.19	.23	.27	.31	.34
DATE	[illegible]	[illegible]	[illegible]	23	[illegible]	23	07	07	07	07	07	07
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1421	1436	1436	1500
NOV	.13	[illegible]	[illegible]	[illegible]	[illegible]	.22	.22	.24	.24	.24	.26	.26
DATE	[illegible]	[illegible]	18	[illegible]	[illegible]	[illegible]	[illegible]	12	12	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0225	[illegible]	[illegible]	0245	[illegible]	[illegible]
DEC	[illegible]	.04	[illegible]	[illegible]	[illegible]	[illegible]	.18	.20	[illegible]	.24	.28	[illegible]
DATE	[illegible]	[illegible]	01	01	[illegible]	[illegible]	01	01	01	01	01	01
TIME	[illegible]	[illegible]	1428	[illegible]	0335	[illegible]	[illegible]	[illegible]	0409	0429	[illegible]	0520
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.34	[illegible]	[illegible]	[illegible]	.48	.55
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	02	02	[illegible]	02	[illegible]

LITTLE ROCK, ARKANSAS

JAN	.23	[illegible]	[illegible]	.37	.49	.54	[illegible]	.57	[illegible]	.83	.92	.93
DATE	18	18	20	20	[illegible]	20	20	20	20	20	21	[illegible]
TIME	[illegible]	[illegible]	2229	2229	2229	2230	[illegible]	2230	2345	2352	0016	0030
FEB	.14	.20	.23	[illegible]	[illegible]	.38	.41	.42	[illegible]	.45	.49	.55
DATE	07	07	07	[illegible]	[illegible]	07	07	07	07	07	[illegible]	07
TIME	1231	1235	1240	1245	1245	1246	1300	1300	2040	2100	2122	2145
MAR	.27	[illegible]	.43	.47	.55	.67	[illegible]	.85	.91	1.00	1.25	1.30
DATE	[illegible]	[illegible]	[illegible]	[illegible]	14	[illegible]	24	24	24	24	24	[illegible]
TIME	0018	[illegible]	[illegible]	0027	0051	1530	1333	1358	1400	[illegible]	1400	[illegible]
APR	.31	[illegible]	1.05	[illegible]	1.15	1.18	1.52	1.70	2.20	2.75	3.00	3.15
DATE	[illegible]	22	22	22	[illegible]	[illegible]	22	19	[illegible]	[illegible]	19	19
TIME	[illegible]	2245	2250	2250	2255	2300	2300	1215	1225	[illegible]	1315	1345
MAY	.17	.37	.50	[illegible]	.88	.99	1.00	1.02	1.03	1.05	1.05	1.07
DATE	[illegible]	27	27	27	[illegible]	27	[illegible]	27	[illegible]	27	27	27
TIME	0253	[illegible]	[illegible]	[illegible]	[illegible]	0051	0106	0126	0146	[illegible]	[illegible]	0258
JUN	.09	.20	.30	[illegible]	.40	[illegible]	[illegible]	.40	[illegible]	.40	[illegible]	[illegible]
DATE	[illegible]	19	19	[illegible]	27	27	27	27	27	27	27	[illegible]
TIME	0732	1420	1420	1430	2140	2140	[illegible]	2140	2140	2140	2140	[illegible]
JUL	.25	.50	[illegible]	[illegible]	1.12	[illegible]	1.90	2.25	2.38	2.75	2.75	2.77
DATE	04	04	04	[illegible]	04	04	[illegible]	04	04	04	04	[illegible]
TIME	[illegible]	[illegible]	1745	1800	[illegible]	[illegible]	1835	1855	1915	1930	[illegible]	1930
AUG	.20	[illegible]	.45	[illegible]	.63	.75	[illegible]	.78	[illegible]	[illegible]	.80	.80
DATE	[illegible]	10	10	10	[illegible]	10	10	10	10	10	10	10
TIME	[illegible]	1235	1240	1245	1300	1339	1330	1345	1400	1400	[illegible]	1400
SEP	[illegible]	.26	[illegible]	.50	.70	[illegible]	1.62	1.72	2.30	[illegible]	3.00	3.05
DATE	03	[illegible]	03	[illegible]	[illegible]	[illegible]	07	07	07	[illegible]	07	07
TIME	[illegible]	[illegible]	2318	[illegible]	1805	1805	1900	1920	1940	2000	2015	2015
OCT	.28	.61	[illegible]	.68	.71	.76	.83	1.16	1.23	1.38	1.40	1.40
DATE	[illegible]	07	07	[illegible]	07	[illegible]	07	07	07	07	[illegible]	07
TIME	0335	0340	0345	0350	0400	0415	0430	[illegible]	0510	0418	[illegible]	0540
NOV	[illegible]	.37	.72	.74	.78	[illegible]	[illegible]	1.19	1.25	[illegible]	1.85	1.90
DATE	[illegible]	26	23	[illegible]	23	[illegible]	26	26	26	[illegible]	23	23
TIME	0135	[illegible]	1700	1705	1715	[illegible]	0500	0520	0540	1700	[illegible]	1820
DEC	.12	[illegible]	.22	[illegible]	.29	.31	.46	.57	[illegible]	[illegible]	.77	1.09
DATE	23	03	03	03	03	03	03	03	[illegible]	04	04	03
TIME	[illegible]	[illegible]	1245	1250	1300	[illegible]	2300	2330	0010	0000	[illegible]	2345
YEAR	[illegible]	.61	1.05	1.13	1.15	[illegible]	1.90	[illegible]	2.38	2.75	3.00	3.15
MONTH	[illegible]	10	04	04	[illegible]	07	[illegible]	[illegible]	07	[illegible]	09*	04

BLUE CANYON, CALIFORNIA

JAN	[illegible]	.15	.18	[illegible]	.21	M	.37	M	M	.63	M	[illegible]
DATE	[illegible]	[illegible]	[illegible]	16	[illegible]		[illegible]			16		[illegible]
TIME	[illegible]	[illegible]	[illegible]	1817	1820		0800			[illegible]		[illegible]
FEB	.05	[illegible]	.12	.17	.22	.25	.31	[illegible]	[illegible]	[illegible]	.50	.62
DATE	[illegible]	[illegible]	27	27	[illegible]	27	[illegible]	27	[illegible]	27*	10	10
TIME	[illegible]	[illegible]	2000	2000	2000	[illegible]	2010	2010	2015	2030	0150	0155
MAR	.05	[illegible]	.10	.11	[illegible]	.22	[illegible]	.30	.32	[illegible]	.53	.64
DATE	[illegible]	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10	[illegible]	10	10
TIME	[illegible]	1700	[illegible]	[illegible]	1600	[illegible]	1610	1752	1752	1752	1752	1800
APR	.05	[illegible]	.10	[illegible]	.10	.10	[illegible]	[illegible]	.15	.16	.22	.26
DATE	[illegible]	29	29	[illegible]	29	29	[illegible]	29	[illegible]	29	17	[illegible]
TIME	1602	[illegible]	1602	1602	1602	1602	[illegible]	[illegible]	1602	1602	0055	0117
MAY	.05	[illegible]	.09	.11	.18	.21	[illegible]	.25	[illegible]	[illegible]	.30	.30
DATE	[illegible]	04	31	31	31	[illegible]	[illegible]	[illegible]	04	04	[illegible]	04
TIME	1313	1325	1428	1538	[illegible]	1600	1400	[illegible]	1415	1415	[illegible]	1430
JUN	.00	.00	.00	.00	.00	[illegible]	.00	[illegible]	[illegible]	.00	.00	.00
DATE												
TIME												
JUL	[illegible]	.04	.04	[illegible]	[illegible]	[illegible]	.05	.05	.05	.05	.05	[illegible]
DATE	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]	14
TIME	[illegible]	[illegible]	1327	1327	1327	1327	1327	1327	[illegible]	1327	1529	1529
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.15	.16	.19	.20	.21	.23
DATE	26	26	[illegible]	26	[illegible]	[illegible]	[illegible]	26	26	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1531	[illegible]	1531	1531	1531	1531	1531	1531	1531	1531	2043
SEP	.07	.09	.14	[illegible]	.22	.30	.35	.38	.53	.63	.73	.79
DATE	20*	20*	[illegible]	20	[illegible]	20	20	20	[illegible]	20	20	[illegible]
TIME	0229	[illegible]	[illegible]	[illegible]	[illegible]	0208	0208	0208	[illegible]	0208	0208	0208
OCT	.13	.23	.25	[illegible]	.33	.40	[illegible]	.60	.62	[illegible]	.87	[illegible]
DATE	[illegible]	[illegible]	22	22	[illegible]	22	[illegible]	22	[illegible]	22	22	[illegible]
TIME	2110	2115	2115	2115	[illegible]	2115	2110	2215	2250	[illegible]	2315	2315
NOV	.08	.11	.16	.21	.25	[illegible]	.35	.50	.55	[illegible]	[illegible]	.82
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	17	17	[illegible]	12	12	[illegible]
TIME	1154	[illegible]	[illegible]	1431	1431	1431	1431	1431	0200	[illegible]	[illegible]	0030
DEC	[illegible]	[illegible]	.14	.18	.21	.28	[illegible]	[illegible]	[illegible]	.53	.65	.75
DATE	11	[illegible]	11	11	[illegible]	17	17	17	[illegible]	17	29	[illegible]
TIME	[illegible]	0915	0915	0915	0915	0500	[illegible]	0500	0500	[illegible]	0403	0403
YEAR	.13	[illegible]	.25	[illegible]	.33	[illegible]	.49	[illegible]	[illegible]	.67	[illegible]	[illegible]
MONTH	[illegible]	10	10	[illegible]	10		10			10		[illegible]

LOS ANGELES, CALIFORNIA

JAN	.07	.12	[illegible]	.21	[illegible]	.39	[illegible]	.56	[illegible]	.73	.81	.93
DATE	[illegible]	16	16	[illegible]	16	[illegible]	16	16	[illegible]	[illegible]	16	[illegible]
TIME	1720	[illegible]	1732	1737	[illegible]	1758	1805	1820	[illegible]	1818	1818	1818
FEB	[illegible]	[illegible]	.41	[illegible]	[illegible]	[illegible]	.65	[illegible]	[illegible]	.70	.70	.78
DATE	[illegible]	07	07	[illegible]	07	[illegible]	07	[illegible]	[illegible]	07	07	07
TIME	[illegible]	[illegible]	0930	0932	[illegible]	[illegible]	1000	1000	1000	1000	1000	1000
MAR	[illegible]	.22	[illegible]	.33	[illegible]	.39	.45	.52	.55	.58	.60	.62
DATE	[illegible]	20	20	20	20	20	20	20	20	[illegible]	20	20
TIME	0415	0418	0425	[illegible]	0435	0447	0426	0436	[illegible]	0516	0530	0550
APR	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
MAY	.01	.01	.01	[illegible]	.01	.01	.01	[illegible]	.01	[illegible]	[illegible]	.01
DATE	31	31	31	[illegible]	31	31	31	[illegible]	31	31	31	31
TIME	[illegible]	[illegible]	[illegible]	0745	[illegible]	[illegible]	0810	[illegible]	0825	0825	0825	0825
JUN	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
JUL	[illegible]	.00	.00	.00	[illegible]	[illegible]	.00	.00	[illegible]	[illegible]	.00	.00
DATE												
TIME												
AUG	[illegible]	.02	.02	[illegible]	.02	.02	[illegible]	.02	[illegible]	.02	.02	.02
DATE	13	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	13	[illegible]	13	13	13
TIME	[illegible]	0915	0921	0921	0921	0921	0921	0921	0921	0921	0921	0921
SEP	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
OCT	[illegible]	[illegible]	.02	.02	[illegible]	.03	.04	.04	.04	.04	.04	.04
DATE	[illegible]	23	[illegible]	08	[illegible]	08	08	08	08	08	08	08
TIME	0700	0700	0521	0521	[illegible]	0545	0600	0600	0600	0600	0600	[illegible]
NOV	[illegible]	[illegible]	[illegible]	.18	[illegible]	.39	.50	.63	.72	[illegible]	.94	.98
DATE	23	[illegible]	23	23	[illegible]	23	23	23	[illegible]	23	23	[illegible]
TIME	2015	[illegible]	[illegible]	2030	2030	2025	2030	2030	2030	2030	[illegible]	2035
DEC	[illegible]	[illegible]	.08	.09	.10	.12	.16	.17	[illegible]	.20	.24	.28
DATE	01	[illegible]	01	01	01	01	[illegible]	01	01	01	[illegible]	01
TIME	1054	1054	1054	1054	[illegible]	[illegible]	1114	[illegible]	[illegible]	[illegible]	[illegible]	1114
YEAR	[illegible]	.29	.41	[illegible]	.54	.61	.65	[illegible]	[illegible]	.85	.94	.98
MONTH	02	[illegible]	[illegible]	[illegible]	02	[illegible]	[illegible]	[illegible]	11	[illegible]	11	[illegible]

BAKERSFIELD, CALIFORNIA

JAN	.03	.06	[illegible]	.09	.13	.17	.20	.27	.30	.34	.40	.46
DATE	18*	18	[illegible]	18	[illegible]	18	18	18	18	[illegible]	[illegible]	18
TIME	1430	[illegible]	1440	[illegible]	1445	1455	1455	1455	1455	1455	1615	1635
FEB	.02	[illegible]	.04	.05	[illegible]	.09	.10	.13	.14	.14	.14	.14
DATE	14*	12	12	12	[illegible]	[illegible]	12	12	[illegible]	[illegible]	12	[illegible]
TIME	1732	[illegible]	2052	2100	[illegible]	2125	2140	2150	[illegible]	2200	2200	[illegible]
MAR	[illegible]	.09	.10	.12	[illegible]	[illegible]	.20	.22	.25	.28	.34	[illegible]
DATE	[illegible]	06	[illegible]	06	[illegible]	06	06	08	08	20	20	20
TIME	[illegible]	2217	2220	2228	[illegible]	2245	2305	0555	0615	0540	0600	0625
APR	[illegible]	[illegible]	.10	[illegible]	[illegible]	.17	[illegible]	[illegible]	[illegible]	[illegible]	.18	.18
DATE	[illegible]	13	13	13	[illegible]	13	13	[illegible]	[illegible]	13	13	13
TIME	1653	[illegible]	1703	1708	1723	1738	1758	1758	[illegible]	1758	1758	1758
MAY	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
JUN	.00	.00	.00	.00	.00	.00	[illegible]	.00	.00	.00	[illegible]	.00
DATE												
TIME												
JUL	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
DATE												
TIME												
AUG	.00	[illegible]	.00	.00	[illegible]	.00	.00	[illegible]	.00	.00	.00	[illegible]
DATE												
TIME												
SEP	.00	[illegible]	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
DATE												
TIME												
OCT	.02	[illegible]	[illegible]	.05	.06	[illegible]	.08	.11	.12	.13	.14	[illegible]
DATE	07	07	[illegible]	07	[illegible]	07	07	[illegible]	07	07	07	07
TIME	[illegible]	[illegible]	1745	1730	1750	[illegible]	1815	[illegible]	1845	1920	[illegible]	1930
NOV	[illegible]	[illegible]	.06	.08	[illegible]	.12	.13	[illegible]	.14	.14	.17	.22
DATE	[illegible]	[illegible]	[illegible]	17	[illegible]	17	[illegible]	17	[illegible]	[illegible]	17	17
TIME	[illegible]	2115	1750	2125	2135	2150	2205	[illegible]	[illegible]	[illegible]	2335	2355
DEC	.02	[illegible]	[illegible]	.06	.08	.10	.11	.16	.17	.19	.23	.25
DATE	[illegible]	[illegible]	21	21	[illegible]	[illegible]	01	01	01	01	01	01
TIME	2308	[illegible]	2308	2308	[illegible]	[illegible]	0731	0751	0811	[illegible]	0901	0921
YEAR	[illegible]	[illegible]	.10	.12	[illegible]	[illegible]	.20	[illegible]	.30	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	04*	[illegible]	[illegible]	[illegible]	04*	03*	01	[illegible]	01	[illegible]	01

EUREKA, CALIFORNIA

JAN	.05	.09	.12	[illegible]	.20	[illegible]	.35	.43	.51	[illegible]	.68	.73
DATE	[illegible]	18	18	18	18	18	18	18	18	[illegible]	18	[illegible]
TIME	0425	[illegible]	0430	0425	0430	0430	[illegible]	0446	0448	0448	0502	0520
FEB	[illegible]	.08	.10	.12	[illegible]	.21	.24	.25	.30	.38	.40	[illegible]
DATE	[illegible]	11	11	11	[illegible]	04	04	[illegible]	[illegible]	04	04	04
TIME	[illegible]	[illegible]	2126	[illegible]	2140	2025	2030	2030	[illegible]	2027	2030	[illegible]
MAR	[illegible]	.11	[illegible]	.19	[illegible]	.30	.38	.43	.46	[illegible]	.55	.63
DATE	[illegible]	19	[illegible]	19	[illegible]	[illegible]	19	19	[illegible]	[illegible]	19	[illegible]
TIME	0530	[illegible]	0540	0544	0554	[illegible]	0622	0642	0702	[illegible]	0752	0822
APR	[illegible]	[illegible]	.02	.03	[illegible]	[illegible]	.04	.05	.05	.06	.07	[illegible]
DATE	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]	16	01	[illegible]	[illegible]	[illegible]	[illegible]
TIME	2215	0003	0003	0005	0005	0010	1722	0322	1722	1722	[illegible]	1722
MAY	[illegible]	.08	.10	.12	[illegible]	[illegible]	.15	.17	.17	.17	.20	.22
DATE	04	04	04	04	[illegible]	04	04	04	04	[illegible]	23	23
TIME	0219	[illegible]	[illegible]	0230	0240	[illegible]	0255	[illegible]	[illegible]	1800	[illegible]	1900
JUN	M	M	M	M	M	M	.04	M	M	.08	M	.09
DATE							12			12		12
TIME							1000			1000		1200
JUL	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
AUG	[illegible]	[illegible]	.03	[illegible]	[illegible]	[illegible]	.06	.06	[illegible]	.06	[illegible]	[illegible]
DATE	[illegible]	24	24	24	24	24	24	24	[illegible]	24	24	24
TIME	[illegible]	1347	1347	1354	[illegible]	1411	1411	1625	[illegible]	1505	1505	1505
SEP	.07	[illegible]	.11	.13	[illegible]	.21	.28	.35	[illegible]	.46	.50	.56
DATE	[illegible]	22	22	22	[illegible]	[illegible]	19	19	[illegible]	[illegible]	22	22
TIME	[illegible]	0904	0904	0703	0710	0724	0853	0853	0853	[illegible]	0904	[illegible]
OCT	[illegible]	[illegible]	[illegible]	.25	.37	.50	[illegible]	[illegible]	.81	[illegible]	.93	[illegible]
DATE	[illegible]	[illegible]	21	21	[illegible]	21	21	21	21	[illegible]	21	21
TIME	[illegible]	1005	1005	1005	[illegible]	1014	[illegible]	[illegible]	1034	1024	1037	1037
NOV	.10	.15	.17	.19	[illegible]	.33	.41	.55	.67	[illegible]	.84	.91
DATE	21	[illegible]	21	13	[illegible]	08	08	08	08	[illegible]	08	08
TIME	[illegible]	0551	0556	0921	[illegible]	0045	[illegible]	0149	[illegible]	0150	0204	0204
DEC	[illegible]	.34	[illegible]	.45	.55	[illegible]	.73	.78	[illegible]	.87	.90	.96
DATE	12	12	[illegible]	12	12	12	12	12	[illegible]	12	[illegible]	[illegible]
TIME	1849	1854	1856	1857	[illegible]	1922	1937	1957	2017	2032	2042	2042
YEAR	[illegible]	[illegible]	M	[illegible]	[illegible]	M	.73	[illegible]	M	.87	[illegible]	.97
MONTH							12			12		10

MOUNT SHASTA, CALIFORNIA

JAN	[illegible]	[illegible]	[illegible]	.07	[illegible]	[illegible]	.20	[illegible]	.33	.38	.48	.57
DATE	[illegible]	18*	[illegible]	[illegible]	[illegible]	18*	18*	15	[illegible]	[illegible]	[illegible]	[illegible]
TIME	0620	[illegible]	0630	0630	[illegible]	0645	0700	2130	[illegible]	[illegible]	2230	[illegible]
FEB	.03	.06	.08	.11	[illegible]	.22	.28	.34	.40	.44	.54	[illegible]
DATE	[illegible]	[illegible]	24	[illegible]	[illegible]	24	24	[illegible]	24	[illegible]	24	[illegible]
TIME	1520	[illegible]	1530	[illegible]	[illegible]	1530	1530	1530	1545	0900	0900	0900
MAR	.02	[illegible]	.04	.05	.06	.08	.10	.13	.15	.18	[illegible]	.27
DATE	5	[illegible]	[illegible]	5	05	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]
TIME	2310	2315	2315	2320	2330	0645	0700	0700	[illegible]	0700	0700	0700
APR	.03	[illegible]	[illegible]	.05	.05	.06	[illegible]	.06	[illegible]	[illegible]	.10	.10
DATE	[illegible]	13	13	13	[illegible]	13	[illegible]	13	[illegible]	[illegible]	13	[illegible]
TIME	0650	0655	0700	0700	0700	0700	0700	0700	0700	0700	0700	0700
MAY	.03	[illegible]	.05	[illegible]	.08	.09	.12	.17	.17	[illegible]	.17	.17
DATE	[illegible]	[illegible]	[illegible]	04	04	04	04	04	04	[illegible]	[illegible]	04
TIME	0715	0720	0820	0820	[illegible]	0820	0820	0820	[illegible]	0820	[illegible]	0820
JUN	.00	[illegible]	[illegible]	.00	[illegible]	.00	[illegible]	.00	.00	[illegible]	.00	.00
DATE												
TIME												
JUL	.01	[illegible]	.01	.01	.02	[illegible]	[illegible]	[illegible]	.02	.03	.03	.03
DATE	[illegible]	[illegible]	[illegible]	11	28	28	28	28	[illegible]	[illegible]	28	[illegible]
TIME	[illegible]	0910	0910	0910	1630	[illegible]	[illegible]	1630	[illegible]	1630	1630	1630
AUG	.02	[illegible]	.07	.08	.10	.10	[illegible]	.10	[illegible]	[illegible]	.10	.10
DATE	[illegible]	24	24	24	[illegible]	24	[illegible]	24	[illegible]	[illegible]	24	[illegible]
TIME	[illegible]	1510	1515	[illegible]	1530	1530	1530	1530	1530	1530	1530	1530
SEP	[illegible]	.08	[illegible]	[illegible]	[illegible]	[illegible]	.22	.26	.35	[illegible]	.45	.53
DATE	[illegible]	19	[illegible]	19	19	22	22	22	22	[illegible]	22	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1625	1630	1000	[illegible]	1015	1035	1055	1115	[illegible]
OCT	.04	[illegible]	.08	[illegible]	[illegible]	[illegible]	[illegible]	.33	[illegible]	[illegible]	.52	.56
DATE	[illegible]	22	22	22	[illegible]	22	22	22	22	[illegible]	22	[illegible]
TIME	2005	2010	[illegible]	2020	2030	2030	2030	2030	[illegible]	2035	2035	2035
NOV	.13	[illegible]	.21	.23	.28	[illegible]	.56	[illegible]	.76	[illegible]	.97	1.10
DATE	12	[illegible]	12	12	30	30	30	30	30	30	[illegible]	[illegible]
TIME	0155	0155	[illegible]	0155	0710	0725	0745	0805	[illegible]	[illegible]	0800	[illegible]
DEC	[illegible]	[illegible]	.08	.11	.18	.23	.26	.31	[illegible]	.50	.59	.64
DATE	[illegible]	11	11	11	11	11	11	11	[illegible]	[illegible]	11	11
TIME	[illegible]	0530	0530	0530	0530	0530	0600	0600	0600	0600	[illegible]	0700
YEAR	.13	[illegible]	.21	.23	.28	.41	.56	.67	.76	[illegible]	.97	1.10
MONTH	11	[illegible]	11	11	11	11	11	[illegible]	11	[illegible]	[illegible]	[illegible]

MAXIMUM SHORT DURATION PRECIPITATION

Maximum precipitation in inches

JAN	.08	.24	[illegible]	[illegible]	.29	[illegible]	.49	[illegible]	[illegible]	[illegible]	.73	[illegible]
DATE	[illegible]	[illegible]	[illegible]	16	18	18	16	16	[illegible]	[illegible]	16	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0713	[illegible]	0853	0853	[illegible]	0853	[illegible]	0853
FEB	.11	.21	.28	.31	.35	[illegible]	[illegible]	.45	.46	.49	.56	[illegible]
DATE	[illegible]	09	09	[illegible]	[illegible]	09	[illegible]	[illegible]	09	09	06	06
TIME	[illegible]	[illegible]	2116	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2200	1005	[illegible]
MAR	[illegible]	.11	.11	[illegible]	[illegible]	.13	.15	.19	.21	.23	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	21	21+	[illegible]	[illegible]	[illegible]	[illegible]	19	[illegible]	19
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1530	1550	1610	1640	1710
APR	[illegible]	[illegible]	.01	.01	.01	.01	.02	.02	[illegible]	[illegible]	.02	.02
DATE	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	13	[illegible]	[illegible]	13	13
TIME	[illegible]	0145	0145	[illegible]	0145	0145	0610	0610	0610	0610	[illegible]	0610
MAY	.02	[illegible]	[illegible]	[illegible]	[illegible]	.02	.02	.02	.02	.02	.02	.02
DATE	[illegible]	[illegible]	04	04	04	[illegible]	04	24+	24+	24+	24+	24+
TIME	0812	[illegible]	[illegible]	0812	0812	0812	0812	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN	[illegible]	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
JUL	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
AUG	[illegible]	[illegible]	.00	[illegible]	[illegible]	.00	.00	.00	[illegible]	[illegible]	[illegible]	[illegible]
DATE												
TIME												
SEP	.03	[illegible]	.04	.05	[illegible]	.10	.12	.14	.18	.21	[illegible]	[illegible]
DATE	[illegible]	[illegible]	20	20	[illegible]	20	20	20	[illegible]	20	20	[illegible]
TIME	[illegible]	[illegible]	0407	0413	0413	[illegible]	0427	0427	0455	[illegible]	[illegible]	[illegible]
OCT	[illegible]	[illegible]	.15	.18	[illegible]	.27	.29	.32	.33	.33	.33	[illegible]
DATE	[illegible]	22	[illegible]	22	22	22	[illegible]	22	22	[illegible]	22	[illegible]
TIME	[illegible]	1922	[illegible]	[illegible]	1920	[illegible]	[illegible]	1946	2007	[illegible]	2052	[illegible]
NOV	.05	.09	.12	[illegible]	.19	.26	.34	.41	.49	[illegible]	.71	[illegible]
DATE	[illegible]	15	[illegible]	[illegible]	[illegible]	05	05	05	[illegible]	05	05	05
TIME	[illegible]	0425	[illegible]	[illegible]	0435	1845	1845	1845	[illegible]	[illegible]	[illegible]	[illegible]
DEC	.07	.12	.14	[illegible]	.24	.34	[illegible]	.53	[illegible]	.68	[illegible]	.87
DATE	21	[illegible]	[illegible]	26	26	[illegible]	26	26	26	26	26	26
TIME	[illegible]	[illegible]	1717	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1943
YEAR	[illegible]	.26	.28	.31	[illegible]	.40	[illegible]	.53	[illegible]	[illegible]	[illegible]	.87
MONTH	[illegible]	01	[illegible]	02	[illegible]	02	[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]

MAXIMUM SHORT DURATION PRECIPITATION

PUEBLO, COLORADO

YEAR					.40	.72	.78	.80	1.02	1.10	1.11	1.13	1.13	1.13	1.13	1.13
MONTH					08	08	08	08	07	08	08	08	08	08	08	08

WILMINGTON, DELAWARE

YEAR	.52	.67	.68	.72	1.02	1.08	1.10	1.31	1.37	1.39	1.40
MONTH	06	08	08	06	06	06	06	06	06	06	06

DAYTONA BEACH, FLORIDA

FORT MYERS, FLORIDA

YEAR	.95	1.75	2.10	2.40	2.70	2.86	2.95	2.97	2.97	2.99	3.01	3.05
MONTH	07	07	07	07	07	07	07	07	07	07	07	03

MAXIMUM SHORT DURATION PRECIPITATION

JACKSONVILLE, FLORIDA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.31	.44	.53	.73	.76	.79	.88	.94	.99	1.05	[illegible]
DATE	28	28	28	28	28	28	28	28	28	28	28	28
TIME	[illegible]	[illegible]	0623	0623	[illegible]	[illegible]	0644	0626	0628	[illegible]	0730	[illegible]
FEB	.24	[illegible]	.51	.65	.83	.90	.92	.94	.96	1.02	1.11	1.32
DATE	02	02	02	02	02	02	02	02	02	15	15	15
TIME	[illegible]	[illegible]	1050	1056	1101	[illegible]	1131	[illegible]	1216	[illegible]	0153	0129
MAR	[illegible]	[illegible]	1.00	1.16	1.32	1.68	1.88	[illegible]	2.00	2.01	2.13	2.15
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	1414	[illegible]	[illegible]	[illegible]	[illegible]	1838	[illegible]	[illegible]	[illegible]	1900	1930	2000
APR	[illegible]	.53	.76	1.02	1.45	2.02	[illegible]	3.32	[illegible]	4.10	4.25	4.27
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	[illegible]	[illegible]	2048	2047	[illegible]	2047	[illegible]	2115	2120	2126	2144	2145
MAY	.44	.64	.72	.75	.81	.82	.84	.90	.94	.99	[illegible]	1.13
DATE	08	30	08	30	08	08	30	30	30	30	08	08
TIME	[illegible]	[illegible]	1843	[illegible]	[illegible]	[illegible]	0748	[illegible]	0826	0843	1856	[illegible]
JUN	[illegible]	.34	[illegible]	.56	.67	.76	[illegible]	.85	.85	.85	.85	.85
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	[illegible]	0544	[illegible]	[illegible]	0600	0602	0610	[illegible]	0610	[illegible]	0610	0610
JUL	.51	[illegible]	[illegible]	1.02	1.09	1.19	[illegible]	[illegible]	1.32	[illegible]	1.39	1.42
DATE	31	31	31	31	31	31	31	31	31	[illegible]	27	27
TIME	1544	1544	[illegible]	[illegible]	[illegible]	1613	1621	[illegible]	1643	1647	1937	1950
AUG	.35	.47	.51	.56	.95	[illegible]	1.16	1.21	1.26	1.34	[illegible]	1.40
DATE	[illegible]	30	[illegible]	16	16	16	16	16	16	16	16	16
TIME	[illegible]	[illegible]	[illegible]	1621	1621	1621	[illegible]	[illegible]	[illegible]	1741	[illegible]	[illegible]
SEP	.53	[illegible]	1.00	1.03	1.21	1.22	1.22	1.22	[illegible]	[illegible]	1.22	1.22
DATE	12	12	12	12	12	12	12	12	12	12	12	12
TIME	[illegible]	[illegible]	1526	1626	1638	1643	1643	1643	[illegible]	[illegible]	1643	1643
OCT	.31	[illegible]	[illegible]	.67	1.15	1.35	1.53	[illegible]	[illegible]	1.87	1.98	2.03
DATE	[illegible]	[illegible]	21	21	21	[illegible]	21	21	[illegible]	21	21	21
TIME	[illegible]	[illegible]	1355	1355	1356	[illegible]	1356	1349	[illegible]	[illegible]	[illegible]	1326
NOV	[illegible]	[illegible]	[illegible]	.20	.20	.21	.22	.22	.22	.22	.22	.22
DATE	18	18	28	28	[illegible]	28	18	18	18	18	18	18
TIME	2202	1357	1357	1355	[illegible]	1355	[illegible]	[illegible]	2152	[illegible]	2152	[illegible]
DEC	[illegible]	[illegible]	.33	[illegible]	[illegible]	[illegible]	[illegible]	.54	.57	.58	.59	[illegible]
DATE	26	[illegible]	[illegible]	[illegible]	[illegible]	26	[illegible]	26	26	[illegible]	26	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1754	[illegible]	1819	1835	1855	[illegible]	1935	[illegible]
YEAR	.51	.89	1.00	1.16	[illegible]	[illegible]	2.60	3.32	[illegible]	4.10	4.25	[illegible]
MONTH	[illegible]	[illegible]	09	03	[illegible]	[illegible]	04	[illegible]	04	[illegible]	04	04

MIAMI, FLORIDA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	[illegible]	.62	.88	.90	1.07	1.35	1.68	[illegible]	1.88	2.01
DATE	[illegible]	11	[illegible]	11	[illegible]	11	[illegible]	11	11	[illegible]	11	11
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0700	0715	0735	[illegible]	[illegible]	0845	[illegible]
FEB	.28	[illegible]	[illegible]	.55	[illegible]	[illegible]	.80	[illegible]	.98	.99	1.02	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15	[illegible]	15	[illegible]	15	15	15
TIME	0138	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0735	[illegible]	[illegible]	0745	0800	[illegible]
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.81	.83	[illegible]	.84	[illegible]	.88	.88
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26	[illegible]	[illegible]	26	26	26	26
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0942	[illegible]	[illegible]	0944
APR	.79	[illegible]	.45	[illegible]	.75	.85	[illegible]	1.15	[illegible]	1.56	1.66	[illegible]
DATE	27	[illegible]	[illegible]	27	27	27	27	27	[illegible]	27	27	[illegible]
TIME	0225	0232	0235	[illegible]	[illegible]	[illegible]	0300	0310	[illegible]	0346	0400	0402
MAY	[illegible]	[illegible]	.28	.30	[illegible]	.30	[illegible]	[illegible]	.30	.30	[illegible]	.30
DATE	[illegible]	09	[illegible]	[illegible]	09	09	09	09	[illegible]	09	09	09
TIME	1550	[illegible]	1600	1605	[illegible]	[illegible]	1630	[illegible]	1630	1630	1630	1630
JUN	.32	.58	[illegible]	[illegible]	[illegible]	1.55	1.65	2.30	[illegible]	2.37	2.44	[illegible]
DATE	[illegible]	25	25	25	25	25	[illegible]	[illegible]	[illegible]	[illegible]	25	[illegible]
TIME	[illegible]	1840	[illegible]	[illegible]	[illegible]	1900	[illegible]	[illegible]	[illegible]	[illegible]	1945	2002
JUL	.27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.10	[illegible]	1.15	1.15
DATE	[illegible]	[illegible]	02	02	02	[illegible]	[illegible]	02	02	02	02	[illegible]
TIME	[illegible]	1417	1419	1427	[illegible]	[illegible]	[illegible]	1525	1545	[illegible]	1630	[illegible]
AUG	.43	[illegible]	.93	[illegible]	1.17	[illegible]	[illegible]	1.30	1.30	[illegible]	[illegible]	1.57
DATE	25	[illegible]	24	24	24	24	20	20	20	[illegible]	[illegible]	[illegible]
TIME	[illegible]	2300	2305	[illegible]	[illegible]	2330	0850	0910	0930	0948	[illegible]	[illegible]
SEP	.47	[illegible]	[illegible]	[illegible]	1.05	[illegible]	[illegible]	1.16	[illegible]	[illegible]	1.30	1.34
DATE	[illegible]	[illegible]	[illegible]	06	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]	22	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1919	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1946	[illegible]
OCT	[illegible]	.36	.41	[illegible]	.46	.50	.53	.55	.55	.55	.55	.55
DATE	11	11	[illegible]	11	11	[illegible]	[illegible]	11	[illegible]	11	11	[illegible]
TIME	0005	[illegible]	[illegible]	0020	0030	0045	0100	0120	0140	0200	0230	0300
NOV	.10	.15	[illegible]	.26	.27	.27	[illegible]	.27	[illegible]	.27	[illegible]	.27
DATE	06	06	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]
TIME	0805	[illegible]	[illegible]	0920	[illegible]	[illegible]	0900	0920	0940	1000	[illegible]	[illegible]
DEC	.25	.40	.46	.61	[illegible]	.84	.90	[illegible]	1.12	[illegible]	1.27	1.35
DATE	[illegible]	20	[illegible]	20	[illegible]	20	20	20	20	20	20	20
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1506	1506	[illegible]	[illegible]	[illegible]	1501	1515	[illegible]
YEAR	[illegible]	.83	[illegible]	[illegible]	1.45	1.55	1.65	2.30	2.34	2.37	[illegible]	2.49
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	06	06	06	[illegible]	06	05

TAMPA, FLORIDA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.30	.32	[illegible]	[illegible]	.45	[illegible]	.52	[illegible]	.68	.76	[illegible]
DATE	[illegible]	28	28	28	[illegible]	22	[illegible]	22	[illegible]	22	22	[illegible]
TIME	[illegible]	[illegible]	1056	1101	1111	0915	[illegible]	0915	[illegible]	0915	0915	[illegible]
FEB	.23	[illegible]	[illegible]	.37	[illegible]	.53	.61	.68	[illegible]	.72	.75	.75
DATE	[illegible]	[illegible]	09	[illegible]	09	[illegible]	[illegible]	09	[illegible]	09	09	[illegible]
TIME	[illegible]	1820	1820	[illegible]	1820	1820	[illegible]	1825	1828	1835	1850	1920
MAR	[illegible]	.26	[illegible]	[illegible]	[illegible]	[illegible]	.73	[illegible]	1.26	[illegible]	[illegible]	1.45
DATE	[illegible]	25	[illegible]	25	25	[illegible]	[illegible]	25	25	25	25	[illegible]
TIME	[illegible]	[illegible]	1328	1330	[illegible]	[illegible]	1413	[illegible]	[illegible]	[illegible]	1922	1915
APR	[illegible]	.53	.55	[illegible]	[illegible]	[illegible]	[illegible]	.84	[illegible]	.86	.86	.86
DATE	[illegible]	[illegible]	[illegible]	26	[illegible]	[illegible]	26	26	[illegible]	26	26	26
TIME	[illegible]	0005	1710	1715	[illegible]	[illegible]	1755	1815	[illegible]	[illegible]	[illegible]	1955
MAY	[illegible]	[illegible]	[illegible]	.10	[illegible]	.13	[illegible]	.15	.15	.15	.15	.15
DATE	[illegible]	[illegible]	[illegible]	09	09	09	[illegible]	09	[illegible]	[illegible]	09	[illegible]
TIME	2348	2353	0000	0005	0027	0030	0030	[illegible]	[illegible]	0042	0042	0042
JUN	.25	[illegible]	.55	[illegible]	.86	.88	[illegible]	.90	.90	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	19	19	[illegible]	19	19	19	19	[illegible]	19
TIME	1025	[illegible]	[illegible]	[illegible]	1050	1105	[illegible]	[illegible]	1120	1120	1120	1120
[illegible]	.50	.70	.85	.91	[illegible]	[illegible]	.91	.91	[illegible]	[illegible]	.95	[illegible]
DATE	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]	19	19	19	19	[illegible]	[illegible]
TIME	1700	[illegible]	[illegible]	[illegible]	[illegible]	1715	1715	[illegible]	1715	1715	1715	[illegible]
AUG	[illegible]	[illegible]	[illegible]	.99	1.30	1.36	1.36	1.42	1.42	1.42	1.42	1.42
DATE	[illegible]	08	08	08	22	[illegible]	22	22	22	22	22	22
TIME	[illegible]	[illegible]	[illegible]	1715	1416	1428	[illegible]	1416	1435	1435	[illegible]	[illegible]
SEP	.37	.67	.85	1.07	[illegible]	1.25	1.50	[illegible]	1.51	[illegible]	1.55	[illegible]
DATE	02	[illegible]	02	02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	04	04	04
TIME	1500	[illegible]	1512	[illegible]	[illegible]	[illegible]	[illegible]	1920	1940	2000	2030	2100
OCT	.23	[illegible]	.33	.33	.33	[illegible]	.53	.53	[illegible]	.53	.53	[illegible]
DATE	[illegible]	[illegible]	21	[illegible]	21	21	21	21	21	21	[illegible]	21
TIME	[illegible]	[illegible]	1650	[illegible]	[illegible]	1705	1702	1705	1705	[illegible]	1705	1705
NOV	[illegible]	.70	.75	1.00	1.25	1.35	1.60	1.68	[illegible]	1.73	[illegible]	1.74
DATE	01	01	01	01	01	[illegible]	[illegible]	[illegible]	[illegible]	01	01	[illegible]
TIME	[illegible]	[illegible]	0057	[illegible]	[illegible]	0112	[illegible]	[illegible]	0137	0200	[illegible]	0155
DEC	.23	.32	.35	.38	.41	.49	[illegible]	.59	.80	[illegible]	[illegible]	.89
DATE	27	07	07	[illegible]	[illegible]	[illegible]	[illegible]	20	[illegible]	20	20	20
TIME	[illegible]	[illegible]	[illegible]	1324	[illegible]	[illegible]	1339	1339	[illegible]	1339	[illegible]	[illegible]
YEAR	[illegible]	.85	[illegible]	[illegible]	[illegible]	1.36	[illegible]	1.68	1.70	[illegible]	[illegible]	1.74
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]	11

KEY WEST, FLORIDA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.35	.70	[illegible]	.90	1.00	1.07	1.26	1.31	[illegible]	1.71	1.78	1.86
DATE	11	11	11	[illegible]	[illegible]	11	11	11	11	[illegible]	11	11
TIME	[illegible]	0815	0815	0820	[illegible]	0845	0900	0920	0925	[illegible]	[illegible]	1000
FEB	.25	.40	[illegible]	[illegible]	[illegible]	[illegible]	1.04	1.05	[illegible]	[illegible]	[illegible]	1.05
DATE	09	09	09	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	09	09	09	09
TIME	2305	2310	2312	[illegible]	[illegible]	2320	2320	2355	2355	[illegible]	2355	2355
MAR	.25	.38	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.72	[illegible]	[illegible]	[illegible]	1.05
DATE	[illegible]	26	[illegible]	[illegible]	21	[illegible]	21	21	21	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0858	1138	1147	[illegible]	1214	1217	[illegible]	1300	1326	1345
APR	[illegible]	.04	.05	.07	.10	[illegible]	.11	.11	.11	[illegible]	.11	.11
DATE	[illegible]	27	27	[illegible]	[illegible]	[illegible]	27	27	27	[illegible]	27	27
TIME	0007	0008	0009	0010	0030	0045	0045	0045	[illegible]	[illegible]	0045	0045
MAY	.20	.25	[illegible]	.30	[illegible]	.32	[illegible]	[illegible]	.61	.62	.65	[illegible]
DATE	15	15	[illegible]	15	[illegible]	[illegible]	16	[illegible]	16	16	16	[illegible]
TIME	2308	2311	[illegible]	[illegible]	0035	0048	0100	[illegible]	0033	0057	0130	0147
JUN	.19	.36	[illegible]	.54	[illegible]	[illegible]	[illegible]	.68	.68	.69	[illegible]	.70
DATE	[illegible]	20	[illegible]	20	[illegible]	[illegible]	22	[illegible]	22	22	22	22
TIME	[illegible]	[illegible]	0722	0727	0737	0752	0405	0444	0501	[illegible]	0552	0620
JUL	.25	[illegible]	.42	.45	[illegible]	.69	[illegible]	.89	[illegible]	.97	[illegible]	[illegible]
DATE	02	02	02	02	11	11	11	[illegible]	11	[illegible]	[illegible]	11
TIME	1920	1925	[illegible]	[illegible]	1045	1100	1052	1116	1132	1137	[illegible]	1137
AUG	[illegible]	[illegible]	.93	1.13	1.17	[illegible]	1.35	[illegible]	1.35	1.35	1.35	1.35
DATE	[illegible]	[illegible]	[illegible]	29	29	09	09	09	[illegible]	[illegible]	09	[illegible]
TIME	1741	[illegible]	1751	1756	1806	0812	[illegible]	0820	0820	[illegible]	0820	[illegible]
SEP	.24	[illegible]	.31	.40	[illegible]	[illegible]	.43	[illegible]	[illegible]	[illegible]	.78	.78
DATE	27	02	[illegible]	02	[illegible]	[illegible]	02	[illegible]	[illegible]	[illegible]	02	[illegible]
TIME	[illegible]	0745	0750	[illegible]	[illegible]	0820	0835	[illegible]	0915	[illegible]	1005	1035
OCT	.25	[illegible]	.70	[illegible]	.86	[illegible]	[illegible]	.91	.91	[illegible]	.91	.91
DATE	[illegible]	[illegible]	[illegible]	09	[illegible]	[illegible]	09	[illegible]	[illegible]	[illegible]	09	09
TIME	1127	[illegible]	[illegible]	1142	1152	[illegible]	1207	[illegible]	[illegible]	1207	[illegible]	1207
NOV	.02	[illegible]	.06	[illegible]	[illegible]	.06	.06	.06	[illegible]	.06	[illegible]	.06
DATE	16	16	16	[illegible]	[illegible]	16	[illegible]	[illegible]	16	[illegible]	16	[illegible]
TIME	0113	0116	[illegible]	0116	0116	[illegible]	0116	0116	0116	0116	[illegible]	[illegible]
DEC	.27	.36	[illegible]	[illegible]	[illegible]	[illegible]	1.00	1.04	1.08	1.10	1.12	1.18
DATE	20	20	20	[illegible]	20	[illegible]	20	20	[illegible]	20	20	20
TIME	[illegible]	1236	[illegible]	[illegible]	0759	0800	0805	1332	1328	[illegible]	1400	1500
YEAR	.35	[illegible]	.93	1.13	1.17	[illegible]	[illegible]	[illegible]	1.37	1.71	1.78	1.86
MONTH	01	[illegible]	[illegible]	08	[illegible]	[illegible]	[illegible]	08	01	01	01	01

ORLANDO, FLORIDA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.10	.16	[illegible]	.20	[illegible]	.36	.44	.53	.65	.76	.92	[illegible]
DATE	[illegible]	[illegible]	23	23	23	23	23	23	[illegible]	[illegible]	23	23
TIME	1115	[illegible]	1125	1125	[illegible]	1145	1200	1155	1140	1200	1210	1230
FEB	.20	.27	[illegible]	.36	.52	.67	[illegible]	.92	1.08	[illegible]	1.41	1.43
DATE	02	[illegible]	[illegible]	09	[illegible]	09	09	[illegible]	[illegible]	09	09	[illegible]
TIME	1655	[illegible]	[illegible]	[illegible]	2000	2015	[illegible]	2030	[illegible]	2100	2145	2215
MAR	.29	[illegible]	.76	.82	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.82	1.93
DATE	25	[illegible]	[illegible]	25	25	25	25	[illegible]	25	25	[illegible]	[illegible]
TIME	2040	2040	[illegible]	[illegible]	2045	2045	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APR	.28	[illegible]	.55	[illegible]	1.09	1.26	1.27	[illegible]	[illegible]	[illegible]	1.44	[illegible]
DATE	[illegible]	08	[illegible]	[illegible]	[illegible]	[illegible]	08	[illegible]	[illegible]	08	08	[illegible]
TIME	[illegible]	1020	0020	[illegible]	[illegible]	0020	[illegible]	0020	0020	0100	0200	[illegible]
MAY	[illegible]	[illegible]	.85	1.03	1.23	[illegible]	1.67	1.69	1.69	1.69	1.69	[illegible]
DATE	[illegible]	[illegible]	30	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	30	30	[illegible]
TIME	1005	[illegible]	1005	1010	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN	.26	[illegible]	[illegible]	.70	.98	[illegible]	[illegible]	1.32	1.40	1.43	[illegible]	[illegible]
DATE	[illegible]	11	11	11	[illegible]	11	[illegible]	[illegible]	11	11	11	[illegible]
TIME	1925	[illegible]	1925	[illegible]	[illegible]	1945	2000	2030	[illegible]	2100	2100	[illegible]
JUL	[illegible]	.52	[illegible]	[illegible]	1.08	1.15	[illegible]	1.18	1.19	[illegible]	1.22	[illegible]
DATE	[illegible]	04	04	14	04	04	04	04	04	[illegible]	14	[illegible]
TIME	1535	1558	1558	1550	1600	1615	1630	1650	1710	1736	[illegible]	2018
AUG	.40	.57	[illegible]	.78	[illegible]	.96	[illegible]	[illegible]	1.04	[illegible]	1.07	[illegible]
DATE	[illegible]	[illegible]	01	01	[illegible]	01	01	01	01	01	01	[illegible]
TIME	[illegible]	[illegible]	1335	1340	1350	1400	1415	1435	1500	1520	1550	[illegible]
SEP	.46	[illegible]	.75	1.00	[illegible]	2.10	2.59	[illegible]	[illegible]	4.10	4.56	[illegible]
DATE	[illegible]	13	13	26	[illegible]	26	26	26	26	[illegible]	26	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1845	[illegible]	[illegible]	1915	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OCT	.05	[illegible]	[illegible]	.15	[illegible]	.23	[illegible]	.31	[illegible]	[illegible]	.45	.45
DATE	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	08	[illegible]	08	[illegible]	08	[illegible]
TIME	1205	[illegible]	1214	1508	1550	1600	1600	1620	1640	[illegible]	1730	1800
NOV	.23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.48	.54	.60	[illegible]	.63	.70
DATE	01	01	[illegible]	01	[illegible]	01	[illegible]	[illegible]	01	[illegible]	01	01
TIME	[illegible]	[illegible]	[illegible]	0245	0250	0300	0240	[illegible]	0315	[illegible]	[illegible]	0315
DEC	.30	.48	.49	.53	.59	.59	[illegible]	.70	.75	.80	.81	[illegible]
DATE	[illegible]	[illegible]	27	27	[illegible]	20	27	20	20	20	20	[illegible]
TIME	1645	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1705	1705	1705	[illegible]
YEAR	.46	.70	[illegible]	[illegible]	1.55	2.10	2.59	3.60	[illegible]	4.10	4.56	4.59
MONTH	[illegible]	[illegible]	05	[illegible]	[illegible]	[illegible]	09	09	09	09	09	[illegible]

WEST PALM BEACH, FLORIDA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.38	[illegible]	.43	.50	[illegible]	[illegible]	[illegible]	.79	.80	.80	[illegible]
DATE	[illegible]	23	[illegible]	11	23	[illegible]	11	11	[illegible]	11	11	[illegible]
TIME	[illegible]	[illegible]	0513	0515	0130	[illegible]	0525	0530	0550	0600	0600	[illegible]
FEB	[illegible]	.55	.57	.57	.57	.57	.57	[illegible]	[illegible]	.57	.57	[illegible]
DATE	15	[illegible]	15	15	[illegible]	[illegible]	15	15	[illegible]	[illegible]	15	[illegible]
TIME	1202	1205	1210	1215	1225	[illegible]	1230	1230	1230	1230	1230	[illegible]
MAR	[illegible]	.36	[illegible]	.50	.85	[illegible]	.95	[illegible]	[illegible]	[illegible]	.98	[illegible]
DATE	26	26	26	26	[illegible]	26	26	[illegible]	26	26	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0625	0636	[illegible]	0645	0643	[illegible]	[illegible]	0647	[illegible]	[illegible]
APR	[illegible]	[illegible]	[illegible]	.32	[illegible]	.50	.55	.58	.58	.65	.65	[illegible]
DATE	[illegible]	16	[illegible]	[illegible]	08	[illegible]	[illegible]	08	08	08	08	[illegible]
TIME	1832	1837	0800	0800	0805	0820	[illegible]	0840	0840	[illegible]	0840	0840
MAY	.35	.60	.63	.95	[illegible]	1.20	1.21	1.21	1.22	1.22	1.70	1.70
DATE	[illegible]	[illegible]	26	26	[illegible]	[illegible]	26	26	26	26	26	26
TIME	[illegible]	[illegible]	1452	1452	1452	1452	1452	1452	[illegible]	1452	1452	[illegible]
JUN	.45	[illegible]	.65	.65	.68	1.03	1.15	1.20	1.27	1.42	[illegible]	[illegible]
DATE	[illegible]	28	28	21	21	21	21	21	21	21	21	[illegible]
TIME	[illegible]	1328	1314	[illegible]	1246	1318	[illegible]	1128	[illegible]	1228	1228	[illegible]
[illegible]	[illegible]	.52	[illegible]	.73	1.15	1.40	1.52	1.61	[illegible]	1.85	[illegible]	[illegible]
DATE	15	15	06	[illegible]	23	23	23	23	23	23	[illegible]	[illegible]
TIME	[illegible]	1244	1536	1542	0408	[illegible]	0430	0445	0505	0525	0559	[illegible]
AUG	.40	.60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.80	.88	[illegible]
DATE	[illegible]	05	05	05	05	[illegible]	05	[illegible]	05	05	[illegible]	[illegible]
TIME	1150	1155	1200	[illegible]	[illegible]	1240	[illegible]	[illegible]	1330	[illegible]	1420	1450
SEP	.40	.75	[illegible]	1.00	1.21	1.25	[illegible]	1.47	[illegible]	[illegible]	1.60	[illegible]
DATE	15	15	15	15	[illegible]	[illegible]	[illegible]	14	[illegible]	14	14	[illegible]
TIME	1722	[illegible]	[illegible]	1727	1735	1745	[illegible]	1910	1935	1950	2010	2010
[illegible]	.35	[illegible]	.55	.67	[illegible]	1.15	1.48	1.85	2.05	2.05	2.05	2.05
DATE	10	07	07	07	07	[illegible]	07	[illegible]	07	[illegible]	07	07
TIME	[illegible]	[illegible]	[illegible]	1435	1445	[illegible]	[illegible]	1445	[illegible]	1500	[illegible]	1500
NOV	[illegible]	.40	.50	.65	[illegible]	[illegible]	.90	.93	.93	.93	[illegible]	[illegible]
DATE	[illegible]	18	[illegible]	[illegible]	[illegible]	18	18	18	[illegible]	[illegible]	18	[illegible]
TIME	2354	2354	2354	2354	2354	2354	2354	[illegible]	[illegible]	2354	2354	2354
DEC	[illegible]	.51	[illegible]	.68	[illegible]	[illegible]	[illegible]	[illegible]	1.02	[illegible]	1.05	1.09
DATE	20	20	20	[illegible]	20	20	[illegible]	20	[illegible]	[illegible]	20	20
TIME	[illegible]	1540	1540	1535	1525	1515	[illegible]	[illegible]	1440	1440	1430	[illegible]
YEAR	.45	[illegible]	.85	[illegible]	[illegible]	[illegible]	1.52	1.85	[illegible]	2.05	2.05	2.10
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07	07	10	10	[illegible]	[illegible]

MIAMI BEACH, FLORIDA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	M	M	M	M	M	M	M	M	M	M	M	M
DATE												
TIME												
FEB	M	M	M	M	M	M	M	M	M	M	M	M
DATE												
TIME												
MAR	[illegible]	.24	[illegible]	[illegible]	.61	[illegible]	[illegible]	.71	.72	.72	.73	.74
DATE	[illegible]	[illegible]	26	[illegible]	26	26	26	[illegible]	26	[illegible]	[illegible]	26
TIME	[illegible]	0906	[illegible]	0913	0928	[illegible]	[illegible]	0935	1003	1003	1003	1003
APR	.11	[illegible]	.19	.21	.30	.35	.42	.53	.58	.66	.72	[illegible]
DATE	26	26	26	26	26	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27
TIME	0350	0400	0355	0400	0405	0420	0243	0247	0310	0331	0343	[illegible]
MAY	.30	.43	[illegible]	[illegible]	.63	.63	.63	.63	.63	[illegible]	[illegible]	.63
DATE	15	15	15	15	[illegible]	15	15	15	15	[illegible]	[illegible]	15
TIME	1600	1600	1600	1615	[illegible]	1630	1630	1630	1630	1630	1630	[illegible]
[illegible]	[illegible]	.29	[illegible]	.35	.37	[illegible]	[illegible]	.65	[illegible]	[illegible]	[illegible]	.94
DATE	29	29	29	[illegible]	[illegible]	29	25	25	25	25	25	25
TIME	[illegible]	[illegible]	[illegible]	0928	[illegible]	0947	0715	0730	0746	0807	0812	0838
[illegible]	[illegible]	.19	[illegible]	.21	.24	.25	.27	[illegible]	.28	.28	.28	.28
DATE	[illegible]	21	21	[illegible]	21	21	21	[illegible]	21	21	21	21
TIME	1200	1205	1210	1215	1225	1240	1255	1315	1335	1355	1400	[illegible]
[illegible]	.60	.95	1.35	1.55	[illegible]	[illegible]	3.40	3.85	4.45*	4.55	4.56*	[illegible]
DATE	[illegible]	23	23	23	[illegible]	23	23	[illegible]	[illegible]	23	23	23
TIME	1755	[illegible]	1805	[illegible]	1817	[illegible]	1830	1835	[illegible]	[illegible]	[illegible]	1900
SEP	[illegible]	.54	[illegible]	[illegible]	.70	.70	.83	[illegible]	[illegible]	.86	.89	.92
DATE	25	25	[illegible]	25	25	25	25	25	[illegible]	[illegible]	[illegible]	25
TIME	[illegible]	[illegible]	[illegible]	1332	1339	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1444
[illegible]	.30	.55	[illegible]	.67	[illegible]	.80	.85	.87	[illegible]	[illegible]	[illegible]	.95
DATE	[illegible]	04	[illegible]	[illegible]	[illegible]	04	[illegible]	[illegible]	[illegible]	04	04	04
TIME	[illegible]	1035	[illegible]	1025	1050	1206	1220	1235	1300	1310	1310	1310
[illegible]	.37	[illegible]	.93	1.01	[illegible]	1.12	1.15	1.15	1.15	1.15	1.15	1.15
DATE	06	[illegible]	[illegible]	[illegible]	06	[illegible]	06	06	[illegible]	06	06	[illegible]
TIME	0620	2034	[illegible]	2039	2049	2104	2114	2114	2114	2114	2114	2114
[illegible]	.40	[illegible]	.70	.70	.80	.85	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.25
DATE	20	20	[illegible]	20	20	20	20	20	20	20	20	[illegible]
TIME	1503	1514	[illegible]	1517	1517	1517	[illegible]	1530	1537	1537	1545	1545
YEAR			M									
MONTH												

TALLAHASSEE, FLORIDA

	5	10	15	20	30	45	60	80	100	120	150	180
[illegible]	.16	.20	[illegible]	.31	[illegible]	.51	.54	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	28	[illegible]	22	22	22	[illegible]	22	[illegible]	22	22	22
TIME	[illegible]	0452	0005	0007	[illegible]	0015	[illegible]	0030	0015	0015	0015	0045
FEB	.28	[illegible]	.46	.55	.95	1.03	1.25	[illegible]	1.70	[illegible]	[illegible]	2.20
DATE	02	02	[illegible]	02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	02	02	[illegible]
TIME	0303	0306	0310	0315	[illegible]	0335	0350	0410	0430	0410	0420	[illegible]
MAR	[illegible]	[illegible]	.49	[illegible]	.75	[illegible]	1.15	1.33	1.36	1.80	1.97	2.05
DATE	[illegible]	[illegible]	25	[illegible]	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0605	0605	[illegible]	[illegible]	0646	[illegible]	0700	0720	0750	0810	[illegible]
APR	.51	[illegible]	1.05	1.29	1.37	1.44	1.53	[illegible]	1.65	[illegible]	[illegible]	[illegible]
DATE	26	[illegible]	[illegible]	26	26	26	[illegible]	[illegible]	26	07	07	[illegible]
TIME	[illegible]	1431	[illegible]	[illegible]	1245	1500	1510	1525	1525	1452	1452	[illegible]
MAY	.55	1.20	1.35	1.60	1.85	[illegible]	[illegible]	2.15	2.25	2.28	2.47	2.52
DATE	[illegible]	26	26	[illegible]	[illegible]	24	26	26	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1732	1735	1740	[illegible]	1759	1814	[illegible]	1830	1845	1855	1920
[illegible]	.75	[illegible]	[illegible]	[illegible]	1.55	1.57	1.57	1.57	1.57	[illegible]	[illegible]	1.60
DATE	[illegible]	21	21	[illegible]	21	21	21	21	[illegible]	21	21	[illegible]
TIME	1703	[illegible]	1709	1715	[illegible]	1740	1754	1807	[illegible]	1809	1809	1732
[illegible]	.45	.50	[illegible]	.53	[illegible]	[illegible]	.67	[illegible]	.76	.76	.76	.76
DATE	[illegible]	[illegible]	[illegible]	23	[illegible]	[illegible]	23	[illegible]	[illegible]	[illegible]	[illegible]	23
TIME	1835	[illegible]	[illegible]	1350	1900	1350	1345	1358	1417	1417	1417	1417
AUG	[illegible]	1.45	[illegible]	[illegible]	[illegible]	1.55	1.55	1.55	1.55	1.55	1.55	1.55
DATE	02	02	[illegible]	02	[illegible]	02	02	02	02	02	02	02
TIME	[illegible]	1100	[illegible]	1103	1105	1112	1115	1115	1115	1115	1115	1115
SEP	[illegible]	[illegible]	.68	[illegible]	[illegible]	.95	[illegible]	[illegible]	1.30	1.40	1.46	1.47
DATE	[illegible]	26	[illegible]	26	26	[illegible]	26	[illegible]	[illegible]	[illegible]	[illegible]	26
TIME	1250	[illegible]	1300	1305	[illegible]	1313	1313	[illegible]	1320	1330	1331	1355
[illegible]	.43	[illegible]	[illegible]	.75	[illegible]	.86	.96	[illegible]	1.15	1.19	1.23	1.23
DATE	[illegible]	[illegible]	[illegible]	01	[illegible]	01	31	31	[illegible]	31	31	31
TIME	1523	[illegible]	[illegible]	1402	1443	1415	1525	1543	1600	1617	1650	1720
[illegible]	.28	[illegible]	.38	[illegible]	[illegible]	.61	[illegible]	[illegible]	.95	1.25	1.43	1.67
DATE	28	[illegible]	[illegible]	21	[illegible]	28	[illegible]	21	21	[illegible]	[illegible]	[illegible]
TIME	0630	0634	[illegible]	1536	[illegible]	0704	1617	1621	[illegible]	1716	1745	[illegible]
DEC	.38	[illegible]	.49	.65	[illegible]	1.07	[illegible]	1.36	1.49	[illegible]	[illegible]	1.50
DATE	[illegible]	15	15	26	26	[illegible]	26	26	[illegible]	26	26	26
TIME	1012	1017	1018	1252	1302	1314	1317	[illegible]	1400	1412	1412	1412
YEAR	.89	1.45	1.47	1.60	1.85	1.97	2.05	2.15	2.25	2.28	2.47	2.52
MONTH	[illegible]	08	08	05	[illegible]	05	[illegible]	05	05	05	05	05

ATHENS, GEORGIA

	5	10	15	20	30	45	60	80	100	120	150	180
[illegible]	[illegible]	.13	[illegible]	[illegible]	.22	.27	[illegible]	.38	[illegible]	.45	.50	.58
DATE	22	[illegible]	22	22	[illegible]	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22
TIME	0120	0125	0130	0135	0130	[illegible]	[illegible]	0155	0155	0200	0200	0200
FEB	.08	[illegible]	[illegible]	.18	.18	.19	.35	.38	.48	[illegible]	[illegible]	.63
DATE	[illegible]	[illegible]	[illegible]	[illegible]	08	01	01	[illegible]	[illegible]	[illegible]	[illegible]	02
TIME	1355	1405	[illegible]	1415	1420	[illegible]	[illegible]	1938	2010	[illegible]	[illegible]	0130
MAR	.20	.38	[illegible]	.54	.65	.76	[illegible]	.88	.94	[illegible]	[illegible]	1.43
DATE	[illegible]	16	16	16	16	16	[illegible]	[illegible]	[illegible]	16	16	16
TIME	[illegible]	[illegible]	1950	1955	2005	[illegible]	2005	2005	[illegible]	[illegible]	[illegible]	2215
APR	.16	[illegible]	[illegible]	.33	[illegible]	[illegible]	[illegible]	.55	.71	.82	1.04	1.13
DATE	[illegible]	24	24	24	[illegible]	[illegible]	[illegible]	07	[illegible]	[illegible]	[illegible]	07
TIME	0749	0755	0804	0815	0815	0830	1255	1255	1255	1255	1255	1255
[illegible]	.40	[illegible]	[illegible]	[illegible]	1.01	[illegible]	[illegible]	[illegible]	2.39	[illegible]	[illegible]	2.39
DATE	28	28	28	28	[illegible]	[illegible]	28	28	[illegible]	[illegible]	[illegible]	28
TIME	0255	0300	0315	0320	0330	[illegible]	0400	0420	0540	[illegible]	[illegible]	0700
[illegible]	.38	.60	[illegible]	[illegible]	[illegible]	[illegible]	.85	.86	[illegible]	[illegible]	[illegible]	.87
DATE	06	[illegible]	[illegible]	[illegible]	06	06	[illegible]	06	06	[illegible]	[illegible]	[illegible]
TIME	1135	1140	[illegible]	1150	1200	[illegible]	1230	1250	1310	1330	1400	1430
[illegible]	.13	.27	[illegible]	.36	[illegible]	[illegible]	.58	.59	.61	.61	.61	.66
DATE	[illegible]	[illegible]	[illegible]	17	17	17	18	18	18	[illegible]	[illegible]	[illegible]
TIME	[illegible]	2340	[illegible]	[illegible]	[illegible]	2350	0000	0000	0000	[illegible]	[illegible]	[illegible]
AUG	.25	.51	.56	[illegible]	.68	.86	.96	1.11	1.11	1.13	1.21	1.21
DATE	01	01	[illegible]	01	17	17	[illegible]	17	17	17	17	17
TIME	1545	[illegible]	1650	[illegible]	1435	1450	1450	[illegible]	[illegible]	1450	1450	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.52	.55	.57	.57	.57	.57	.82	.89
DATE	[illegible]	[illegible]	30	30	30	30	[illegible]	30	30	[illegible]	[illegible]	[illegible]
TIME	1642	[illegible]	1645	1647	1700	1710	[illegible]	1745	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	.12	[illegible]	.20	.26	.30	.30	.31	.31	.36	[illegible]	[illegible]	.36
DATE	28	28	28	[illegible]	28	28	[illegible]	[illegible]	[illegible]	28	28	[illegible]
TIME	[illegible]	1708	1713	[illegible]	[illegible]	1735	[illegible]	1735	1735	[illegible]	[illegible]	[illegible]
NOV	.22	.36	[illegible]	[illegible]	.45	[illegible]	.50	.54	[illegible]	.63	.67	[illegible]
DATE	21	21	21	21	[illegible]	21	[illegible]	21	21	21	21	21
TIME	0959	1004	1009	1014	[illegible]	1039	[illegible]	[illegible]	[illegible]	1154	1224	[illegible]
[illegible]	.30	[illegible]	[illegible]	.57	.77	.82	[illegible]	.96	1.00	[illegible]	[illegible]	[illegible]
DATE	[illegible]	31	31	31	[illegible]	31	[illegible]	[illegible]	[illegible]	05	05	[illegible]
TIME	1730	1730	[illegible]	1730	[illegible]	1730	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	.40	[illegible]	.66	[illegible]	[illegible]	1.37	1.86	2.28	2.39	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	06	05	05	05	05	05	05	05	05	[illegible]

MAXIMUM SHORT DURATION PRECIPITATION

YEAR 1973

Maximum precipitation in inches (5 to 180 minutes)

[illegible]

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.31	.40	[illegible]	[illegible]	[illegible]	[illegible]	1.62	1.97	2.27	2.55	2.65
DATE	[illegible]	07	[illegible]	[illegible]	[illegible]	07	07	07	07	07	07	[illegible]
TIME	[illegible]	2045	2045	2050	[illegible]	[illegible]	2105	2055	[illegible]	[illegible]	[illegible]	2145
FEB	.20	[illegible]	.30	.33	[illegible]	[illegible]	.72	.75	.98	1.23	1.43	1.66
DATE	[illegible]	[illegible]	[illegible]	01	01	01	01	01	01	01	01	[illegible]
TIME	1915	1920	[illegible]	[illegible]	[illegible]	[illegible]	2010	[illegible]	1940	1950	1955	2000
MAR	[illegible]	.38	.51	[illegible]	[illegible]	1.07	1.24	1.63	[illegible]	[illegible]	1.97	[illegible]
DATE	[illegible]	16	[illegible]	16	[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]	16	16
TIME	[illegible]	[illegible]	[illegible]	1715	1725	[illegible]	[illegible]	[illegible]	1840	1900	1830	1750
APR	[illegible]	[illegible]	.30	.35	.48	.51	.52	.60	[illegible]	.88	.99	1.16
DATE	26	[illegible]	[illegible]	[illegible]	[illegible]	26	26	07	[illegible]	[illegible]	07	07
TIME	[illegible]	[illegible]	2201	[illegible]	2216	2231	2246	1125	[illegible]	[illegible]	1125	1125
MAY	[illegible]	[illegible]	[illegible]	.60	.63	[illegible]	[illegible]	1.21	1.33	1.33	1.33	1.33
DATE	[illegible]	[illegible]	[illegible]	23	[illegible]	28	[illegible]	[illegible]	[illegible]	28	28	28
TIME	[illegible]	[illegible]	[illegible]	2129	[illegible]	0143	0143	0150	0209	[illegible]	0209	0209
JUN	[illegible]	.56	[illegible]	[illegible]	1.17	[illegible]	1.39	1.40	1.40	1.40	1.41	[illegible]
DATE	20	20	[illegible]	[illegible]	[illegible]	20	20	20	20	[illegible]	20	20
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1347	1351	1354	1408	1420	1420	1520	[illegible]
JUL	[illegible]	[illegible]	.49	[illegible]	.57	[illegible]	.57	.57	.58	.58	.58	.58
DATE	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26	26	26	[illegible]
TIME	[illegible]	[illegible]	1952	[illegible]	2005	2005	2005	2005	2059	2059	[illegible]	[illegible]
AUG	.25	[illegible]	[illegible]	.50	.50	.50	.50	[illegible]	.50	.50	.50	[illegible]
DATE	[illegible]	[illegible]	12	12	12	[illegible]	12	[illegible]	[illegible]	[illegible]	12	12
TIME	[illegible]	1711	1720	[illegible]	1724	[illegible]	[illegible]	1724	[illegible]	1724	1724	1724
SEP	[illegible]	[illegible]	.52	.57	.58	.58	.58	.58	.58	.60	[illegible]	[illegible]
DATE	[illegible]	09	09	09	09	[illegible]	[illegible]	09	[illegible]	[illegible]	30	[illegible]
TIME	2104	2100	2056	2056	2056	[illegible]	[illegible]	2056	2056	1827	1838	1838
OCT	[illegible]	.04	[illegible]	[illegible]	.11	[illegible]	[illegible]	.17	.19	.20	.22	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01	[illegible]
TIME	[illegible]	[illegible]	2035	2049	[illegible]	2049	[illegible]	2106	[illegible]	2144	[illegible]	[illegible]
NOV	[illegible]	[illegible]	.62	[illegible]	.72	[illegible]	[illegible]	.81	.88	.95	[illegible]	[illegible]
DATE	[illegible]	21	21	[illegible]	21	21	21	21	[illegible]	21	21	[illegible]
TIME	[illegible]	0834	0839	0844	0854	0909	0924	0944	1004	1024	1054	[illegible]
DEC	[illegible]	.55	[illegible]	[illegible]	[illegible]	.85	.87	.87	[illegible]	.99	1.08	[illegible]
DATE	29	29	[illegible]	[illegible]	29	[illegible]	29	29	[illegible]	05	05	[illegible]
TIME	[illegible]	[illegible]	2134	2139	[illegible]	[illegible]	[illegible]	2228	0235	0228	0248	[illegible]
YEAR	[illegible]	.56	[illegible]	.89	1.17	[illegible]	1.39	[illegible]	[illegible]	2.27	2.55	2.65
MONTH	[illegible]	06	[illegible]	[illegible]	06	06	[illegible]	03	[illegible]	[illegible]	01	[illegible]

AUGUSTA, GEORGIA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.08	[illegible]	.12	.15	.25	.28	.30	.32	.35	.42	.48	.54
DATE	22	[illegible]	22	22	[illegible]	22	[illegible]	22	[illegible]	08	08	08
TIME	[illegible]	0315	[illegible]	0325	[illegible]	0345	[illegible]	0420	[illegible]	0300	0240	0300
FEB	.32	.34	.38	.47	.52	.63	[illegible]	.81	[illegible]	.94	1.05	1.14
DATE	02	02	[illegible]	02	02	02	02	02	02	02	02	02
TIME	0435	0435	0435	0435	0435	0435	0500	0500	[illegible]	0510	0530	0600
MAR	.22	.36	.39	.40	.44	[illegible]	.50	.58	.60	.68	.77	.78
DATE	31+	[illegible]	11	11	[illegible]	[illegible]	[illegible]	[illegible]	11	31+	31	31
TIME	[illegible]	2105	[illegible]	2112	[illegible]	1045	1055	[illegible]	2235	1130	1120	1125
APR	[illegible]	.21	[illegible]	.30	[illegible]	.38	.55	.70	.94	[illegible]	1.20	1.42
DATE	07	07	07	[illegible]	07	[illegible]	07	07	[illegible]	07	07	07
TIME	1533	[illegible]	1225	1230	1240	1255	1310	[illegible]	1350	1410	1440	1510
MAY	.40	.45	.47	[illegible]	[illegible]	.65	.70	.74	.78	.85	[illegible]	.93
DATE	[illegible]	[illegible]	08	[illegible]	08	08	08	08	08	08	08	08
TIME	1432	[illegible]	1442	1437	1437	1449	1500	1514	1534	1554	1624	[illegible]
JUN	.27	.54	[illegible]	.67	.85	.86	1.09	1.12	1.14	1.33	1.56	1.62
DATE	[illegible]	[illegible]	15	12	12	12	[illegible]	15	[illegible]	15	15	[illegible]
TIME	1742	2230	2225	1956	1956	2001	[illegible]	2238	[illegible]	2235	2232	2302
JUL	.25	.42	[illegible]	.50	[illegible]	.56	.58	.58	.58	[illegible]	.58	.58
DATE	[illegible]	[illegible]	[illegible]	26	26	26	26	[illegible]	[illegible]	[illegible]	26	[illegible]
TIME	[illegible]	1704	1709	[illegible]	1720	1735	1750	[illegible]	[illegible]	1754	1754	[illegible]
AUG	[illegible]	[illegible]	.40	[illegible]	.51	.56	[illegible]	.70	.70	.70	.70	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]	18	18	18	18	[illegible]
TIME	1420	1430	1435	1427	[illegible]	1420	1435	1455	1456	1456	1456	1456
SEP	.28	[illegible]	.60	.65	.65	.65	.65	.65	.65	.66	.70	.74
DATE	[illegible]	[illegible]	[illegible]	10	[illegible]	10	10	[illegible]	10	[illegible]	13	13
TIME	0521	[illegible]	0531	0536	0542	0545	0545	0545	0545	1827	1850	1920
OCT	.42	.78	1.12	1.23	1.46	[illegible]	[illegible]	1.58	[illegible]	1.58	1.58	1.58
DATE	01	01	[illegible]	[illegible]	01	01	01	01	[illegible]	01	01	01
TIME	1508	[illegible]	1518	1523	1525	1540	[illegible]	1548	1548	1548	1548	1548
NOV	.05	.08	[illegible]	.12	[illegible]	.20	.23	.25	.25	.25	.25	[illegible]
DATE	21	[illegible]	21	21	[illegible]	21	[illegible]	21	21	[illegible]	21	[illegible]
TIME	1234	1239	1244	[illegible]	[illegible]	1314	1325	1345	1400	[illegible]	1447	[illegible]
DEC	.18	.25	.38	[illegible]	.50	[illegible]	[illegible]	.60	.60	.60	.60	[illegible]
DATE	[illegible]	[illegible]	31	31	31	31	31	[illegible]	31	31	31	[illegible]
TIME	2301	[illegible]	[illegible]	2301	[illegible]	2328	2343	2359	[illegible]	2359	2359	2359
YEAR	.42	.78	1.12	1.23	1.46	1.56	1.58	1.58	1.58	1.58	1.58	1.62
MONTH	[illegible]	10	10	10	10	10	10	10	10	[illegible]	10	06

COLUMBUS, GEORGIA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.37	.46	.50	.55	.62	.75	.92	1.00	1.03	1.06	1.10	1.16
DATE	19	19	19	19	08	08	08	08	08	08	08	08
TIME	0440	0445	0450	0455	0330	0330	0330	0350	0410	[illegible]	0410	0410
FEB	.15	[illegible]	.24	.24	.25	.28	.38	.38	.39	.46	.52	.64
DATE	[illegible]	08	[illegible]	08	08	08	01	01	01	01	01	01
TIME	1425	1425	1425	1425	1425	1440	2230	2230	2230	2230	2235	2235
MAR	.40	.63	.68	.81	.90	1.01	1.13	1.18	1.29	1.39	1.59	1.62
DATE	12	12	12	12	12	12	[illegible]	12	12	12	12	12
TIME	1635	1640	1815	1815	1830	1845	1900	1900	1815	1830	1900	1930
APR	.32	[illegible]	.57	.63	.78	.95	[illegible]	1.23	1.41	1.49	1.57	1.70
DATE	[illegible]	07	07	07	07	07	07	07	07	07	07	07
TIME	1102	1108	1114	[illegible]	1124	1124	1124	1124	1124	1124	1226	1227
MAY	.36	.65	.77	[illegible]	1.12	1.13	1.17	1.26	1.51	1.61	1.61	1.61
DATE	[illegible]	[illegible]	28	28	28	28	28	28	28	28	28	28
TIME	0316	0325	0330	0330	0333	0550	0350	0430	0455	0450	0450	0450
JUN	.36	[illegible]	[illegible]	[illegible]	1.22	1.43	1.56	1.63	1.68	1.68	1.68	1.68
DATE	06	[illegible]	[illegible]	17	[illegible]	17	17	17	17	[illegible]	17	17
TIME	1320	1553	1553	1555	1604	1619	1634	1638	1658	1658	1658	1658
JUL	.43	.84	1.25	1.26	1.36	1.40	1.50	1.55	1.59	[illegible]	1.63	1.63
DATE	14	14	14	14	[illegible]	14	14	14	14	14	14	[illegible]
TIME	1430	1430	1430	1437	1445	1500	1445	1505	0525	1545	1615	1615
AUG	.62	.90	1.20	1.50*	1.98	2.25	2.27	2.27	2.27	2.27	2.27	2.27
DATE	[illegible]	05	05	[illegible]	[illegible]	05	05	05	[illegible]	05	05	05
TIME	1613	1718	1727	[illegible]	1731	1740	1753	1753	1753	1753	1753	1753
SEP	.20	.33	.34	.42	.64	.66	.67	.69	.80	.81	.93	1.01
DATE	30	30	30	30	[illegible]	30	30	30	30	30	30	30
TIME	[illegible]	1730	[illegible]	[illegible]	1734	1742	1757	1817	1837	1857	1927	1957
OCT	.11	[illegible]	.15	.17	.23	.34	.39	.44	.52	.54	.55	.55
DATE	31	01	01	31	31	[illegible]	31	31	31	31	31	31
TIME	1548	1143	[illegible]	1305	1315	1330	1345	1345	1345	1345	1408	1408
NOV	.44	.78	.87	.90	.91	.92	.92	.94	.96	1.05	1.15	1.18
DATE	28	28	28	28	28	28	28	28	[illegible]	28	28	28
TIME	0205	0210	0215	0215	0225	0240	0255	0315	0330	0350	0425	0455
DEC	.37	.51	[illegible]	.86	1.00	1.12	1.19	1.28	1.35	1.42	1.52	1.54
DATE	31	31	26	26	[illegible]	26	26	26	26	26	26	26
TIME	1917	1926	1104	1112	[illegible]	1118	1116	1118	1118	1118	1118	1118
YEAR	.62	.90	1.25	1.50*	1.98	2.25	2.27	2.27	2.27	2.27	2.27	2.27
MONTH	08	08	07	08	08	08	08	08	08	08	08	08

MACON, GEORGIA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.15	.23	.36	[illegible]	[illegible]	[illegible]	.57	[illegible]	[illegible]	.82	.89	.94
DATE	19	19	[illegible]	[illegible]	[illegible]	08	08	08	[illegible]	08	08	08
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0446	[illegible]	0504	0523	0528	[illegible]
FEB	.26	.44	.55	[illegible]	[illegible]	1.05	[illegible]	1.14	[illegible]	[illegible]	[illegible]	1.45
DATE	[illegible]	[illegible]	02	02	[illegible]	02	[illegible]	02	[illegible]	02	02	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0104	0056	0109	[illegible]	[illegible]	0113	0104	0109	0109
MAR	[illegible]	[illegible]	.53	[illegible]	[illegible]	.83	[illegible]	.96	.98	.98	1.05	1.05
DATE	[illegible]	[illegible]	[illegible]	31	[illegible]	31	[illegible]	31	[illegible]	31	16	[illegible]
TIME	[illegible]	2107	[illegible]	2108	2108	2112	[illegible]	[illegible]	2205	2205	2249	2249
APR	[illegible]	[illegible]	[illegible]	[illegible]	1.05	1.16	1.25	1.37	1.46	[illegible]	1.81	1.98
DATE	[illegible]	[illegible]	26	[illegible]	26	07	[illegible]	26	[illegible]	26	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1436	1435	[illegible]	[illegible]	[illegible]	1448	[illegible]	[illegible]	[illegible]	1653
MAY	.18	.26	[illegible]	[illegible]	.50	.65	[illegible]	[illegible]	[illegible]	1.51	1.66	1.85
DATE	[illegible]	[illegible]	29	29	[illegible]	29	29	29	[illegible]	29	29	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0351	0359	0400	0356	0357	0404	0432	[illegible]	[illegible]
JUN	[illegible]	[illegible]	[illegible]	[illegible]	.85	.88	[illegible]	[illegible]	[illegible]	.92	.92	.92
DATE	[illegible]	[illegible]	[illegible]	22	[illegible]	22	[illegible]	22	[illegible]	22	22	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0325	0340	0400	0420	[illegible]	0510	0540
JUL	[illegible]	.55	[illegible]	.78	[illegible]	[illegible]	1.19	1.19	1.21	1.32	1.38	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	06	06	[illegible]	[illegible]	06	[illegible]
TIME	[illegible]	[illegible]	2041	[illegible]	[illegible]	1455	[illegible]	1501	1545	1501	1511	1546
AUG	.34	.63	.89	1.00	[illegible]	1.66	[illegible]	1.72	1.76	1.81	1.82	1.82
DATE	[illegible]	17	[illegible]	17	17	[illegible]	17	17	[illegible]	[illegible]	17	17
TIME	2010	2014	2017	2018	[illegible]	[illegible]	[illegible]	2102	2122	2142	2146	2146
SEP	[illegible]	[illegible]	[illegible]	[illegible]	.50	.50	.50	.50	.50	.50	[illegible]	.50
DATE	[illegible]	10	[illegible]	10	10	[illegible]	[illegible]	10	[illegible]	[illegible]	10	10
TIME	2146	[illegible]	[illegible]	[illegible]	[illegible]	2140	2140	[illegible]	2140	2140	[illegible]	[illegible]
OCT	[illegible]	.20	.25	.27	[illegible]	.27	.27	.28	.28	.28	.28	.28
DATE	[illegible]	[illegible]	[illegible]	28	[illegible]	[illegible]	28	28	28	28	28	28
TIME	[illegible]	[illegible]	1730	[illegible]	1725	1725	1725	[illegible]	[illegible]	1640	[illegible]	1640
NOV	[illegible]	.26	.33	[illegible]	[illegible]	.45	[illegible]	[illegible]	.47	.55	.63	.65
DATE	[illegible]	21	21	21	[illegible]	21	21	21	[illegible]	21	21	21
TIME	[illegible]	[illegible]	1025	1031	1037	1056	1102	[illegible]	[illegible]	1211	1240	[illegible]
DEC	.15	.19	[illegible]	.29	.40	.42	.42	[illegible]	.53	.56	[illegible]	.71
DATE	31	[illegible]	31	[illegible]	[illegible]	31	[illegible]	31	[illegible]	[illegible]	31	[illegible]
TIME	[illegible]	2111	2111	[illegible]	[illegible]	[illegible]	[illegible]	2014	[illegible]	2251	2220	[illegible]
YEAR	.39	[illegible]	[illegible]	1.00	1.46	1.66	[illegible]	1.72	1.76	1.81	1.82	1.98
MONTH	[illegible]	08	[illegible]	08	[illegible]	[illegible]	08	08	08	[illegible]	[illegible]	[illegible]

ROME, GEORGIA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.25	.31	.42	.47	.60	.62	.69	.75	.78	.79	.79	.81
DATE	[illegible]	[illegible]	21	21	21	21	19	19	[illegible]	[illegible]	19	19
TIME	[illegible]	[illegible]	[illegible]	2135	2145	2200	2215	[illegible]	[illegible]	2245	[illegible]	2245
FEB	.14	[illegible]	[illegible]	.20	.22	.28	.34	.36	[illegible]	.37	.50	.60
DATE	[illegible]	01	[illegible]	01	[illegible]	[illegible]	[illegible]	01	01	[illegible]	01	[illegible]
TIME	1600	[illegible]	[illegible]	1615	[illegible]	1635	1650	1705	1715	1750	1645	1710
MAR	.50	[illegible]	.65	.70	.72	.75	.77	.83	[illegible]	.96	1.09	1.26
DATE	[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	16	31
TIME	1430	1430	[illegible]	[illegible]	1430	1445	1500	[illegible]	1540	[illegible]	[illegible]	0600
APR	.40	.48	.50	.75	[illegible]	[illegible]	1.12	1.20	1.24	[illegible]	1.26	1.37
DATE	[illegible]	[illegible]	24	24	[illegible]	[illegible]	24	[illegible]	24	[illegible]	24	07
TIME	0355	0400	0400	0410	[illegible]	0430	0420	0430	0500	[illegible]	0530	1100
MAY	.45	.70	.90	[illegible]	1.17	1.47	2.06	2.37	2.72	2.81	3.37*	3.57
DATE	[illegible]	27	27	27	27	27	27	27	27	27	27	[illegible]
TIME	[illegible]	1815	1845	1850	[illegible]	1845	1900	[illegible]	1946	1940	2015	2055
JUN	.22	.35	[illegible]	.45	.57	.70	.72	.80	.93	.99	1.01	[illegible]
DATE	[illegible]	06	[illegible]	28+	28	[illegible]	28	06	06	[illegible]	06	06
TIME	[illegible]	[illegible]	[illegible]	0600	[illegible]	0603	0603	0420	0445	0500	0530	0600
JUL	[illegible]	.85	1.00	1.15	1.52	[illegible]	1.69	1.70	1.70	1.74	1.74	1.78
DATE	10	10	10	[illegible]	[illegible]	10	10	10	10	10	10	[illegible]
TIME	[illegible]	1746	[illegible]	1750	1758	1820	2005	2005	2005	2015	2015	[illegible]
AUG	[illegible]	.35	.35	.36	[illegible]	.42	[illegible]	.45	.45	[illegible]	.45	.45
DATE	18	[illegible]	18	18	[illegible]	18	18	18	[illegible]	[illegible]	18	18
TIME	[illegible]	0435	[illegible]	0437	[illegible]	0446	0448	0550	0530	0550	[illegible]	0550
SEP	.34	.56	.75	1.05	1.47	1.54	1.54	1.57	1.57	1.57	1.57	1.57
DATE	28	28	28	28	28	28	[illegible]	28	[illegible]	28	28	28
TIME	1510	[illegible]	1515	1515	1515	1520	[illegible]	1525	1525	1530	1530	[illegible]
OCT	.09	.17	.23	.25	.29	.32	.36	.39	.40	[illegible]	.45	[illegible]
DATE	01	[illegible]	[illegible]	[illegible]	[illegible]	01	01	[illegible]	01	[illegible]	01	01
TIME	0505	0510	0505	0510	0510	0510	0515	0535	0540	0515	0545	0615
NOV	.18	.20	.27	.35	.44	.52	.70	.83	.83	.89	1.24	1.45
DATE	27	27	27	27	27	28	27	27	27	[illegible]	28	28
TIME	2200	2205	2250	2255	2310	[illegible]	2255	2310	0325	2355	[illegible]	0150
DEC	.27	[illegible]	[illegible]	.51	.57	.75	.85	.97	1.16	1.25	1.42	1.49
DATE	31	[illegible]	31	31	[illegible]	31	[illegible]	31	31	31	31	31
TIME	0725	0725	0730	0735	0745	0800	0815	0830	0850	0915	0945	1000
YEAR	.50	.85	1.00	1.15	1.52	1.64	2.06	[illegible]	2.72	2.81	3.37*	3.57
MONTH	[illegible]	07	07	07+	07	07	05	05	[illegible]	05	[illegible]	05

SAVANNAH, GEORGIA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.07	.12	.14	[illegible]	[illegible]	.32	.37	.44	.55	.64	.84	.92
DATE	26	22	22	22	22	22	22	[illegible]	[illegible]	[illegible]	22	22
TIME	2022	0702	0717	0558	[illegible]	[illegible]	0638	0658	0715	0715	0715	0715
FEB	.16	[illegible]	.27	.28	[illegible]	.29	.44	.45	.46	.46	.46	.46
DATE	[illegible]	26	26	26	[illegible]	26	26	26	26	26	26	26
TIME	1615	1620	1624	1629	[illegible]	1629	1622	1629	1629	1629	1629	1629
MAR	.14	.21	.25	.30	.38	.47	.48	.52	.62	.67	.69	.71
DATE	[illegible]	08	31	[illegible]	08	08	31	31	31	31	31	08
TIME	[illegible]	[illegible]	1352	1352	[illegible]	0701	[illegible]	1429	[illegible]	1509	1509	[illegible]
APR	.26	.48	.62	[illegible]	.97	1.18	1.32	1.39	1.44	1.48	1.56	1.62
DATE	26	26	26	26	26	26	26	26	26	[illegible]	26	26
TIME	[illegible]	1936	1938	1943	[illegible]	2007	2007	2012	2012	2012	2012	2012
MAY	.09	.12	.19	.23	[illegible]	.31	.33	.36	.38	.40	.43	.43
DATE	08	08	08	08	[illegible]	08	[illegible]	08	08	08	08	08
TIME	1702	1704	1710	[illegible]	[illegible]	1714	1734	1745	1734	1755	1755	1755
JUN	.31	[illegible]	.55	.61	[illegible]	1.02	1.17	1.39	1.72	1.87	1.91	2.03
DATE	[illegible]	11	[illegible]	11	11	11	[illegible]	11	11	[illegible]	[illegible]	11
TIME	1301	1302	1302	1310	1325	1332	1349	[illegible]	1431	1449	1519	1440
JUL	.36	.64	.69	.71	.73	.81	.82	.84	.85	.88	.95	[illegible]
DATE	[illegible]	05	05	05	05	11	11	[illegible]	[illegible]	11	11	11
TIME	[illegible]	1556	1556	1600	1603	1919	1924	1946	2009	2224	2055	2133
AUG	.26	[illegible]	.57	.60	[illegible]	.69	.73	.82	.86	.87	1.25	1.26
DATE	01	[illegible]	[illegible]	01	01	01	[illegible]	[illegible]	01	01	03	03
TIME	1605	1606	1611	1614	1619	1634	1630	1630	1637	1637	1610	[illegible]
SEP	.38	.68	.82	.93	.97	.97	.97	.97	.97	.97	.97	.97
DATE	[illegible]	11	11	11	11	11	[illegible]	11	[illegible]	11	11	11
TIME	[illegible]	2053	2057	2102	2108	2108	[illegible]	2108	2108	2108	[illegible]	2108
OCT	.06	[illegible]	.08	.08	[illegible]	.08	.09	[illegible]	.10	.10	.10	.10
DATE	[illegible]	28	28	28	[illegible]	28	29	29	[illegible]	29	29	29
TIME	2338	[illegible]	[illegible]	2346	2346	2346	0027	0027	0056	0056	0056	0056
NOV	.34	.46	.47	.48	.49	.49	.52	.55	.55	.55	.55	.55
DATE	09	09	09	09	09	09	[illegible]	09	09	09	09	09
TIME	1257	1301	1301	[illegible]	[illegible]	1301	[illegible]	1353	1353	1353	1353	1353
DEC	.06	[illegible]	.11	.14	.17	.21	.25	.30	[illegible]	.42	.51	.57
DATE	26	27	27	27	27	27	27	27	27	27	27	27
TIME	[illegible]	0719	0721	[illegible]	0726	0726	0735	0756	0815	[illegible]	0907	0912
YEAR	.38	.68	.82	.93	.97	1.18	1.32	1.39	1.72	1.87	1.91	2.03
MONTH	09	09	09	09	09+	04	04	06+	06	[illegible]	06	[illegible]

BOISE, IDAHO

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.11	[illegible]	.18	[illegible]	.19
DATE	16	[illegible]	31+	[illegible]	31	[illegible]	[illegible]	[illegible]	12	[illegible]	12	12
TIME	[illegible]	[illegible]	0430	[illegible]	[illegible]	0545	[illegible]	0615	0550	0610	0645	0640
FEB	[illegible]	.04	[illegible]	.06	.08	.09	[illegible]	[illegible]	.09	[illegible]	.09	[illegible]
DATE	[illegible]	[illegible]	10	[illegible]	[illegible]	10	10	[illegible]	[illegible]	[illegible]	10	10
TIME	2040	2040	2045	2045	[illegible]	2100	[illegible]	2100	2100	[illegible]	[illegible]	2100
MAR	[illegible]	[illegible]	.15	[illegible]	.16	.16	.18	.19	.24	.24	.26	.26
DATE	10	10	10	10	10	10	[illegible]	10	[illegible]	[illegible]	10	10
TIME	[illegible]	1455	1500	[illegible]	[illegible]	1530	[illegible]	[illegible]	1625	1645	[illegible]	[illegible]
APR	.07	.12	[illegible]	.19	[illegible]	.20	[illegible]	.30	[illegible]	.42	.52	.57
DATE	13	13	13	13	13	13	[illegible]	13	[illegible]	13	13	[illegible]
TIME	1003	[illegible]	1613	[illegible]	[illegible]	1648	1710	1723	1725	1805	1835	1905
MAY	.13	[illegible]	[illegible]	[illegible]	[illegible]	.22	[illegible]	.22	.22	.23	.25	.26
DATE	[illegible]	24	24	24	24	24	[illegible]	24	24	[illegible]	24	24
TIME	2205	[illegible]	[illegible]	2220	[illegible]	2245	2300	2300	[illegible]	2300	[illegible]	2300
JUN	[illegible]	[illegible]	.02	.02	.03	.04	.05	[illegible]	[illegible]	.08	.09	.11
DATE	17	[illegible]	[illegible]	17	17	17	[illegible]	17	[illegible]	17	17	17
TIME	[illegible]	[illegible]	0110	0115	0120	0135	0155	0210	0230	0245	0245	0245
JUL	.02	[illegible]	[illegible]	[illegible]	.05	.05	.05	.05	[illegible]	.05	.05	.05
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	14	[illegible]	[illegible]	14	14
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0025	0025	[illegible]	0025	[illegible]	[illegible]	0025	[illegible]
AUG	[illegible]	[illegible]	[illegible]	.02	.02	.02	.02	.02	.02	.02	.02	.02
DATE	31	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31	31	31
TIME	[illegible]	[illegible]	0410	[illegible]	0415	0415	[illegible]	0415	0415	[illegible]	0415	0415
SEP	[illegible]	[illegible]	.08	[illegible]	[illegible]	[illegible]	.22	.23	[illegible]	[illegible]	.24	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	07	[illegible]	[illegible]	24	[illegible]	[illegible]	24	[illegible]
TIME	1035	[illegible]	[illegible]	1045	[illegible]	1900	1915	1935	1955	2005	2025	2025
OCT	.03	.05	.06	.06	.08	.12	.14	[illegible]	.18	.18	.18	.22
DATE	20	[illegible]	20	[illegible]	20	20	20	[illegible]	20	[illegible]	[illegible]	06
TIME	[illegible]	[illegible]	0940	0945	[illegible]	[illegible]	1025	1045	1105	1125	[illegible]	[illegible]
NOV	.03	[illegible]	.08	.09	.11	.14	.24	[illegible]	[illegible]	[illegible]	.30	.31
DATE	[illegible]	[illegible]	13	[illegible]	13	13	13	13	[illegible]	13	13	13
TIME	0130	0130	[illegible]	0120	0125	[illegible]	0145	0155	0210	[illegible]	0300	0300
DEC	.03	[illegible]	.05	[illegible]	.06	[illegible]	.08	.10	.13	.14	.15	.25
DATE	[illegible]	17	17	17+	17	[illegible]	[illegible]	[illegible]	23	[illegible]	23	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1315	[illegible]	[illegible]	[illegible]	2135	0540	0540	0600	2000
YEAR	[illegible]	.17	[illegible]	.20	[illegible]	.22	.28	[illegible]	.35	.42	.52	.57
MONTH	[illegible]	05	[illegible]	[illegible]	[illegible]	05	04	04	[illegible]	[illegible]	[illegible]	04

LEWISTON, IDAHO

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.02	[illegible]	.04	.06	.08	.12	.16	.18	.20	.23	.25
DATE	12	12+	[illegible]	12	12	12	[illegible]	12	12	[illegible]	12	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1930	1945	[illegible]	[illegible]	2040	2040	2100	2100
FEB	.08	[illegible]	.10	[illegible]	.12	.15	.15	[illegible]	.20	.22	.23	[illegible]
DATE	28	28	28	28	28	28	28	28+	[illegible]	10	10	[illegible]
TIME	[illegible]	[illegible]	2330	2335	2345	2359	2359	2359	[illegible]	[illegible]	1855	1900
MAR	[illegible]	.01	[illegible]	.02	.03	.04	.05	.06	[illegible]	.07	.10	.10
DATE	31	31	31	31	[illegible]	31	[illegible]	[illegible]	[illegible]	31	31	31
TIME	0245	0245	0500	0500	0500	0500	0635	[illegible]	0250	0500	0700	0700
APR	.01	[illegible]	[illegible]	.03	[illegible]	.06	[illegible]	.07	[illegible]	[illegible]	.09	[illegible]
DATE	12	12+	[illegible]	12	[illegible]	12	12	12	[illegible]	[illegible]	12	12
TIME	[illegible]	[illegible]	0822	0812	0815	0822	0822	0822	0822	0822	0822	0822
MAY	.07	.09	.12	.14	[illegible]	[illegible]	.22	.29	.33	.36	.38	.41
DATE	[illegible]	24	24	24	[illegible]	24	24	[illegible]	24	24	24	24
TIME	1548	1553	1558	1603	1613	[illegible]	1643	1703	1723	1743	1813	1843
JUN	[illegible]	[illegible]	[illegible]	.05	.07	.07	[illegible]	.11	.11	.11	.11	[illegible]
DATE	16	[illegible]	16	16	[illegible]	[illegible]	16	16	[illegible]	16	16	16
TIME	[illegible]	1340	[illegible]	1348	1352	1352	1350	1410	1410	1410	1410	1410
JUL	T	T	.01	.01	[illegible]	.01	.01	.01	.01	.01	.01	.01
DATE			20	20	20	20	20	20	20	20	20	20
TIME			[illegible]	0640	[illegible]	0640	0640	0640	0640	0640	0640	0640
AUG	T	T	T	T	.01	.02	.02	.02	[illegible]	.02	.02	.02
DATE					24	24	24	[illegible]	[illegible]	24	24	24
TIME					0150	0205	0205	0205	0205	0205	0205	0205
SEP	.03	.04	[illegible]	.08	.09	.11	.14	.17	.20	.21	.21	.22
DATE	[illegible]	07	07	07	07	07	20	20	[illegible]	[illegible]	07	07
TIME	[illegible]	0815	[illegible]	0820	0825	0840	0442	0456	0515	0535	0945	1015
OCT	.05	[illegible]	.06	.07	.11	.13	.18	.24	.26	[illegible]	.40	.43
DATE	31	31	[illegible]	[illegible]	31	[illegible]	[illegible]	31	31	31	31	31
TIME	1110	[illegible]	[illegible]	1115	0958	[illegible]	1005	1020	1115	1100	1115	1105
NOV	.07	.09	.09	.09	.11	.14	.18	.20	.26	.26	.27	.28
DATE	[illegible]	11	[illegible]	11	[illegible]	11	11	11	[illegible]	11	11	11
TIME	1925	[illegible]	[illegible]	1940	1948	2002	2017	2037	2057	[illegible]	2147	2217
DEC	[illegible]	[illegible]	.05	.06	.08	[illegible]	.11	.14	.16	[illegible]	.19	.23
DATE	24	24	07	07	07	[illegible]	07	07	07	07	07	07
TIME	2128	[illegible]	[illegible]	0700	0700	0700	0700	0700	0700	[illegible]	0710	[illegible]
YEAR	[illegible]	[illegible]	.12	.14	.17	[illegible]	.22	.29	.33	.36	.40	.43
MONTH	02	02	05	05	05	05	05	05	05	[illegible]	10	10

POCATELLO, IDAHO

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.02	[illegible]	.05	.06	.08	.10	.12	.13	.13	.15	.15	.15
DATE	[illegible]	16	[illegible]	16	16	16	17	17	17	[illegible]	17	17
TIME	2347	2355	2355	2355	2359	2359	0030	0030	0040	0115	0145	0200
FEB	[illegible]	.02	.02	.03	.04	.05	.07	.08	.09	.12	.14	.15
DATE	[illegible]	27	27+	10	27+	27	[illegible]	10	[illegible]	[illegible]	10	10
TIME	0640	0640	0640	2035	1045	0640	2200	2200	2200	2200	2200	2215
MAR	.05	.07	.08	.09	[illegible]	.12	.13	.13	.13	.15	.15	.16
DATE	01	01	01	01	01	[illegible]	17	[illegible]	[illegible]	[illegible]	17	17
TIME	[illegible]	1705	1710	1715	1728	1515	1515	1540	1600	1620	1625	1635
APR	[illegible]	[illegible]	.08	.08	.09	.09	.12	.15	.16	.17	.18	.20
DATE	13	13	13	13	13	13	01	01	01	01	01	01
TIME	[illegible]	0435	0435	0440	0450	0455	[illegible]	0645	0650	0700	0730	0800
MAY	[illegible]	.06	.06	.06	.06	.07	.08	.09	.10	.12	.14	.16
DATE	31	31	31	31	31	25	25	25	25	25	25	25
TIME	[illegible]	2046	2051	2056	[illegible]	0008	0025	0245	0245	0245	0150	0245
JUN	.04	.06	.08	.09	[illegible]	.16	.19	.25	.31	.33	.33	.36
DATE	14	[illegible]	14	14	14	14	14	14	14	14	14	14
TIME	[illegible]	0820	0825	0830	0840	0846	0846	0846	0846	0846	0930	1000
JUL	.15	.27	.35	.43	.50	.50	.50	.50	.50	.52	.54	.55
DATE	22	22	22	22	22	22	22	22	22	19	19	19
TIME	[illegible]	[illegible]	0958	1003	[illegible]	1028	1043	1103	[illegible]	2116	2146	2216
AUG	.02	[illegible]	.03	.03	.03	.04	[illegible]	[illegible]	.04	.04	.04	[illegible]
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME	1735	1740	1740	1745	1755	1810	1825	1845	1905	1925	1955	2025
SEP	.06	[illegible]	.12	[illegible]	.16	.16	.22	.28	.35	.42	.53	.59
DATE	25	25	25	25	25	25+	[illegible]	01	01	01	01	01
TIME	1520	1525	1528	1530	1530	1545	1900	1915	1935	2000	2025	2050
OCT	.02	.03	.04	.05	[illegible]	[illegible]	.12	.16	.18	.20	[illegible]	.22
DATE	23	29	29	29	29	29	29	29	29	29	29	29
TIME	[illegible]	[illegible]	1740	1745	1800	[illegible]	1815	[illegible]	1840	1900	1930	2000
NOV	.03	.04	.06	.08	[illegible]	.15	.18	.24	.26	.29	.30	.31
DATE	03	03	03	03	[illegible]	03	03	03	03	03	03	03
TIME	2120	2125	2130	2120	2120	2105	[illegible]	2140	2145	2200	2230	2300
DEC	.02	[illegible]	[illegible]	.03	[illegible]	[illegible]	.08	.09	.11	.12	.13	[illegible]
DATE	17	17	17+	17+	30+	30	30	30+	30	30+	30	30+
TIME	1438	[illegible]	1448	1453	0430	0405	0430	0435	0455	0515	0515	[illegible]
YEAR	.15	.27	.35	.43	.50	.50	.50	.50	.50	.52	.54	.59
MONTH	07	07	07	07	07	07	07	07	07	07	07	09

MAXIMUM SHORT DURATION PRECIPITATION

[illegible]

JAN	.08	[illegible]	.16	.19	[illegible]	.27	[illegible]	.39	.48	.56	.64	[illegible]
DATE	[illegible]	[illegible]	03	03	03	[illegible]	21	21	[illegible]	21	21	21
TIME	[illegible]	[illegible]	1020	[illegible]	1024	[illegible]	[illegible]	0550	0550	[illegible]	0622	0600
FEB	.06	.10	.12	.14	.17	[illegible]	.24	.29	.32	[illegible]	.37	[illegible]
DATE	[illegible]	01	01	[illegible]	01	01	01	01	01	01	07	[illegible]
TIME	[illegible]	[illegible]	0356	0356	0356	[illegible]	0404	0432	[illegible]	0445	2010	2042
MAR	.19	.24	[illegible]	.28	[illegible]	.40	.43	.48	[illegible]	.52	.68	.69
DATE	[illegible]	10	10	14	10	[illegible]	10	10	11	11	10	[illegible]
TIME	[illegible]	2326	[illegible]	[illegible]	2326	[illegible]	[illegible]	[illegible]	0009	0038	[illegible]	[illegible]
APR	[illegible]	[illegible]	.19	.21	[illegible]	.31	.34	.43	[illegible]	.62	.73	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	23	23	19	[illegible]	[illegible]	19	19	19
TIME	0104	[illegible]	[illegible]	[illegible]	0110	0110	[illegible]	[illegible]	1303	1326	1356	1428
MAY	[illegible]	[illegible]	[illegible]	.92	[illegible]	1.14	1.19	1.25	1.29	1.31	[illegible]	1.41
DATE	01	[illegible]	[illegible]	01	[illegible]	01	27	[illegible]	[illegible]	01	27	27
TIME	[illegible]	[illegible]	2308	2310	[illegible]	[illegible]	0149	2332	2349	[illegible]	[illegible]	0304
JUN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.12	1.14	1.15	1.19	1.23	[illegible]
DATE	[illegible]	[illegible]	[illegible]	12	[illegible]	[illegible]	12	12	12	12	12	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1532	[illegible]	1558	[illegible]	1618	1638	[illegible]	1728	[illegible]
JUL	[illegible]	[illegible]	[illegible]	.79	.80	.81	.82	.82	[illegible]	.82	.83	.83
DATE	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]	19	19	[illegible]	19	19	19
TIME	[illegible]	[illegible]	[illegible]	1051	1058	1110	[illegible]	[illegible]	[illegible]	1200	1230	1300
AUG	[illegible]	.42	.45	.46	[illegible]	[illegible]	.55	.55	.55	[illegible]	.60	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29	[illegible]	[illegible]	[illegible]	29	09	09
TIME	[illegible]	[illegible]	2011	2018	[illegible]	[illegible]	1809	1809	[illegible]	[illegible]	2324	[illegible]
SEP	.30	[illegible]	[illegible]	[illegible]	[illegible]	.93	1.17	[illegible]	[illegible]	2.05	[illegible]	2.35
DATE	08	[illegible]	08	08	08	[illegible]	08	08	[illegible]	08	08	[illegible]
TIME	[illegible]	1354	1358	[illegible]	1501	1501	1458	1501	1517	1501	1512	[illegible]
OCT	.23	[illegible]	[illegible]	[illegible]	.52	[illegible]	[illegible]	.52	.52	.52	.54	[illegible]
DATE	01	01	01	01	01	01	01	[illegible]	[illegible]	01	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1356	1359	1406	[illegible]	1406	1406	[illegible]	[illegible]	1056	1122
NOV	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.87	.99	[illegible]	1.26	[illegible]	1.53
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23	23	[illegible]	[illegible]	23	23	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0613	0639	[illegible]	[illegible]	0639	0639	0653
DEC	[illegible]	.11	.14	.17	.22	[illegible]	.36	[illegible]	[illegible]	.60	.70	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24	[illegible]	26	26	26	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1911	[illegible]	1926	1941	[illegible]	1209	[illegible]	[illegible]	1209	1209
YEAR	[illegible]	[illegible]	[illegible]	.92	[illegible]	[illegible]	1.19	1.81	1.85	2.05	2.31	2.35
MONTH	[illegible]	[illegible]	05	05	[illegible]	05	[illegible]	09	[illegible]	09	09	09

[illegible]INE, ILLINOIS

JAN	[illegible]	.08	.10	[illegible]	.20	.25	.33	.41	.52	.61	[illegible]	[illegible]
DATE	[illegible]	[illegible]	03	[illegible]	03	[illegible]	[illegible]	03	[illegible]	[illegible]	03	03
TIME	[illegible]	[illegible]	1240	[illegible]	1250	[illegible]	1325	[illegible]	[illegible]	[illegible]	[illegible]	1405
FEB	[illegible]	.03	.04	[illegible]	[illegible]	.07	.09	.11	[illegible]	.14	[illegible]	.21
DATE	[illegible]	[illegible]	14	14	[illegible]	[illegible]	02	02	[illegible]	02	02	02
TIME	0145	[illegible]	[illegible]	0155	[illegible]	[illegible]	[illegible]	0505	0510	[illegible]	[illegible]	0215
MAR	[illegible]	.26	[illegible]	[illegible]	.48	[illegible]	.66	.70	1.00	1.20	1.37	1.42
DATE	[illegible]	06	[illegible]	[illegible]	06	[illegible]	06	06	[illegible]	[illegible]	[illegible]	07
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0950	1114	[illegible]	[illegible]	[illegible]	[illegible]	1150	[illegible]
APR	[illegible]	[illegible]	[illegible]	1.20	[illegible]	1.45	[illegible]	1.65	2.16	2.19	[illegible]	[illegible]
DATE	21	[illegible]	21	[illegible]	21	[illegible]	21	[illegible]	[illegible]	21	21	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1640	1620	[illegible]
MAY	[illegible]	[illegible]	[illegible]	[illegible]	.88	.96	[illegible]	1.35	[illegible]	1.36	1.37	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27	[illegible]	[illegible]	[illegible]	[illegible]	27	[illegible]
TIME	1125	[illegible]	[illegible]	[illegible]	[illegible]	1050	[illegible]	1035	[illegible]	[illegible]	[illegible]	[illegible]
JUN	[illegible]	[illegible]	[illegible]	1.51	[illegible]	2.56	[illegible]	[illegible]	[illegible]	[illegible]	3.41	[illegible]
DATE	[illegible]	[illegible]	16	16	[illegible]	16	[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1835	[illegible]	[illegible]	1835	2100	[illegible]
JUL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.52	[illegible]	[illegible]	.80	[illegible]
DATE	[illegible]	09	09	[illegible]	[illegible]	09	[illegible]	04	04	04	04	[illegible]
TIME	2011	2011	[illegible]	2011	2011	2051	0402	0358	0410	[illegible]	0455	[illegible]
AUG	[illegible]	.31	[illegible]	.41	.59	.82	.98	1.01	1.04	1.04	1.04	1.04
DATE	13	13	13	[illegible]	13	13	[illegible]	13	13	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1533	1533	[illegible]	1533	1533	[illegible]	1533	1533	1828
SEP	[illegible]	[illegible]	.51	[illegible]	[illegible]	1.14	1.20	1.23	1.24	[illegible]	1.24	[illegible]
DATE	04	04	04	04	04	04	04	04	[illegible]	04	[illegible]	04
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0610	0610	[illegible]	[illegible]	0725	[illegible]	[illegible]	0845
OCT	[illegible]	[illegible]	.35	.40	.49	.49	.49	[illegible]	[illegible]	[illegible]	.49	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	03	03	[illegible]	03	[illegible]
TIME	2345	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2345	[illegible]
NOV	.04	.07	.09	.11	.16	[illegible]	.25	.28	[illegible]	.30	[illegible]	.35
DATE	20	20	20	[illegible]	20	20	20	[illegible]	[illegible]	20	20	20
TIME	1655	1655	1655	[illegible]	[illegible]	1655	[illegible]	1655	[illegible]	[illegible]	1655	1655
DEC	.09	.12	.13	[illegible]	.17	.22	.34	.43	.48	.53	.63	.72
DATE	[illegible]	[illegible]	04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	04	04	[illegible]	04
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0746	0746
YEAR	[illegible]	[illegible]	1.30	1.51	1.88	2.56	[illegible]	3.32	[illegible]	[illegible]	3.41	3.43
MONTH	[illegible]	06	[illegible]	[illegible]	[illegible]	06	06	06	[illegible]	06	06	[illegible]

SPRINGFIELD, ILLINOIS

JAN	[illegible]	[illegible]	.15	[illegible]	.26	.32	[illegible]	.44	.50	[illegible]	.64	.67
DATE	[illegible]	[illegible]	03	03	03	[illegible]	[illegible]	[illegible]	03	03	[illegible]	03
TIME	[illegible]	[illegible]	1215	[illegible]	[illegible]	[illegible]	1255	1315	1315	1515	1325	1325
FEB	[illegible]	.04	.05	.07	[illegible]	.11	[illegible]	.13	.14	.14	.14	.15
DATE	[illegible]	01	01	01	[illegible]	01	01	[illegible]	01	[illegible]	[illegible]	13
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2023	[illegible]	2050	[illegible]	[illegible]	0415	[illegible]
MAR	[illegible]	[illegible]	[illegible]	.50	[illegible]	.52	[illegible]	.84	.93	[illegible]	1.18	1.25
DATE	[illegible]	[illegible]	13	13	[illegible]	[illegible]	[illegible]	06	06	06	[illegible]	[illegible]
TIME	1556	[illegible]	[illegible]	1613	1623	[illegible]	2216	[illegible]	[illegible]	2213	[illegible]	[illegible]
APR	.16	.30	[illegible]	[illegible]	.61	.63	.72	.75	.82	.91	1.14	1.23
DATE	[illegible]	22	22	[illegible]	22	22	[illegible]	[illegible]	22	21	21	21
TIME	2047	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0130	0150	[illegible]	0425	0455	[illegible]
MAY	[illegible]	[illegible]	[illegible]	.37	.41	[illegible]	[illegible]	[illegible]	.48	[illegible]	.48	[illegible]
DATE	[illegible]	01	01	01	[illegible]	01	01	[illegible]	02	02	02	[illegible]
TIME	[illegible]	[illegible]	2306	[illegible]	[illegible]	2333	[illegible]	[illegible]	[illegible]	0047	[illegible]	0147
JUN	[illegible]	[illegible]	1.30	1.30	1.30	[illegible]	[illegible]	1.55	[illegible]	1.80	[illegible]	[illegible]
DATE	[illegible]	18	[illegible]	18	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]	[illegible]	18
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1758	[illegible]	[illegible]	[illegible]	[illegible]	1958
JUL	[illegible]	.42	.50	.60	.82	.90	[illegible]	.97	.99	1.19	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2029	[illegible]	[illegible]	[illegible]	[illegible]	2030	2030	[illegible]	2130
AUG	.20	[illegible]	.56	[illegible]	[illegible]	.69	.69	[illegible]	.75	[illegible]	.75	[illegible]
DATE	[illegible]	08	08	08	[illegible]	08	08	[illegible]	08	[illegible]	09	09
TIME	[illegible]	2312	2317	2322	2332	[illegible]	[illegible]	2325	[illegible]	[illegible]	[illegible]	0105
SEP	.14	.23	.39	.45	.46	.47	.50	[illegible]	[illegible]	[illegible]	.71	[illegible]
DATE	[illegible]	[illegible]	[illegible]	30	30	30	08	08	[illegible]	08	08	08
TIME	[illegible]	[illegible]	1940	1942	2000	2012	[illegible]	0909	[illegible]	0909	0909	[illegible]
OCT	.63	[illegible]	[illegible]	1.05	[illegible]	[illegible]	2.03	2.12	2.15	[illegible]	[illegible]	[illegible]
DATE	[illegible]	03	03	03	03	[illegible]	[illegible]	03	[illegible]	[illegible]	03	[illegible]
TIME	[illegible]	[illegible]	0117	0120	0117	0117	0121	0126	0126	0126	0130	[illegible]
NOV	.15	[illegible]	.20	[illegible]	.22	.23	.24	.24	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	15	15	[illegible]	15	15	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0426	[illegible]	0430	[illegible]	0500	0510	0510	[illegible]	[illegible]	[illegible]	[illegible]
DEC	[illegible]	[illegible]	[illegible]	.22	.30	[illegible]	.55	.60	[illegible]	[illegible]	[illegible]	[illegible]
DATE	04	[illegible]	04	04	04	04	04	04	04	04	04	04
TIME	[illegible]	[illegible]	0500	[illegible]	[illegible]	[illegible]	0503	[illegible]	[illegible]	0543	[illegible]	[illegible]
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.15	2.17	[illegible]	[illegible]
MONTH	[illegible]	06	[illegible]	06	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] ARPT

JAN	.05	[illegible]	[illegible]	.13	[illegible]	.22	[illegible]	[illegible]	[illegible]	.45	[illegible]	.55
DATE	03	03	[illegible]	03	03	[illegible]	03	03	03	03	[illegible]	03
TIME	[illegible]	1435	1440	1445	1445	1500	[illegible]	1540	1540	[illegible]	[illegible]	1630
FEB	.03	[illegible]	.06	.08	[illegible]	.17	[illegible]	.21	.22	[illegible]	.28	.29
DATE	14	14	[illegible]	14	[illegible]	[illegible]	14	14	14	14	14	[illegible]
TIME	0130	[illegible]	0133	0140	[illegible]	0150	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0420
MAR	.15	.20	.23	.25	.28	[illegible]	[illegible]	.45	[illegible]	.55	[illegible]	.62
DATE	[illegible]	31	31	31	[illegible]	[illegible]	[illegible]	[illegible]	31	[illegible]	31	[illegible]
TIME	1230	[illegible]	[illegible]	1230	[illegible]	1230	1230	[illegible]	[illegible]	1230	[illegible]	1230
APR	[illegible]	.45	.50	.63	.70	1.00	[illegible]	1.26	1.28	1.31	1.31	1.34
DATE	21	21	[illegible]	21	21	21	[illegible]	30	30	30	30	30
TIME	[illegible]	0925	[illegible]	2215	[illegible]	2245	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAY	.25	[illegible]	.37	.40	.45	[illegible]	.53	[illegible]	.65	[illegible]	[illegible]	.65
DATE	27	[illegible]	[illegible]	[illegible]	[illegible]	27	27	27	27	[illegible]	27	[illegible]
TIME	[illegible]	[illegible]	1525	1530	[illegible]	[illegible]	1605	1628	[illegible]	1645	1645	1645
JUN	.42	[illegible]	[illegible]	.70	[illegible]	[illegible]	.74	.74	[illegible]	[illegible]	.74	.74
DATE	16	[illegible]	[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]	16	[illegible]	16	16
TIME	[illegible]	[illegible]	1107	1115	1130	[illegible]	[illegible]	1219	[illegible]	[illegible]	1329	[illegible]
JUL	.25	.49	.51	.52	[illegible]	[illegible]	[illegible]	.82	.85	.87	[illegible]	[illegible]
DATE	20	13	[illegible]	13	[illegible]	[illegible]	[illegible]	04	04	[illegible]	20	20
TIME	0115	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0553	0613	[illegible]	0650	1808	[illegible]
AUG	.07	.12	.14	.19	.26	[illegible]	.28	.28	.28	.28	.28	.28
DATE	09	[illegible]	[illegible]	09	09	[illegible]	09	[illegible]	[illegible]	[illegible]	10	10
TIME	[illegible]	[illegible]	[illegible]	[illegible]	2328	2337	2340	0004	0013	0013	0013	0013
SEP	[illegible]	.34	.38	[illegible]	.50	[illegible]	.72	.98	1.02	1.05	1.06	1.07
DATE	[illegible]	22	[illegible]	22	[illegible]	[illegible]	24	24	[illegible]	24	24	[illegible]
TIME	[illegible]	[illegible]	0055	0100	0045	0125	2043	2045	2110	[illegible]	2200	2230
OCT	.25	[illegible]	.27	.37	[illegible]	.48	.50	.60	.70	[illegible]	.82	.86
DATE	12	12	12	12	[illegible]	12	12	[illegible]	[illegible]	[illegible]	12	[illegible]
TIME	[illegible]	2140	[illegible]	[illegible]	[illegible]	2210	2225	[illegible]	2305	[illegible]	[illegible]	[illegible]
NOV	.08	.10	[illegible]	.11	.11	.14	.16	[illegible]	[illegible]	[illegible]	.27	.32
DATE	[illegible]	24	24	24	[illegible]	24	24	[illegible]	[illegible]	14	14	14
TIME	[illegible]	0456	0501	0506	0516	0531	0546	[illegible]	[illegible]	2201	2301	[illegible]
DEC	.11	.12	.15	.17	[illegible]	.28	.32	.35	.45	[illegible]	.57	[illegible]
DATE	13	13	[illegible]	[illegible]	[illegible]	13	13	13	[illegible]	13	13	13
TIME	0315	0315	0315	[illegible]	[illegible]	0320	0335	0403	0403	0407	0510	0530
YEAR	.42	[illegible]	.58	.70	[illegible]	[illegible]	[illegible]	1.26	1.28	1.31	1.31	1.34
MONTH	[illegible]	[illegible]	[illegible]	06	06	[illegible]	04	04	[illegible]	04	[illegible]	[illegible]

PEORIA, ILLINOIS

JAN	[illegible]	[illegible]	.20	.24	[illegible]	[illegible]	[illegible]	[illegible]	.59	.64	.71	[illegible]
DATE	[illegible]	03	03	03	03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	03	[illegible]
TIME	[illegible]	[illegible]	1223	[illegible]	[illegible]	[illegible]	1300	1320	1340	[illegible]	[illegible]	1350
FEB	.01	.02	.03	.03	.05	[illegible]	[illegible]	[illegible]	.11	.12	.12	.13
DATE	13	[illegible]	13	13	13	[illegible]	13	[illegible]	[illegible]	13	[illegible]	[illegible]
TIME	[illegible]	1725	[illegible]	[illegible]	1730	1730	1745	[illegible]	1830	1845	[illegible]	1900
MAR	[illegible]	.21	[illegible]	.34	[illegible]	[illegible]	.60	[illegible]	.68	.72	.96	1.07
DATE	[illegible]	[illegible]	12	13	[illegible]	13	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1840	[illegible]	[illegible]	[illegible]	2025	2255
APR	.24	[illegible]	[illegible]	.43	.48	[illegible]	.55	.60	[illegible]	[illegible]	.85	[illegible]
DATE	21	21	21	[illegible]	21	21	[illegible]	21	[illegible]	21	21	[illegible]
TIME	[illegible]	0108	[illegible]	0105	0055	[illegible]	0055	0055	0055	0055	0055	0055
MAY	.16	.25	.31	[illegible]	.50	.57	.60	[illegible]	.73	.81	.94	[illegible]
DATE	[illegible]	07	22	22	07	[illegible]	[illegible]	07	07	07	07	07
TIME	0303	1847	0303	0303	1900	1930	[illegible]	1950	[illegible]	2031	2100	2131
JUN	.26	[illegible]	.53	.60	.61	[illegible]	[illegible]	.81	[illegible]	.85	.86	.97
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]	19	[illegible]	19	[illegible]	18
TIME	[illegible]	[illegible]	[illegible]	1450	[illegible]	[illegible]	1530	[illegible]	1830	1830	1700	1730
JUL	[illegible]	[illegible]	1.30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.51	1.65	[illegible]
DATE	[illegible]	[illegible]	[illegible]	19	19	19	19	[illegible]	19	19	19	[illegible]
TIME	[illegible]	[illegible]	1635	1640	1650	1705	1720	1740	1800	[illegible]	1850	[illegible]
AUG	.20	[illegible]	.26	[illegible]	.26	.26	.26	[illegible]	.26	.26	.26	[illegible]
DATE	[illegible]	11	11	11	[illegible]	11	11	[illegible]	11	11	11	[illegible]
TIME	[illegible]	[illegible]	0614	0614	0614	0614	0614	0614	0614	0614	0614	0614
SEP	.48	[illegible]	.62	.72	[illegible]	.87	[illegible]	[illegible]	1.14	[illegible]	1.15	1.15
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30	30	[illegible]	[illegible]	30	[illegible]	30
TIME	[illegible]	[illegible]	[illegible]	2137	2136	2200	2200	[illegible]	2240	2300	[illegible]	[illegible]
OCT	.25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.98	1.01	1.02	1.10	[illegible]	1.30
DATE	01	01	[illegible]	01	[illegible]	[illegible]	01	01	[illegible]	[illegible]	12	12
TIME	1624	[illegible]	[illegible]	1629	[illegible]	1647	[illegible]	[illegible]	1745	2145	2214	2245
NOV	.09	.10	.10	.10	.17	.21	.31	.32	.41	.47	[illegible]	.50
DATE	[illegible]	20	[illegible]	[illegible]	[illegible]	20	20	[illegible]	20	[illegible]	20	[illegible]
TIME	[illegible]	0339	0344	0349	0400	0347	[illegible]	0400	0400	[illegible]	0435	[illegible]
DEC	[illegible]	.11	[illegible]	.18	.28	.41	.53	.63	.71	.77	.84	[illegible]
DATE	04	04	[illegible]	[illegible]	04	04	04	04	04	04	04	04
TIME	0616	[illegible]	0628	[illegible]	0614	[illegible]	0701	[illegible]	0701	0701	[illegible]	0702
YEAR	[illegible]	1.10	[illegible]	1.34	1.35	[illegible]	[illegible]	1.48	1.50	[illegible]	1.65	1.73
MONTH	[illegible]	07	07	[illegible]	07	07	07	07	07	07	07	07

EVANSVILLE, INDIANA

JAN	[illegible]	.18	.20	.22	.26	.26	.29	[illegible]	[illegible]	.50	.57	.65
DATE	03	[illegible]	[illegible]	03	03	03	[illegible]	[illegible]	[illegible]	03	[illegible]	03
TIME	[illegible]	[illegible]	1205	1210	1205	1210	1210	1310	1330	1345	1415	1410
FEB	[illegible]	.08	.08	.09	.14	.15	.23	[illegible]	.30	.31	.35	.36
DATE	[illegible]	[illegible]	[illegible]	01	01	01	01	01	01	01	01	01
TIME	[illegible]	0645	[illegible]	[illegible]	0700	0715	[illegible]	0705	0705	0720	[illegible]	0815
MAR	[illegible]	[illegible]	.21	.26	[illegible]	[illegible]	.42	[illegible]	.57	.65	[illegible]	.84
DATE	[illegible]	09	09	[illegible]	[illegible]	10	14	[illegible]	[illegible]	10	10	10
TIME	1217	[illegible]	1114	1117	1129	1952	[illegible]	1950	[illegible]	2000	1955	2025
APR	.11	[illegible]	.21	[illegible]	[illegible]	.32	[illegible]	.48	.67	[illegible]	.83	.94
DATE	[illegible]	[illegible]	18	[illegible]	[illegible]	18	[illegible]	[illegible]	[illegible]	19	19	19
TIME	[illegible]	2308	2313	[illegible]	1613	[illegible]	[illegible]	0018	0038	[illegible]	0048	1742
MAY	.32	.34	[illegible]	.36	[illegible]	[illegible]	[illegible]	[illegible]	.82	.95	1.13	[illegible]
DATE	07	07	[illegible]	[illegible]	[illegible]	07	07	07	27	27	27	27
TIME	[illegible]	2209	2214	2219	2229	[illegible]	2259	2315	0320	0340	[illegible]	0405
JUN	.44	[illegible]	[illegible]	[illegible]	[illegible]	.82	.86	[illegible]	[illegible]	.87	.87	[illegible]
DATE	04	[illegible]	[illegible]	[illegible]	26	26	26	[illegible]	26	26	26	26
TIME	[illegible]	[illegible]	[illegible]	1644	[illegible]	2303	[illegible]	[illegible]	2318	2318	[illegible]	2318
JUL	[illegible]	[illegible]	.67	.73	[illegible]	[illegible]	.78	[illegible]	.78	[illegible]	[illegible]	.78
DATE	[illegible]	21	21	[illegible]	[illegible]	21	[illegible]	[illegible]	21	21	21	21
TIME	1946	[illegible]	1957	[illegible]	[illegible]	2025	2040	2100	2120	2140	2216	2240
AUG	[illegible]	.60	[illegible]	.86	1.14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	12	[illegible]	12	12	[illegible]	12	12	12	[illegible]	12	[illegible]	12
TIME	1817	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2016	2036	[illegible]	2012	2042	2112
SEP	.12	.15	[illegible]	[illegible]	[illegible]	.21	[illegible]	.26	.26	[illegible]	.26	.35
DATE	[illegible]	24	24	[illegible]	[illegible]	24	24	24	[illegible]	24	[illegible]	24
TIME	[illegible]	[illegible]	[illegible]	1819	[illegible]	1843	[illegible]	[illegible]	[illegible]	[illegible]	2028	[illegible]
OCT	[illegible]	.14	[illegible]	.22	[illegible]	.35	.36	[illegible]	.40	.43	[illegible]	[illegible]
DATE	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	13	13	13	13	13	[illegible]
TIME	[illegible]	[illegible]	1100	[illegible]	1115	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1130	[illegible]
NOV	[illegible]	.72	[illegible]	[illegible]	1.17	[illegible]	1.51	1.73	1.84	[illegible]	1.96	[illegible]
DATE	[illegible]	[illegible]	[illegible]	26	26	[illegible]	26	26	[illegible]	[illegible]	26	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0810	[illegible]	[illegible]	0700	0710	[illegible]	[illegible]	[illegible]
DEC	[illegible]	[illegible]	.12	[illegible]	.23	[illegible]	.35	.40	[illegible]	[illegible]	.50	.53
DATE	[illegible]	26	26	[illegible]	26	26	[illegible]	[illegible]	[illegible]	[illegible]	26	26
TIME	[illegible]	[illegible]	1215	[illegible]	1205	1215	1215	1215	[illegible]	[illegible]	1229	1229
YEAR	[illegible]	[illegible]	.96	1.04	[illegible]	[illegible]	1.51	[illegible]	1.91	[illegible]	[illegible]	2.76
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11*	[illegible]	11	08	08	08	08

[illegible]GO, ILLINOIS [illegible]

JAN	[illegible]	[illegible]	.12	.13	[illegible]	[illegible]	[illegible]	[illegible]	.44	.52	.54	.57
DATE	[illegible]	[illegible]	18	03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	03
TIME	1040	1045	[illegible]	1430	[illegible]	[illegible]	[illegible]	[illegible]	1500	1525	1540	[illegible]
FEB	[illegible]	.03	[illegible]	.05	[illegible]	.12	.15	.18	[illegible]	[illegible]	.27	.28
DATE	14	[illegible]	14	[illegible]	14	14	[illegible]	[illegible]	14	14	14	[illegible]
TIME	[illegible]	2230	2230	[illegible]	[illegible]	2245	2300	2300	[illegible]	[illegible]	2330	2340
MAR	.13	.14	[illegible]	.18	.26	.26	.36	[illegible]	[illegible]	.45	.46	.50
DATE	31	[illegible]	31	31	31	[illegible]	31	31	[illegible]	31	[illegible]	31
TIME	[illegible]	[illegible]	1200	1700	1200	1200	1200	1200	[illegible]	1200	1200	1200
APR	[illegible]	.30	.39	[illegible]	.52	[illegible]	.64	.71	[illegible]	[illegible]	1.00	1.04
DATE	30	30	30	30	30	[illegible]	30	[illegible]	30	30	[illegible]	[illegible]
TIME	[illegible]	2056	2101	2106	2116	2131	2146	2200	[illegible]	[illegible]	[illegible]	2346
MAY	.35	[illegible]	[illegible]	.51	[illegible]	.70	.78	[illegible]	.85	[illegible]	[illegible]	[illegible]
DATE	27	27	27	[illegible]	27	27	27	27	27	[illegible]	[illegible]	27
TIME	1522	1529	[illegible]	[illegible]	[illegible]	1546	1609	1630	1648	1703	[illegible]	[illegible]
JUN	[illegible]	.35	[illegible]	.47	.53	.56	[illegible]	[illegible]	[illegible]	[illegible]	.80	.80
DATE	05	16	16	[illegible]	16	16	16	16	16	16	[illegible]	16
TIME	1547	1607	[illegible]	[illegible]	1630	[illegible]	1645	1715	1730	[illegible]	[illegible]	[illegible]
JUL	[illegible]	[illegible]	.75	.90	1.30	[illegible]	1.35	1.35	[illegible]	1.35	1.35	1.35
DATE	09	09	[illegible]	[illegible]	09	[illegible]	09	[illegible]	09	09	09	09
TIME	2235	[illegible]	2245	2248	[illegible]	2315	2315	2315	2315	[illegible]	2315	2315
AUG	[illegible]	[illegible]	.21	[illegible]	.22	.23	[illegible]	.28	.30	.30	.33	.37
DATE	10	10	10	10	[illegible]	24	24	[illegible]	24	[illegible]	[illegible]	24
TIME	[illegible]	0015	0020	0030	0030	0110	0115	0118	0210	[illegible]	0315	0345
SEP	[illegible]	[illegible]	[illegible]	.30	[illegible]	.31	.43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	24	28	[illegible]	29	29	29	[illegible]	[illegible]
TIME	1615	1730	1732	1745	1745	1131	0200	0210	0210	0230	[illegible]	[illegible]
OCT	.10	[illegible]	.27	.35	[illegible]	.62	[illegible]	[illegible]	.98	[illegible]	[illegible]	1.21
DATE	12	12	[illegible]	12	[illegible]	12	[illegible]	[illegible]	[illegible]	12	12	[illegible]
TIME	[illegible]	[illegible]	2246	2250	[illegible]	2300	2305	2305	2305	2305	2305	[illegible]
NOV	.14	[illegible]	.16	[illegible]	[illegible]	[illegible]	[illegible]	.20	[illegible]	.27	.35	[illegible]
DATE	24	24	[illegible]	[illegible]	[illegible]	24	[illegible]	[illegible]	24	24	24	[illegible]
TIME	0515	0517	0530	0533	0535	0535	[illegible]	0615	0630	0700	[illegible]	0740
DEC	.12	.14	.16	.18	.25	[illegible]	.32	.40	.50	.52	.58	.67
DATE	04	04	13	13	[illegible]	13	04	13	13	13	13	[illegible]
TIME	[illegible]	0834	[illegible]	0845	[illegible]	0315	[illegible]	0315	[illegible]	[illegible]	0450	0900
YEAR	[illegible]	[illegible]	[illegible]	.90	1.30	[illegible]	1.35	[illegible]	[illegible]	1.35	1.35	1.35
MONTH	07	07	07	[illegible]	07	[illegible]	07	[illegible]	07	07	07	[illegible]

ROCKFORD, ILLINOIS

JAN	[illegible]	[illegible]	.13	.17	.24	.33	[illegible]	.50	.57	.63	.76	.82
DATE	[illegible]	[illegible]	03	[illegible]	03	[illegible]	[illegible]	[illegible]	03	[illegible]	03	03
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1503	1510	[illegible]	1550	1550
FEB	.03	[illegible]	[illegible]	.06	.07	.09	[illegible]	.12	.15	[illegible]	.24	.26
DATE	02	02	02	[illegible]	[illegible]	02	[illegible]	02	02	[illegible]	02	[illegible]
TIME	0545	0550	0550	[illegible]	0550	[illegible]	0610	0630	0650	[illegible]	0740	[illegible]
MAR	.12	[illegible]	[illegible]	[illegible]	.32	[illegible]	[illegible]	[illegible]	.71	[illegible]	1.08	[illegible]
DATE	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]	07	07	[illegible]	07	07
TIME	0230	0235	[illegible]	0245	0255	0310	0015	0035	[illegible]	0128	0128	[illegible]
APR	.36	[illegible]	[illegible]	[illegible]	.73	1.03	1.14	1.38	[illegible]	2.03	2.40	[illegible]
DATE	20	20	20	21	21	[illegible]	[illegible]	21	[illegible]	21	21	21
TIME	[illegible]	2130	[illegible]	0105	0120	0130	0145	[illegible]	[illegible]	0130	0130	0130
MAY	.20	.29	.32	[illegible]	[illegible]	.54	[illegible]	.75	.88	[illegible]	[illegible]	1.28
DATE	01	[illegible]	01	01	[illegible]	[illegible]	[illegible]	01	[illegible]	[illegible]	[illegible]	01
TIME	[illegible]	0725	0730	[illegible]	0745	0800	0810	[illegible]	0858	[illegible]	0900	[illegible]
JUN	.65	1.01	[illegible]	1.30	[illegible]	1.43	1.47	1.63	1.74	[illegible]	[illegible]	[illegible]
DATE	04	04	04	[illegible]	[illegible]	04	04	04	04	04	04	04
TIME	0114	[illegible]	[illegible]	0128	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0302	0317	0402
JUL	[illegible]	[illegible]	[illegible]	1.36	[illegible]	[illegible]	1.70	[illegible]	1.74	1.74	1.74	1.74
DATE	23	23	[illegible]	23	[illegible]	[illegible]	23	[illegible]	[illegible]	23	[illegible]	23
TIME	[illegible]	[illegible]	2220	[illegible]	2205	2220	2205	2205	[illegible]	2205	[illegible]	[illegible]
AUG	.13	.15	.16	[illegible]	[illegible]	.30	.36	.43	.54	[illegible]	[illegible]	[illegible]
DATE	[illegible]	08	08	[illegible]	[illegible]	23	23	23	23	23	[illegible]	23
TIME	1304	1304	1304	1306	1019	1019	1019	1019	[illegible]	0856	[illegible]	[illegible]
SEP	.49	.84	[illegible]	[illegible]	[illegible]	1.01	1.29	1.46	1.70	1.86	1.90	1.90
DATE	04	04	04	04	04	04	21	21	21	21	21	[illegible]
TIME	0902	0902	0902	0902	[illegible]	0902	2230	2210	[illegible]	2140	[illegible]	2140
OCT	[illegible]	1.06	[illegible]	[illegible]*	[illegible]	2.36*	2.42	2.46	2.46	2.49	2.49	[illegible]
DATE	[illegible]	10	[illegible]	10	[illegible]	10	10	[illegible]	10	10	10	10
TIME	[illegible]	[illegible]	1605	1600	1600	[illegible]	1537	1528	1528	1528	[illegible]	[illegible]
NOV	.13	[illegible]	.25	.30	[illegible]	[illegible]	.42	.42	[illegible]	[illegible]	.48	.48
DATE	[illegible]	[illegible]	24	24	24	24	24	24	[illegible]	[illegible]	[illegible]	24
TIME	[illegible]	0315	0313	[illegible]	[illegible]	0305	[illegible]	0305	0250	0204	0133	[illegible]
DEC	.07	[illegible]	[illegible]	.13	.14	.17	.19	[illegible]	.24	[illegible]	.32	.34
DATE	04	[illegible]	04	[illegible]	04	[illegible]	04	[illegible]	04	[illegible]	04	04
TIME	[illegible]	[illegible]	[illegible]	0906	0906	0912	1245	1240	1245	1245	1245	[illegible]
YEAR	.65	1.17	1.36	[illegible]*	2.11	2.36*	2.42	2.46	2.46	[illegible]	[illegible]	2.90
MONTH	[illegible]	[illegible]	10	10	10	[illegible]	10	10	10	[illegible]	10	[illegible]

FORT WAYNE, IND.

JAN	.08	[illegible]	.12	.16	[illegible]	[illegible]	.28	.30	.31	[illegible]	[illegible]	[illegible]
DATE	21	21	[illegible]	21	21	21	[illegible]	21	21	03	[illegible]	[illegible]
TIME	[illegible]	2140	[illegible]	2145	2145	2145	2200	[illegible]	[illegible]	1830	1830	[illegible]
FEB	.14	.14	.15	[illegible]	[illegible]	.15	[illegible]	.16	[illegible]	.23	.28	.32
DATE	[illegible]	02	[illegible]	02	[illegible]	02	02	[illegible]	[illegible]	[illegible]	02	02
TIME	[illegible]	[illegible]	0440	[illegible]	0500	[illegible]	0500	0500	0500	0500	[illegible]	[illegible]
MAR	.08	.14	[illegible]	.16	.18	[illegible]	.22	.26	.32	.37	.42	[illegible]
DATE	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	25	11	11	[illegible]
TIME	[illegible]	[illegible]	0300	[illegible]	0149	0200	0200	0200	[illegible]	[illegible]	1410	1437
APR	.09	.15	.18	.26	.27	[illegible]	[illegible]	[illegible]	.35	.36	[illegible]	[illegible]
DATE	[illegible]	16	[illegible]	[illegible]	22	22	[illegible]	22	[illegible]	22	22	22
TIME	1512	1517	0637	0637	[illegible]	[illegible]	[illegible]	0637	[illegible]	0637	[illegible]	0637
MAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.27	.30	.38	[illegible]	[illegible]	[illegible]	.42
DATE	[illegible]	29	[illegible]	29	[illegible]	29	[illegible]	19	[illegible]	[illegible]	19	[illegible]
TIME	[illegible]	1800	1807	[illegible]	1821	[illegible]	[illegible]	[illegible]	[illegible]	1956	[illegible]	2059
JUN	.46	.75	[illegible]	.94	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.37
DATE	[illegible]	26	[illegible]	[illegible]	[illegible]	26	[illegible]	[illegible]	[illegible]	26	[illegible]	26
TIME	1357	[illegible]	[illegible]	[illegible]	[illegible]	1432	[illegible]	[illegible]	[illegible]	1547	[illegible]	[illegible]
JUL	[illegible]	[illegible]	[illegible]	.90	.91	[illegible]	[illegible]	[illegible]	[illegible]	.91	.91	.91
DATE	02	02	02	02	02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	02	02
TIME	1708	[illegible]	1716	1723	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AUG	.36	[illegible]	.62	[illegible]	[illegible]	1.08	[illegible]	[illegible]	[illegible]	1.32	1.32	1.32
DATE	11	[illegible]	11	[illegible]	11	11	[illegible]	[illegible]	11	11	11	[illegible]
TIME	1640	[illegible]	1705	[illegible]	1717	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SEP	[illegible]	.07	[illegible]	[illegible]	.15	.15	.16	[illegible]	.23	.24	.25	[illegible]
DATE	[illegible]	09	09	[illegible]	09	09	09	[illegible]	09	09	09	09
TIME	[illegible]	0014	0025	[illegible]	0034	[illegible]	[illegible]	[illegible]	[illegible]	0207	[illegible]	[illegible]
OCT	.24	[illegible]	.45	[illegible]	[illegible]	.46	[illegible]	[illegible]	.46	[illegible]	[illegible]	[illegible]
DATE	04	[illegible]	04	04	04	04	[illegible]	04	04	[illegible]	04	04
TIME	1442	[illegible]	[illegible]	1500	[illegible]	1500	1500	[illegible]	1500	[illegible]	[illegible]	1541
NOV	.07	.09	.14	.16	.20	.26	[illegible]	.38	.39	.42	.49	.62
DATE	26	15	15	[illegible]	15	25	[illegible]	[illegible]	[illegible]	25	28	25
TIME	2006	[illegible]	[illegible]	[illegible]	1045	[illegible]	[illegible]	[illegible]	[illegible]	1945	[illegible]	1859
DEC	.07	.15	.24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.51	.53	.59
DATE	26	26	26	26	[illegible]	26	26	[illegible]	26	26	[illegible]	26
TIME	1741	1745	[illegible]	[illegible]	1809	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	.46	.75	.87	[illegible]	.97	[illegible]	[illegible]	[illegible]	1.32	1.32	1.32	1.37
MONTH	08	[illegible]	08	[illegible]	[illegible]	[illegible]	[illegible]	08	08	[illegible]	[illegible]	08

MAXIMUM SHORT DURATION PRECIPITATION

YEAR 1973

Maximum precipitation in inches (5 to 180 minutes)

[illegible]

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.12	.16	.16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.53	.58	.63
DATE	[illegible]	[illegible]	03	03	[illegible]	03	03	[illegible]	03	03	[illegible]	03
TIME	[illegible]	[illegible]	[illegible]	1555	1600	[illegible]	1600	[illegible]	1610	[illegible]	1615	1625
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.25	.31	.32	.33	.35
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	[illegible]	01	01	01	01	01	01
TIME	[illegible]	1250	1300	[illegible]	[illegible]	1045	[illegible]	[illegible]	1100	[illegible]	[illegible]	1200
MAR	[illegible]	.10	[illegible]	[illegible]	.20	[illegible]	.36	[illegible]	[illegible]	[illegible]	[illegible]	.81
DATE	[illegible]	[illegible]	09	[illegible]	09	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1102	[illegible]	1125	[illegible]	[illegible]	[illegible]	[illegible]	1314	1341
APR	[illegible]	[illegible]	[illegible]	[illegible]	.24	[illegible]	.34	[illegible]	.40	.41	.46	.51
DATE	[illegible]	[illegible]	[illegible]	28	[illegible]	22	22	[illegible]	[illegible]	[illegible]	22	22
TIME	[illegible]	[illegible]	1547	[illegible]	0740	0753	0812	0831	0849	0908	0940	1010
MAY	[illegible]	.20	[illegible]	.38	[illegible]	[illegible]	[illegible]	.45	[illegible]	[illegible]	[illegible]	.47
DATE	[illegible]	08	[illegible]	08	[illegible]	08	[illegible]	[illegible]	[illegible]	[illegible]	08	08
TIME	[illegible]	[illegible]	0008	0012	0023	[illegible]	0050	0108	0100	[illegible]	0130	[illegible]
JUN	[illegible]	[illegible]	.36	.45	[illegible]	[illegible]	.54	.55	[illegible]	.56	.61	.62
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	05	[illegible]	06	06	[illegible]	06	[illegible]
TIME	[illegible]	[illegible]	2140	2145	[illegible]	2355	2225	0025	[illegible]	0105	0135	0205
JUL	[illegible]	.52	.59	[illegible]	[illegible]	.86	[illegible]	.89	[illegible]	.91	1.03	[illegible]
DATE	[illegible]	[illegible]	[illegible]	24	[illegible]	24	[illegible]	[illegible]	[illegible]	24	21	[illegible]
TIME	[illegible]	[illegible]	0315	0315	[illegible]	0331	[illegible]	[illegible]	0429	[illegible]	0230	0300
AUG	.31	[illegible]	[illegible]	.54	.54	[illegible]	[illegible]	.82	.82	.84	[illegible]	[illegible]
DATE	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	30	30	30	14	14	14
TIME	[illegible]	[illegible]	1743	[illegible]	1758	1813	1828	1848	[illegible]	[illegible]	0817	0847
SEP	[illegible]	[illegible]	.58	.67	.72	[illegible]	.91	1.06	1.12	1.21	1.31	1.34
DATE	[illegible]	22	[illegible]	22	[illegible]	[illegible]	14	14	[illegible]	14	14	[illegible]
TIME	[illegible]	1849	[illegible]	[illegible]	[illegible]	0301	0301	0321	0341	0401	[illegible]	0501
OCT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.51	[illegible]	.56	.59	.62
DATE	01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01	01	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1235	[illegible]	[illegible]	1305	1320	1340	1218	1238	1308	1338
NOV	[illegible]	.24	.26	.28	[illegible]	.35	.39	.51	[illegible]	.73	.84	[illegible]
DATE	[illegible]	15	15	[illegible]	15	[illegible]	[illegible]	25	25	25	25	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0905	0915	0930	[illegible]	0238	0258	0818	0348	[illegible]
DEC	[illegible]	.11	[illegible]	.17	[illegible]	.27	.30	.35	.37	.37	.39	.41
DATE	04	[illegible]	[illegible]	[illegible]	04	[illegible]	04	04	04	[illegible]	26	[illegible]
TIME	[illegible]	[illegible]	0929	0929	0929	0921	[illegible]	0921	[illegible]	[illegible]	1347	0107
YEAR	[illegible]	[illegible]	.59	[illegible]	.81	[illegible]	.91	1.06	1.12	1.21	[illegible]	1.34
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07	09	09	[illegible]	09	[illegible]	09

DUBUQUE, IOWA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	M	M	M	M	M	M	.17	M	M	.31	M	.35
DATE							03			[illegible]		03
TIME							[illegible]			[illegible]		1600
FEB	M	M	M	M	M	M	.03	.04	.05	.06	[illegible]	.08
DATE							[illegible]	14	14	[illegible]	13	13
TIME							0800	0500	0500	0500	1600	1600
MAR	.13	.21	.25	.28	[illegible]	.45	[illegible]	.53	[illegible]	.63	.64	[illegible]
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	[illegible]	[illegible]	0056	[illegible]	0059	0115	[illegible]	0145	[illegible]	[illegible]	0205	[illegible]
APR	[illegible]	.25	.27	.30	.35	.38	.42	[illegible]	.42	.42	.42	[illegible]
DATE	[illegible]	20	20	20	[illegible]	[illegible]	20	20	[illegible]	20	20	20
TIME	[illegible]	1345	[illegible]	[illegible]	1430	1400	[illegible]	[illegible]	1430	1430	1425	1425
MAY	.12	[illegible]	[illegible]	.26	[illegible]	.29	.42	.47	[illegible]	.54	.60	[illegible]
DATE	[illegible]	[illegible]	[illegible]	01	01	[illegible]	27	27	27	27	27	27
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1700	[illegible]	1001	1001	1001	1001	1001	1001
JUN	[illegible]	.13	.14	[illegible]	[illegible]	.23	[illegible]	.29	.32	.34	.40	.45
DATE	12	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	12	12	12	12
TIME	[illegible]	0422	[illegible]	[illegible]	[illegible]	0422	0422	0422	0422	[illegible]	0422	0422
JUL	[illegible]	[illegible]	[illegible]	1.25	[illegible]	1.26	1.42	1.42	1.42	1.42	1.42	1.42
DATE	[illegible]	03	[illegible]	03	[illegible]	03	03	03	[illegible]	03	03	03
TIME	[illegible]	[illegible]	[illegible]	2013	2013	2013	[illegible]	2013	2013	2013	[illegible]	2013
AUG	.12	.21	.24	.26	[illegible]	.29	.31	.34	.36	.38	.40	.45
DATE	[illegible]	04	04	04	04	04	04	04	04	04	04	04
TIME	0710	0710	0710	0710	0710	0710	0710	0710	0710	0710	0603	0603
SEP	[illegible]	.46	.51	.53	[illegible]	.83	.89	.98	1.07	1.12	1.14	1.22
DATE	[illegible]	21	21	[illegible]	03	03	03	03	03	03	03	03
TIME	[illegible]	[illegible]	1150	1153	[illegible]	1255	1305	1325	1345	1400	1430	1500
OCT	.07	[illegible]	.07	.08	.09	.09	.09	.10	.11	.13	.14	.14
DATE	08	[illegible]	08	06	[illegible]	06	06	31	31	31	31	31
TIME	[illegible]	[illegible]	[illegible]	1817	1817	1817	1817	0515	0515	0515	0515	0515
NOV	.07	[illegible]	.15	.20	.27	.28	.30	.32	.33	.36	.46	.49
DATE	14	14	14	14	14	14	14	14	14	20	20	20
TIME	[illegible]	[illegible]	1440	[illegible]	1450	[illegible]	1512	1532	1545	1938	1955	2030
DEC	.05	[illegible]	[illegible]	.10	[illegible]	[illegible]	.23	.28	.32	.38	.45	.52
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	[illegible]	[illegible]	0820	0820	0820	0820	0820	0820	0820	0930	0910	0935
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.42	M	M	1.42	M	1.42
MONTH							07			07		07

WICHITA, KANSAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.14	.15	[illegible]	.18	.21
DATE	[illegible]	[illegible]	[illegible]	02	02	02	[illegible]	02	02	02	02	03
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1015	1030	1100	1105	1120	1145	1150	[illegible]
FEB	.01	.01	[illegible]	[illegible]	[illegible]	.05	[illegible]	[illegible]	[illegible]	.12	.16	.16
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01	01	[illegible]	[illegible]	01	01	01
TIME	1515	[illegible]	1515	1720	1730	1645	1700	1720	1830	1830	1845	1845
MAR	[illegible]	[illegible]	[illegible]	.12	[illegible]	.24	.30	.33	[illegible]	.44	.48	.54
DATE	[illegible]	13	[illegible]	13	23	23	23	23	[illegible]	23	23	23
TIME	[illegible]	1605	1610	[illegible]	1045	1055	1100	1120	1140	[illegible]	1230	1300
APR	[illegible]	.45	[illegible]	.59	[illegible]	.68	.68	.85	.99	.99	1.00	1.00
DATE	[illegible]	[illegible]	14	[illegible]	14	14	[illegible]	14	[illegible]	[illegible]	14	14
TIME	1620	1625	1625	[illegible]	1637	[illegible]	1707	1732	1745	[illegible]	1835	1905
MAY	.23	[illegible]	[illegible]	[illegible]	[illegible]	.58	.72	.93	[illegible]	[illegible]	1.10	1.10
DATE	[illegible]	06	[illegible]	[illegible]	[illegible]	06	06	[illegible]	06	06	06	06
TIME	1722	1730	1730	1730	2214	[illegible]	[illegible]	2223	2245	2300	2315	2315
JUN	[illegible]	.43	[illegible]	[illegible]	[illegible]	.53	.54	.54	.54	.54	.54	.54
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	12	12	12	12	12
TIME	[illegible]	[illegible]	[illegible]	1458	1511	[illegible]	1540	[illegible]	1617	1637	1707	1737
JUL	[illegible]	[illegible]	.95	[illegible]	1.49	1.66	[illegible]	1.89	1.96	1.98	2.08	[illegible]
DATE	[illegible]	[illegible]	[illegible]	20	20	20	20	[illegible]	20	20	20	20
TIME	[illegible]	0040	[illegible]	0045	[illegible]	0052	0055	0055	0055	[illegible]	0055	0045
AUG	[illegible]	.56	.59	[illegible]	[illegible]	[illegible]	[illegible]	1.14	[illegible]	[illegible]	[illegible]	1.21
DATE	15	[illegible]	[illegible]	15	15	15	[illegible]	15	15	15	15	15
TIME	[illegible]	[illegible]	0437	[illegible]	0454	0507	[illegible]	0541	0601	0620	0650	0720
SEP	[illegible]	.34	[illegible]	[illegible]	[illegible]	.55	[illegible]	[illegible]	[illegible]	.73	.78	.91
DATE	[illegible]	[illegible]	25	25	25	25	25	25	03	03	03	03
TIME	1635	[illegible]	[illegible]	[illegible]	1650	1645	1645	1645	0125	0145	0215	[illegible]
OCT	[illegible]	[illegible]	.46	[illegible]	.54	[illegible]	[illegible]	.84	.86	.94	1.10	1.32
DATE	10	10	10	[illegible]	10	10	10	[illegible]	10	[illegible]	11	11
TIME	[illegible]	0240	0245	0245	[illegible]	0300	0238	0255	[illegible]	[illegible]	[illegible]	0245
NOV	[illegible]	[illegible]	.36	.36	[illegible]	.52	[illegible]	.59	[illegible]	.59	.59	.59
DATE	[illegible]	19	[illegible]	[illegible]	[illegible]	19	[illegible]	19	[illegible]	19	19	19
TIME	[illegible]	[illegible]	2123	2130	2145	[illegible]	2202	2220	2220	2220	2220	2220
DEC	[illegible]	[illegible]	.12	.12	[illegible]	[illegible]	[illegible]	.28	.31	[illegible]	.38	[illegible]
DATE	[illegible]	[illegible]	[illegible]	24	24	03	24	[illegible]	03	24	03	24
TIME	[illegible]	[illegible]	0040	0040	[illegible]	0145	0145	0620	0640	0230	[illegible]	0335
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.89	1.96	1.98	2.08	[illegible]
MONTH	[illegible]	[illegible]	07	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07	07	07	[illegible]

SOUTH BEND, INDIANA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.02	.03	.05	.06	.06	.09	.23	.24	.30	.39	.54	.57
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	1750	1750	1755	1800	1800	1800	1800	1800	1800	1800	1800	1800
FEB	.02	.03	.04	.05	.07	.09	.12	.15	.18	.21	.21	.22
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	1305	1310	1315	1320	1330	1320	1400	1400	1400	1400	1400	1400
MAR	.09	.13	.14	.15	.17	.21	.23	.25	.25	.27	.32	.33
DATE	29	31	31	31	28	05	05	05	05	31	31	31
TIME	1706	[illegible]	2311	2315	2230	0935	0930	0930	0930	2305	2330	2350
APR	.20	.29	.29	.33	.47	.60	.81	.95	1.04	1.17	1.25	1.27
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME	0233	0239	0244	0249	0259	0314	0329	0349	0419	0429	0459	0529
MAY	.17	.25	.26	.26	.42	.53	.67	.74	.74	.74	.74	.74
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	2022	2027	[illegible]	2037	2047	2102	2117	2140	2130	2130	2130	2130
JUN	.39	.64	.99	1.29	1.47	1.52	1.55	1.55	1.55	1.55	1.55	1.55
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	1804	1809	1814	1819	1829	1844	1859	1919	1939	1959	2029	2059
JUL	.28	.55	.62	.70	[illegible]	.88	.91	.91	1.03	1.05	1.76	1.76
DATE	31	31	31	31	31	31	31	31	31	31	31	31
TIME	1347	[illegible]	[illegible]	1400	1355	1400	1409	1429	1400	1400	1400	1409
AUG	.07	.12	.15	.16	.16	.16	.16	.17	.20	.20	.23	.29
DATE	08	08	08	08	08	08	08	19	19	19	23	23
TIME	1437	1437	1437	1444	1444	1444	1444	1450	1450	1450	2230	2300
SEP	.13	.18	.20	[illegible]	.25	.27	.30	.30	.30	.35	.38	.40
DATE	04	28	28	28	04	04	04	04	04	17	17	17
TIME	0232	1338	1343	1348	0255	0310	0325	0325	0325	0901	0931	1001
OCT	.11	.16	.18	.19	.30	.36	.39	.39	.39	.40	.41	.50
DATE	04	04	04	04	04	04	04	04	04	04	13	13
TIME	0210	0225	0229	0232	0245	0258	0315	0335	0350	0410	0745	0745
NOV	.04	.06	.07	.08	.09	.10	.13	.14	.17	.18	.22	.26
DATE	02	02	02	02	02	02	28	28	28	28	28	28
TIME	1259	1304	1309	1314	1324	1340	0510	0530	0550	0900	0930	1000
DEC	.11	.16	.18	.21	.27	.27	.28	.37	.40	.45	.53	.58
DATE	04	04	04	04	04	04	13	13	13	13	13	13
TIME	1515	1515	1515	1525	1525	1525	0507	0507	0507	0559	0559	0638
YEAR	.39	.64	.99	1.29	1.47	1.52	1.55	1.55	1.55	1.55	1.76	1.76
MONTH	06	06	06	06	06	06	06	06	06	06	07	07

SIOUX CITY, IOWA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.02	.02	.03	.04	.06	.08	.11	.13	.16	.18	.20	.23
DATE	03	03	21	21	21	21	21	21	21	21	21	21
TIME	1300	1300	0530	0530	0530	0530	0530	0530	0530	0530	0530	0530
FEB	T	T	T	T	.01	.02	.03	.04	.05	.06	.08	.09
DATE					13	13	13	13	13	13	13	13
TIME					0345	0415	[illegible]	0215	0145	0200	0230	0300
MAR	.07	.15	.16	.19	.28	.37	.52	.57	.62	.65	.73	[illegible]
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1755	1755	1755	1755	1800	1800	1800	1755	1815	1835	1908	1800
APR	.10	.12	.13	.13	.16	.21	.26	.33	.37	.37	.37	.37
DATE	28	28	28	28	28	30	30	30	30	30	30	30
TIME	2121	2122	2122	[illegible]	2122	1024	1035	1100	1123	1130	1130	1130
MAY	.05	.08	.09	.10	.14	.15	.18	.22	.27	.30	.36	.40
DATE	09	09	09	09	09	09	09	01	01	01	01	01
TIME	2115	2115	2115	[illegible]	2115	2115	[illegible]	2010	1935	1935	1935	1913
JUN	.44	.72	.82	.94	1.16	1.24	1.27	1.32	1.33	1.33	1.33	1.33
DATE	18	18	18	08	18	18	18	18	18	18	18	18
TIME	0332	0335	0338	0337	0348	0403	0418	0438	0445	0445	0445	0445
JUL	.42	.67	.72	.88	1.57	1.88	1.92	1.96	1.98	2.15	2.22	2.29
DATE	07	07	07	07	07	07	07	07	07	07	07	07
TIME	0428	0428	0430	0450	0447	0455	0514	0510	0532	0614	0620	0650
AUG	.21	.28	.29	.29	.35	.41	.43	.43	.43	.43	.43	.43
DATE	30	15	15	15	15	30	30	30	30	30	30	30
TIME	0453	0916	0921	0921	0936	0533	0535	0535	0535	0535	0535	0535
SEP	.09	.14	.16	.24	.33	.34	.35	.36	.37	.40	.49	.54
DATE	25	28	28	28	28	28	28	28	28	28	28	28
TIME	2125	[illegible]	0715	0733	0743	0745	0800	0817	1630	1635	1704	1730
OCT	.23	.38	.46	.60	.72	.74	.75	.75	.78	.80	.80	.80
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	0833	0838	0845	0847	0849	0900	0917	0938	1000	1018	1047	1047
NOV	.15	.26	.28	.31	.35	.38	.48	.60	.64	.67	.73	.74
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	1132	1133	1135	1135	1135	1145	1143	1135	1155	1215	1245	1308
DEC	.02	.03	.04	.05	.06	.08	.09	.10	.10	.11	.13	.15
DATE	24	24	24	12	24	24	24	24	24	24	24	24
TIME	1245	1245	1245	1245	1245	1300	1300	1300	1300	1300	1300	[illegible]
YEAR	.44	.72	.82	.94	1.57	1.88	1.92	1.96	1.98	2.15	2.22	2.29
MONTH	06	06	06	06	07	07	07	07	07	07	07	07

DODGE CITY, KANSAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.02	.03	.03	.04	.05	.06	.07	.08	.09	.09	.10	.10
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	0815	0820	0825	0830	0830	0830	0900	0920	0940	1000	1030	1100
FEB	M	M	M	M	M	M	.09	M	M	.14	M	.19
DATE							01			01		01
TIME							0300			0300		0400
MAR	.14	.19	.22	.23	.32	.34	.34	.39	.45	.52	.62	.70
DATE	13	13	13	13	13	13	13	10	10	10	10	10
TIME	1217	1217	1217	1217	1217	1217	1217	0557	0617	0637	0707	0737
APR	.12	.16	.16	.18	.24	.32	.41	.49	.55	.62	.81	.83
DATE	15	15	15	18	18	18	18	19	19	19	19	19
TIME	1315	1315	1315	2328	2338	2338	2358	0012	0033	0050	0125	0150
MAY	.07	.10	.12	.14	.15	.20	.22	.23	.25	.25	.27	.31
DATE	07	07	07	07	07	07	07	07	07	07	07	07
TIME	0740	0743	0745	0747	0948	0815	0815	0837	0845	0900	0935	0950
JUN	.17	.20	.23	.25	.31	.34	.41	.45	.54	.56	.57	.58
DATE	28	28	28	28	28	28	28	28	28	28	28	28
TIME	0500	[illegible]	0510	0515	0525	0515	0530	0510	0510	0550	0620	0650
JUL	.20	.34	.38	.43	.49	.60	.66	.70	.74	.78	.90	1.04
DATE	19	09	22	22	22	22	22	20	14	14	14	14
TIME	1547	[illegible]	0046	0055	0105	0055	0110	0130	0000	0020	0050	0120
AUG	.18	.32	.35	.44	.57	.69	.80	.80	.80	.80	.80	.91
DATE	30	30	30	30	30	30	30	30	30	30	30	30
TIME	2107	2113	2115	2120	[illegible]	2135	2148	2148	2148	2148	2148	2148
SEP	.24	.45	.47	.66	.85	.87	1.32	1.60	1.66	1.69	1.69	1.69
DATE	02	02	02	02	02	03	03	03	03	03	03	03
TIME	2330	2337	2338	2343	2347	0006	0026	0036	0037	0050	0050	0050
OCT	.26	.33	.34	.34	.34	.34	.34	.42	.47	.50	.52	.52
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	0923	0928	0933	0938	0948	1003	1018	2050	2114	2132	2100	2219
NOV	.36	.72	.80	.93	.99	1.01	1.02	1.04	1.05	1.06	1.06	1.06
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	1710	1715	1720	1717	[illegible]	1725	1740	1738	1758	1808	1838	1909
DEC	.04	[illegible]	.12	.15	.22	.29	.38	.43	.44	.47	.48	.50
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	1017	1025	1027	1032	1047	1055	1110	1115	1140	1153	1227	1253
YEAR	M	M	M	M	M	M	1.32	M	M	1.69	M	1.69
MONTH							09			09		09

DES MOINES, IOWA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.03	.04	.06	.09	.15	.15	.17	.22	.24	.28	.32	.35
DATE	27	27	03	03	03	03	03	03	03	03	03	03
TIME	1135	1135	1245	1300	1300	1300	1300	1300	1315	1315	1330	1330
FEB	.03	.05	.06	.07	.09	.10	.19	.24	.37	.44	.47	.54
DATE	15	01	01	01	01	01	01	01	01	01	01	01
TIME	1740	0150	0155	0155	0200	0200	0245	0705	0645	0715	0700	0700
MAR	.11	.14	.16	.18	.25	.31	.36	.43	.49	.56	.66	.77
DATE	13	13	13	13	13	13	13	31	31	31	31	31
TIME	2105	2110	2115	2120	2115	2125	2130	1055	1055	1055	1055	1055
APR	.26	.42	.47	.58	.68	.72	.78	.97	.98	1.00	1.02	1.03
DATE	30	30	30	30	30	30	30	30	30	30	30	30
TIME	1153	1158	1203	1208	1218	1220	1212	1220	1240	1253	1323	1350
MAY	.11	.19	.23	.25	.31	.41	.50	.68	.77	.88	1.09	1.28
DATE	26	27	27	27	27	27	27	27	27	27	27	27
TIME	0937	0831	0835	0840	0850	0555	0608	0848	0908	0833	0740	0830
JUN	.32	.42	.46	.51	.65	.70	.72	.74	.77	.78	.78	.78
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	0728	0733	0738	0743	[illegible]	0756	0811	0831	0851	0911	0941	1011
JUL	.54	.90	1.28	1.48	1.69	1.91	2.26	2.35	2.43	2.44	2.51	2.55
DATE	03	03	03	03	03	03	03	03	03	04	04	04
TIME	2305	2310	2315	2320	2330	2330	2330	2336	2355	0015	0148	0118
AUG	.18	.22	.26	.27	.28	.28	.28	.28	.28	.28	.29	.29
DATE	31	31	31	31	31	31	31	31	31	31	31	31
TIME	1651	1656	1702	1706	1711	1711	1711	1711	1711	1711	1910	1910
SEP	.32	[illegible]	.46	.62	.86	1.13	1.70	1.98	2.33	2.46	2.71	2.89
DATE	21	28	28	28	28	28	28	28	28	28	28	28
TIME	1805	2033	2033	2033	2033	2040	2058	2100	2115	2115	2142	2158
OCT	.20	.26	.27	.27	.35	.38	.38	.38	.64	.65	.66	.75
DATE	03	03	03	03	03	03	03	03	03	03	03	11
TIME	0313	0313	0318	0318	0203	0218	0218	0218	0313	0328	0400	0400
NOV	.07	.13	.17	.19	.23	.27	.33	.41	.44	.44	.44	.46
DATE	23	23	23	23	23	23	23	23	23	23	23	23
TIME	2115	[illegible]	2118	2118	2118	2118	2118	2118	2130	2155	2225	2225
DEC	.05	.10	.12	.15	.18	.21	.25	.31	.38	.43	.49	.54
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	0915	0920	0925	0930	0940	0955	1010	0720	0740	0800	0925	0900
YEAR	.54	.90	1.28	1.48	1.69	1.91	2.26	2.35	2.43	2.46	2.71	2.89
MONTH	07	07	07	07	07	07	07	07	07	09	09	09

WATERLOO, IOWA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.04	.05	.05	.06	.06	.14	.16	.20	.25	.28	.28	.33
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	1545	1340	1745	1745	1515	1445	1500	1545	1515	1515	1530	1630
FEB	.04	.04	.04	.05	.05	.12	.15	.18	.21	.25	.31	.37
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	1245	1250	1255	1300	1315	0845	0530	0545	0645	0900	0830	0630
MAR	.20	.21	.22	.22	.22	.24	.29	.36	.41	.52	.56	.63
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	2021	2120	2120	2120	2120	2155	2210	2230	2250	2340	2340	2340
APR	.07	.09	.10	.12	.16	.23	.30	.34	.34	.34	.41	.48
DATE	30	30	30	15	15	15	30	30	30	30	16	16
TIME	1343	1343	1343	1057	1057	1057	1435	1435	1435	1435	0345	0345
MAY	.10	.17	.21	.26	.42	.55	.64	.77	.88	.96	1.07	1.18
DATE	01	27	27	27	27	27	27	27	27	27	27	27
TIME	0138	1343	1346	1344	1353	1400	1400	1428	1440	1430	1500	1447
JUN	.16	.26	.35	.40	.45	.48	.49	.57	.67	.70	.72	.72
DATE	18	18	16	16	16	04	04	18	18	18	18	18
TIME	0805	0823	2010	2010	2020	1505	1520	0922	0940	1000	1030	1100
JUL	.34	.64	.86	.90	.95	.97	.98	.98	.98	.98	.98	.98
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	0035	0040	0045	0050	0100	0115	0130	0130	0130	0130	0130	0130
AUG	.14	.21	.28	.40	.45	.52	.58	.58	.58	.58	.58	.58
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1040	1045	1050	1055	1105	1120	1135	1135	1135	1135	1135	1135
SEP	.20	.47	.62	.88	1.01	1.27	1.37	1.48	1.63	1.74	1.81	1.88
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	0137	0137	0137	0137	0140	0155	0210	0230	0250	0310	0340	0350
OCT	.32	.33	.34	.34	.34	.35	.36	.36	.36	.38	.38	.39
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	0815	0820	0835	0835	0835	0900	0955	0955	0955	1015	1015	1110
NOV	.12	.14	.16	.20	.25	.28	.30	.33	.37	.41	.46	.50
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	1946	1946	1946	1946	1946	1946	1946	1946	1946	1946	1946	1946
DEC	M	M	M	M	M	M	M	M	M	M	M	M
DATE												
TIME												
YEAR	M	M	M	M	M	M	M	M	M	M	M	M
MONTH												

GOODLAND, KANSAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	T	T	.01	.02	.02	.03	.05	.07	.07	.08	.10	.11
DATE			26	26	26	26	26	26	26	26	26	26
TIME			1930	1945	2000	2000	2000	2020	2040	2100	2100	2100
FEB	T	T	T	T	T	T	.01	.01	.01	.01	.01	.01
DATE							07	07	07	07	07	07
TIME							0900	0900	0900	0900	0900	0900
MAR	.07	.10	.10	.10	.12	.12	.13	.15	.18	.20	.24	.29
DATE	13	13	13	13	13	13	23	23	23	23	24	24
TIME	1523	1525	1525	1525	0915	0915	2233	2233	0302	2330	0024	0044
APR	.16	.23	.23	.23	.23	.23	.24	.24	.24	.25	.29	.31
DATE	18	18	18	18	18	18	18	18	18	25	25	25
TIME	1925	1929	1929	1929	1929	1929	2015	2015	2015	0200	0130	0245
MAY	.13	.25	.30	.32	.40	.40	.43	.45	.68	.74	.74	.74
DATE	06	06	06	06	06	06	06	06	06	06	06	06
TIME	1703	1645	1705	1745	1745	1745	1742	1742	1745	1745	1745	1745
JUN	.10	.16	.20	.21	.27	.30	.45	.54	.56	.58	.59	.63
DATE	30	30	30	30	30	30	30	30	30	30	30	30
TIME	0305	0312	0315	0315	0330	0305	0315	0333	0333	0333	0333	0333
JUL	.13	.25	.26	.27	.33	.35	.35	.58	.61	.63	.67	.67
DATE	24	24	24	21	21	21	21	24	24	24	24	24
TIME	2154	2100	2100	2100	1830	1851	1851	2105	2120	2145	2200	2200
AUG	.16	.22	.25	.25	.25	.25	.25	.25	.25	.25	.25	.25
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
SEP	.20	.37	.44	.47	.52	.56	.59	.65	.68	.71	.78	.88
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	0815	0815	0815	0815	0815	1948	1948	1948	1948	1948	1948	1948
OCT	.02	.04	.05	.06	.09	.11	.12	.24	.24	.24	.25	.26
DATE	10	10	10	10	10	10	10	10	10	10	11	11
TIME	2300	2300	2300	2300	2300	2300	2300	2310	2330	2330	0020	0055
NOV	.02	.03	.04	.04	.05	.06	.08	.10	.11	.12	.14	.16
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	1738	1738	1738	1738	1738	1943	1943	1943	1943	1943	1943	1943
DEC	.02	.03	.03	.05	.06	.06	.08	.08	.09	.12	.13	.15
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	1558	1559	1600	1600	1600	1600	1645	1645	1645	1730	1800	1830
YEAR	.20	.37	.44	.47	.52	.56	.59	.65	.68	.74	.78	.88
MONTH	09	09	09	09	09	09	09	09	09	05	09	09

MAXIMUM SHORT DURATION PRECIPITATION

TOPEKA, KANSAS

JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.26	.30	[illegible]	[illegible]	.39	.39
DATE	[illegible]	31	[illegible]	31	31	[illegible]	31	31	31	31	[illegible]	31
TIME	[illegible]	2320	[illegible]	2335	[illegible]	2330	2359	[illegible]	[illegible]	[illegible]	2359	[illegible]
FEB	[illegible]	[illegible]	.04	.05	[illegible]	[illegible]	.19	.27	.30	.35	.39	[illegible]
DATE	[illegible]	[illegible]	01	01	[illegible]	[illegible]	01	01	01	01	01	01
TIME	[illegible]	[illegible]	0130	0150	0200	0200	0300	0245	[illegible]	0300	[illegible]	[illegible]
MAR	[illegible]	[illegible]	[illegible]	.56	.61	[illegible]	[illegible]	[illegible]	[illegible]	.66	[illegible]	.66
DATE	[illegible]	[illegible]	13	13	13	13	[illegible]	[illegible]	[illegible]	13	13	13
TIME	[illegible]	[illegible]	[illegible]	1117	[illegible]	[illegible]	1142	[illegible]	1210	[illegible]	[illegible]	1210
APR	[illegible]	[illegible]	.38	[illegible]	[illegible]	.90	1.02	[illegible]	1.04	1.05	1.17	1.22
DATE	[illegible]	30	[illegible]	30	30	[illegible]	30	30	[illegible]	30	15	15
TIME	[illegible]	2025	2030	2040	2050	2100	2100	2120	2035	2200	2210	[illegible]
MAY	[illegible]	[illegible]	[illegible]	.88	[illegible]	1.08	[illegible]	1.36	[illegible]	1.53	1.60	1.61
DATE	[illegible]	[illegible]	[illegible]	26	[illegible]	[illegible]	26	26	26	[illegible]	26	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1800	1810	1825	[illegible]	1910	1940	2000
[illegible]	[illegible]	.54	[illegible]	.73	[illegible]	1.35	1.78	[illegible]	[illegible]	[illegible]	2.21	2.22
DATE	[illegible]	[illegible]	[illegible]	03	[illegible]	03	[illegible]	[illegible]	03	[illegible]	03	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1645	1700	1715	1730	[illegible]	1730	1740	[illegible]	1840
[illegible]	[illegible]	[illegible]	.88	1.26	1.60	1.62	1.62	1.62	1.88	2.00	2.54	3.02
DATE	02	[illegible]	02	02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	19
TIME	[illegible]	[illegible]	[illegible]	2050	2050	2100	2115	[illegible]	2320	2340	0010	0040
[illegible]	.30	.54	[illegible]	[illegible]	[illegible]	[illegible]	1.32	1.52	1.52	1.92	1.52	1.92
DATE	[illegible]	10	10	10	10	[illegible]	[illegible]	[illegible]	10	[illegible]	10	10
TIME	[illegible]	1415	[illegible]	[illegible]	[illegible]	1445	[illegible]	[illegible]	[illegible]	1520	1520	[illegible]
SEP	.28	[illegible]	.56	[illegible]	[illegible]	[illegible]	1.33	[illegible]	1.60	1.77	2.17	2.32
DATE	24	24	24	24	[illegible]	[illegible]	24	23	[illegible]	23	23	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1750	0420	[illegible]	0510	0510	0510
[illegible]	[illegible]	.90	[illegible]	1.31	[illegible]	[illegible]	[illegible]	2.34	2.37	[illegible]	2.52	2.60
DATE	10	10	10	10	[illegible]	[illegible]	10	10	10	[illegible]	10	10
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1844	[illegible]	[illegible]	1815	1815	[illegible]	1815	[illegible]
NOV	[illegible]	.16	.20	.22	.30	[illegible]	[illegible]	.60	[illegible]	.81	.96	[illegible]
DATE	[illegible]	19	19	19	[illegible]	[illegible]	19	19	19	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	2330	2330	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2330
[illegible]	[illegible]	[illegible]	.11	.12	.16	.18	.22	.33	[illegible]	.52	[illegible]	.70
DATE	[illegible]	23	23	23	23	23	03	03	03	[illegible]	03	[illegible]
TIME	2129	2129	[illegible]	[illegible]	[illegible]	2129	[illegible]	[illegible]	0900	0900	0900	0900
YEAR	[illegible]	[illegible]	1.12	1.31	[illegible]	[illegible]	2.29	2.34	[illegible]	2.42	2.54	3.02
MONTH	10	[illegible]	[illegible]	10	[illegible]	10	10	10	10	[illegible]	07	[illegible]

LEXINGTON, KENTUCKY

[illegible]	[illegible]	.12	.13	[illegible]	.24	.24	[illegible]	.27	[illegible]	.27	.36	.41
DATE	[illegible]	03	03	01	01	[illegible]	03	03	03	03	03	03
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1845	[illegible]	1850	1930	1900	[illegible]	1840	1850
FEB	[illegible]	.03	.06	.08	.10	[illegible]	.14	.19	[illegible]	.26	[illegible]	.32
DATE	[illegible]	14	14	14	14	14	14	14	[illegible]	14	14	[illegible]
TIME	1030	1035	[illegible]	1050	[illegible]	[illegible]	[illegible]	1100	[illegible]	1100	[illegible]	1200
MAR	[illegible]	[illegible]	.21	.21	[illegible]	.26	[illegible]	.31	[illegible]	.48	.52	.55
DATE	14	14	[illegible]	14	[illegible]	[illegible]	16	16	16	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	2133	2133	[illegible]	2133	0557	0557	[illegible]	2133	[illegible]	[illegible]
APR	[illegible]	.11	.15	.18	[illegible]	.35	[illegible]	.42	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	23	23	23	[illegible]	23	23	[illegible]	[illegible]	04	[illegible]	04
TIME	[illegible]	[illegible]	1530	1530	[illegible]	[illegible]	1546	[illegible]	[illegible]	0200	[illegible]	[illegible]
MAY	[illegible]	[illegible]	.81	1.00	1.50	1.73	1.75	1.85	[illegible]	[illegible]	[illegible]	2.23
DATE	27	22	22	22	22	22	[illegible]	[illegible]	[illegible]	[illegible]	22	22
TIME	[illegible]	2108	[illegible]	2058	[illegible]	2040	[illegible]	2040	[illegible]	2040	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	.78	.94	[illegible]	1.06	1.09	1.16	1.19	1.23	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	27	27	27	27	27	[illegible]	[illegible]	[illegible]	27
TIME	1315	[illegible]	[illegible]	1315	1315	[illegible]	[illegible]	1315	[illegible]	[illegible]	[illegible]	1315
[illegible]	[illegible]	.40	[illegible]	.75	.98	[illegible]	1.06	1.06	1.06	[illegible]	[illegible]	1.62
DATE	[illegible]	31	31	[illegible]	[illegible]	31	[illegible]	31	31	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1325	[illegible]	1325	[illegible]	[illegible]	1325	1325	[illegible]	1325	[illegible]	[illegible]
AUG	[illegible]	[illegible]	[illegible]	.94	1.08	1.15	[illegible]	[illegible]	1.20	1.20	1.21	1.30
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10	[illegible]	[illegible]	10	10	[illegible]
TIME	0048	[illegible]	0042	0042	1803	0042	0042	0042	0042	0042	0042	[illegible]
SEP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.41	.45	.51	.53	[illegible]	[illegible]
DATE	[illegible]	29	29	29	[illegible]	[illegible]	29	29	29	29	29	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1250	[illegible]	[illegible]	1250	1250	1250	1230	1230	1230
[illegible]	.23	.26	[illegible]	[illegible]	[illegible]	.58	[illegible]	[illegible]	.60	[illegible]	[illegible]	.60
DATE	01	01	[illegible]	01	[illegible]	[illegible]	[illegible]	01	01	[illegible]	[illegible]	01
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1950	1950	[illegible]	[illegible]
[illegible]	.15	[illegible]	.32	[illegible]	.59	[illegible]	.80	.94	[illegible]	1.15	1.25	1.31
DATE	[illegible]	23	23	23	23	23	23	23	[illegible]	23	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	.22	.27	.29	.33	[illegible]	[illegible]	.37	.37	.37	.37	[illegible]	.37
DATE	[illegible]	04	04	[illegible]	04	[illegible]	04	04	04	04	04	04
TIME	[illegible]	[illegible]	[illegible]	2208	[illegible]	[illegible]	2208	2208	2208	[illegible]	[illegible]	2208
YEAR	[illegible]	[illegible]	.84	1.00	1.50	[illegible]	1.75	1.85	1.94	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	05	05	[illegible]	[illegible]	05	05	05	05

BATON ROUGE, LOUISIANA

JAN	.15	[illegible]	[illegible]	.50	.83	[illegible]	.93	.93	[illegible]	.95	1.17	1.17
DATE	27	[illegible]	[illegible]	21	21	[illegible]	21	21+	[illegible]	21	21	21+
TIME	2030	0650	[illegible]	[illegible]	[illegible]	0735	0735	0735	[illegible]	0735	0731	0735
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.00	1.10	[illegible]	1.15	[illegible]	1.15	1.16
DATE	[illegible]	13	[illegible]	13	[illegible]	13	[illegible]	13	[illegible]	[illegible]	13	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	2000	1955	[illegible]	2010	[illegible]	[illegible]	2010	2010
MAR	[illegible]	.26	[illegible]	[illegible]	[illegible]	.85	[illegible]	1.65	1.88	2.07	2.25	2.50
DATE	[illegible]	26	[illegible]	16	[illegible]	16	16	16	[illegible]	16	16	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1347	[illegible]	[illegible]	[illegible]	[illegible]	1703	[illegible]	1714	[illegible]
APR	[illegible]	.26	.35	.43	[illegible]	.85	[illegible]	1.65	[illegible]	[illegible]	2.25	2.50
DATE	26	[illegible]	16	16	16	16	16	16	16	16	16	[illegible]
TIME	[illegible]	[illegible]	1258	[illegible]	1640	1650	[illegible]	1650	1703	[illegible]	1714	1700
[illegible]	.45	.88	[illegible]	1.22	[illegible]	1.55	[illegible]	1.76	1.82	[illegible]	[illegible]	2.56
DATE	[illegible]	[illegible]	07	[illegible]	07	[illegible]	[illegible]	07	07	07	07	07
TIME	[illegible]	0649	[illegible]	[illegible]	[illegible]	0723	[illegible]	[illegible]	0815	0835	0909	[illegible]
[illegible]	.35	.61	.73	.78	.78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.78	[illegible]
DATE	[illegible]	[illegible]	16	16	16	[illegible]	16	16	[illegible]	16	16	[illegible]
TIME	1200	[illegible]	1210	[illegible]	1225	[illegible]	1255	1315	1335	1355	[illegible]	1455
[illegible]	[illegible]	.55	[illegible]	1.00	1.29	[illegible]	1.32	1.32	[illegible]	1.32	1.32	1.32
DATE	[illegible]	[illegible]	[illegible]	19	[illegible]	19	19	19	19	19	19	19
TIME	[illegible]	1245	[illegible]	1245	1255	1309	[illegible]	[illegible]	1312	1312	1312	1312
[illegible]	.47	[illegible]	1.00	[illegible]	[illegible]	1.74	1.77	1.84	1.89	[illegible]	1.91	1.91
DATE	[illegible]	01	[illegible]	[illegible]	[illegible]	01	[illegible]	01	[illegible]	[illegible]	01	01
TIME	[illegible]	1010	[illegible]	1013	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1321	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.15	[illegible]	3.45	3.86
DATE	[illegible]	12	12	12	12	12	[illegible]	12	12	[illegible]	12	[illegible]
TIME	[illegible]	2210	2210	2210	2210	[illegible]	2210	2210	[illegible]	[illegible]	2210	2210
[illegible]	.25	[illegible]	.50	.51	.52	.52	.55	.60	[illegible]	.65	[illegible]	[illegible]
DATE	[illegible]	[illegible]	11	[illegible]	11	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
TIME	1550	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1714	[illegible]	[illegible]	1744	[illegible]	1749
NOV	[illegible]	[illegible]	[illegible]	[illegible]	1.18	[illegible]	[illegible]	2.07	2.24	2.55	3.30	3.55
DATE	[illegible]	04	[illegible]	04	[illegible]	04	04	04	[illegible]	[illegible]	05	05
TIME	[illegible]	[illegible]	[illegible]	[illegible]	2236	[illegible]	[illegible]	[illegible]	[illegible]	0007	0038	[illegible]
DEC	[illegible]	[illegible]	.80	[illegible]	1.10	1.50	[illegible]	[illegible]	2.15	[illegible]	2.30	2.50
DATE	[illegible]	[illegible]	[illegible]	24	[illegible]	24	[illegible]	24	24	24	24	24
TIME	[illegible]	0130	[illegible]	[illegible]	2020	2030	[illegible]	[illegible]	[illegible]	[illegible]	2030	[illegible]
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.15	[illegible]	[illegible]	3.86
MONTH	[illegible]	09	09	[illegible]	09	[illegible]	[illegible]	[illegible]	09	09	09	[illegible]

[illegible], KANSAS

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APR	.23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	30	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	.39	.42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	.57	.63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	24	[illegible]	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SEP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	.22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	2048	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.76	[illegible]
DATE	[illegible]	23	[illegible]	23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	.26	.57	.63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

LOUISVILLE, KENTUCKY

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.29	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.23	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	23	23	[illegible]	[illegible]	23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.15	[illegible]	[illegible]
[illegible]	[illegible]	.38	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.84	[illegible]	.87	[illegible]	.86	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	.38	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	09
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	.15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2100	2110	2125	1815	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	.19	[illegible]	.22	.27	[illegible]	.30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	02	[illegible]
TIME	[illegible]	[illegible]	2347	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0012	[illegible]
[illegible]	[illegible]	[illegible]	.58	.64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.08	1.17	[illegible]
DATE	[illegible]	[illegible]	[illegible]	15	[illegible]	15	15	[illegible]	[illegible]	26	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1601	1616	[illegible]	[illegible]	0955	1025	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.15	.17	.24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	.44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.23	.23	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.59	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	04	[illegible]	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0948	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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DATE	[illegible]	[illegible]	[illegible]	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0725	0720	0720	0522	0502	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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TIME	[illegible]	[illegible]	[illegible]	[illegible]	0600	0615	0630	[illegible]	0630	0633	[illegible]	[illegible]
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TIME	[illegible]	[illegible]	[illegible]	[illegible]	2154	2154	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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TIME	0045	0045	0045	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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TIME	[illegible]	1703	1703	1703	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1506	1506
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TIME	1030	1030	1030	1030	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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DATE	[illegible]	[illegible]	09	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1303	1303	1303	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	1.02	[illegible]	1.76	1.99	2.04	2.04	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0915	0915	0915	0915	0915	[illegible]	[illegible]
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TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2003	1950	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.95	2.05	2.08
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2000
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.10
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2020
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.60
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0550	[illegible]
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TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2358	[illegible]	[illegible]	[illegible]	2358	2358
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.50	2.55
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01	[illegible]	[illegible]	[illegible]	01	01
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0100	0115	0130	[illegible]	[illegible]	[illegible]	0130	0210
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.30	[illegible]	[illegible]	[illegible]	1.78	2.38
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1300	[illegible]
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DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0203	190	[illegible]	[illegible]	[illegible]	[illegible]
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DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0629	[illegible]
[illegible]	[illegible]	.48	[illegible]	[illegible]	[illegible]	.80	.80	.80	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	.70	.77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2037	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	.47	.48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1515	1520	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	.60	.72	[illegible]	[illegible]	[illegible]	[illegible]	1.29	1.30	[illegible]	1.30
DATE	[illegible]	[illegible]	04	04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1331	[illegible]	1438	[illegible]
[illegible]	[illegible]	[illegible]	.53	.56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.33	1.47
DATE	[illegible]	[illegible]	24	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1208	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

LAKE [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23	[illegible]	[illegible]	[illegible]	[illegible]
TIME	1745	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.93	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1930	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.96	1.15	[illegible]	1.54	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23	23	[illegible]	[illegible]	[illegible]
TIME	1650	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	.85	[illegible]	[illegible]	[illegible]	[illegible]	1.26	1.26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.47	2.70	[illegible]	[illegible]	3.23	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	06	06	06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1300	1314	1323	1338	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.51	.52	.54	.55	[illegible]	[illegible]	[illegible]	[illegible]
DATE	23	[illegible]	[illegible]	[illegible]	25	25	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	0508	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	1404	[illegible]	[illegible]	[illegible]	[illegible]	1225	1250	[illegible]	1330	[illegible]	[illegible]	1420
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.90	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	1540	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0730	0730	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	.55	.66	.74	[illegible]	[illegible]	[illegible]	1.09	[illegible]	[illegible]
DATE	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0135	1550	1550	1614	1601	1620	1640	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.52	1.53	[illegible]	[illegible]	1.55
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	05	05	[illegible]	[illegible]	[illegible]
TIME	2354	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0450	0522	[illegible]	0522	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.93	[illegible]	[illegible]	[illegible]	[illegible]
DATE	24	[illegible]	[illegible]	[illegible]	19	19	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0800	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MAXIMUM SHORT DURATION PRECIPITATION

Maximum precipitation in inches
(5 to 180 minutes)

NEW ORLEANS, LOUISIANA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.20	.26	[illegible]	[illegible]	[illegible]	.51	.58	.60	.61	.61	[illegible]	.61
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	21	21	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0910	[illegible]	[illegible]	0915	0915	0915	[illegible]	0915	0915
FEB	[illegible]	[illegible]	[illegible]	[illegible]	.53	.57	[illegible]	.70	.89	[illegible]	.96	[illegible]
DATE						01	[illegible]	01	01	01	[illegible]	[illegible]
TIME	[illegible]	1030	[illegible]	[illegible]	1030	1035	[illegible]	1030	[illegible]	[illegible]	1045	1100
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.45	[illegible]	[illegible]	2.12	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24	24	24	24	24	24
TIME	[illegible]	1931	[illegible]	[illegible]	[illegible]	2001	2000	1758	2000	[illegible]	2000	1954
APR	[illegible]	[illegible]	[illegible]	[illegible]	1.35	[illegible]	1.57	[illegible]	1.82	1.87	[illegible]	2.27
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	16	16
TIME	[illegible]	0400	0403	1833	[illegible]	0430	[illegible]	0428	[illegible]	1833	[illegible]	1845
MAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.98	1.30	1.34	[illegible]	1.35	1.35
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	08	24	24	24	24	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1440	1706	1716	[illegible]	1805	1831
JUN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.53	1.75	[illegible]	[illegible]	[illegible]	2.22	2.22
DATE	[illegible]	[illegible]	19	[illegible]	[illegible]	[illegible]	19	16	16	16	16	16
TIME	[illegible]	[illegible]	1620	[illegible]	[illegible]	[illegible]	1645	1710	1733	[illegible]	1755	1802
JUL	[illegible]	.82	[illegible]	1.30	[illegible]	[illegible]	1.54	[illegible]	1.54	1.54	1.54	1.54
DATE	[illegible]	26	[illegible]	19	19	19	[illegible]	[illegible]	[illegible]	[illegible]	19	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1758	1810	[illegible]	1834	1853	[illegible]	[illegible]	1933	[illegible]
AUG	[illegible]	.59	.73	[illegible]	[illegible]	[illegible]	1.07	[illegible]	1.07	1.07	1.07	[illegible]
DATE	[illegible]	14	[illegible]	14	[illegible]	[illegible]	14	[illegible]	14	14	[illegible]	14
TIME	[illegible]	[illegible]	1534	1538	[illegible]	1603	1618	[illegible]	[illegible]	1630	1630	[illegible]
SEP	[illegible]	.50	.51	.51	[illegible]	[illegible]	[illegible]	[illegible]	1.40	1.43	[illegible]	1.73
DATE	[illegible]	[illegible]	[illegible]	28	13	[illegible]	[illegible]	13	13	13	[illegible]	[illegible]
TIME	[illegible]	1201	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1025	1045	1035	[illegible]	[illegible]
OCT	[illegible]	1.07	1.21	1.47	[illegible]	1.64	1.70	1.71	1.71	1.71	1.71	1.71
DATE	[illegible]	02		02		[illegible]	02	[illegible]	[illegible]	[illegible]	02	02
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1335	1350	1407	1407	[illegible]	1407
NOV	.20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.62	.69	.73	.75	[illegible]	.86
DATE	[illegible]	27	20	19	[illegible]	27	27	27	27	27	[illegible]	27
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2028	2043	[illegible]	2123	[illegible]	2224
DEC	[illegible]	.69	.76	[illegible]	[illegible]	[illegible]	1.43	1.54	[illegible]	1.64	1.76	1.86
DATE	[illegible]	[illegible]	[illegible]	[illegible]	19	19	[illegible]	19	[illegible]	[illegible]	25	[illegible]
TIME	[illegible]	[illegible]	1840	[illegible]	[illegible]	[illegible]	1925	1918	[illegible]	[illegible]	1130	1200
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	1.65	[illegible]	1.75	2.01	2.16	2.16	[illegible]	2.31
MONTH	[illegible]	[illegible]		10	[illegible]	10	[illegible]	06	06	06	06	[illegible]

NEW ORLEANS, AUDUBON LOUISIANA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.20	.35	.45	.57	.70	.78	.85	.90	[illegible]	[illegible]	1.08	1.12
DATE	27	27	27	27	27	27	27	27	[illegible]	[illegible]	27	27
TIME	1435	1438	1443	1448	1458	1458	1458	1500	1520	[illegible]	1530	1545
FEB	M	M	M	M	M	M	M	M	M	M	M	M
DATE												
TIME												
MAR	M	M	M	M	M	M	M	M	M	M	M	M
DATE												
TIME												
APR	.65	.85	.90	.96	1.13	[illegible]	1.25	1.25	1.35	1.65	1.92	[illegible]
DATE	07	07	07	07	07	07	07	16	16	16	16	16
TIME	0410	0415	0415	0420	0432	0445	[illegible]	1930	1930	[illegible]	1930	[illegible]
MAY	.25	.45	.50	.65	.75	.82	.85	M	M	M	M	M
DATE	24	24	24	12	12	12	12					
TIME	[illegible]	[illegible]	1405	1410	1420	1435	1445					
JUN	.50	[illegible]	.90	[illegible]	1.27	[illegible]	1.46	1.55	1.56	1.56	1.56	1.56
DATE	29	29	29	29	29	29	09	09	09	09	09	09
TIME	1525	1525	1525	1525	1537	1550	1245	1300	1320	1340	1410	1435
JUL	.35	.60	.80	.95	1.05	1.06	1.06	1.07	1.07	1.08	1.08	1.08
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	[illegible]	1210	1215	1220	1230	1245	1245	[illegible]	1320	1400	1400	1400
AUG	[illegible]	1.09	[illegible]	1.56	[illegible]	2.18	[illegible]	2.29	[illegible]	2.29	2.29	2.29
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	1350	1355	1400	1400	1405	1420	1435	1450	1515	1535	1600	[illegible]
SEP	.65	.90	1.01	1.15	[illegible]	[illegible]	2.45	2.62	[illegible]	2.62	2.62	2.62
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	1335	1340	1340	1345	1400	1410	1410	[illegible]	1415	1415	1415	1415
OCT	[illegible]	.21	.24	.25	[illegible]	.30	.30	.31	.50	.55	.60	.60
DATE	31	31	31	31	31	03	03	03	31	31	03	03
TIME	0555	[illegible]	0605	0610	0620	1310	[illegible]	[illegible]	0720	0745	1440	1440
NOV	.26	.40	.50	.54	[illegible]	.60	.63	.65	[illegible]	.75	.82	[illegible]
DATE	[illegible]	22	22	22	[illegible]	22	22	05	05	05	05	05
TIME	[illegible]	0000	0005	[illegible]	[illegible]	0035	0050	0320	0340	0400	[illegible]	0500
DEC	[illegible]	.65	.75	.85	[illegible]	[illegible]	[illegible]	[illegible]	2.00	2.65	3.15	[illegible]
DATE	25	25	25	25	25	25	25	25	25	25	25	25
TIME	2205	2210	[illegible]	2215	2215	2215	[illegible]	2220	[illegible]	2220	2220	2250
YEAR	M	M	M	M	M	M	M	M	M	M	M	M
MONTH												

SHREVEPORT, LOUISIANA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.12	.22	.25	.28	.36	.41	.45	.55	.60	.75	.82	.85
DATE	21	21	21	21	21	21	25	25	25	25	25	25
TIME	[illegible]	0205	[illegible]	[illegible]	0130	0150	[illegible]	1730	1945	2020	2045	2100
FEB	[illegible]	.19	[illegible]	[illegible]	[illegible]	.30	.49	.54	.67	.78	.87	[illegible]
DATE	13	07	07	[illegible]	[illegible]	08	08	08	08	08	08	[illegible]
TIME	1450	2345	2345	2345	[illegible]	[illegible]	1230	1245	[illegible]	[illegible]	0130	[illegible]
MAR	.20	.35	.53	.62	[illegible]	.92	1.14	1.30	[illegible]	1.48	[illegible]	1.66
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	0930	0935	0940	0945	0955	[illegible]	1025	[illegible]	1105	1125	1135	1135
APR	.30	.50	.58	.65	.78	.95	1.07	[illegible]	1.28	1.29	1.35	[illegible]
DATE	15	15	15	15	15	15	24	24	24	24	24	24
TIME	2305	[illegible]	2310	2320	[illegible]	2342	1445	1505	1520	1545	1615	1645
MAY	.32	.44	.48	.50	.52	.55	.63	.83	.86	[illegible]	.97	1.00
DATE	07	07	07	07	07	07	07	07	07	07	07	07
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0145	0145	0145	0150	0215	0230	0300
JUN	.46	.77	.80	.88	.96	1.26	1.36	1.45	[illegible]	1.54	1.55	1.55
DATE	12	12	12	12	12	04	04	04	04	04	04	04
TIME	[illegible]	1440	[illegible]	[illegible]	1500	0500	0537	0557	0617	0637	0707	[illegible]
JUL	M	M	M	M	M	M	1.00	M	M	[illegible]	M	2.09
DATE							07			07		07
TIME							0500			0600		0700
AUG	[illegible]	.30	.35	.39	.41	.42	.43	.43	.44	.44	.44	.44
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	1650	1650	1700	1705	1715	[illegible]	1745	[illegible]	1825	1845	1915	1945
SEP	[illegible]	.55	[illegible]	.58	[illegible]	.60	.60	.65	.67	[illegible]	.73	.84
DATE	06	06	06	06	06	06	06	06	[illegible]	05	05	05
TIME	1605	[illegible]	[illegible]	1610	1610	1610	1610	1610	0335	0335	[illegible]	0335
OCT	.38	.48	.52	.58	.70	.97	1.05	[illegible]	1.28	1.29	1.29	1.29
DATE	12	12	12	12	12	12	12	12	12	12	12	12
TIME	1625	[illegible]	1635	[illegible]	1650	1705	1720	[illegible]	1740	1800	1830	1900
NOV	.17	.34	[illegible]	.55	.68	.69	.73	.76	.95	[illegible]	1.35	1.43
DATE	[illegible]	20	20	20	04	04	04	04	04	04	04	04
TIME	1707	[illegible]	[illegible]	0835	1630	1630	1630	1630	1630	1630	1630	1630
DEC	.30	.70	.75	.95	[illegible]	1.40	1.58	[illegible]	1.70	1.90	1.95	2.00
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	1850	1900	1900	1905	1915	1930	1945	2000	2025	2045	2115	2145
YEAR	M	M	M	M	M	M	1.58			1.90		2.09
MONTH							12			12		07

CARIBOU, MAINE

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	.06	[illegible]	.10	[illegible]	[illegible]	[illegible]	.19	[illegible]	.27	.31
DATE	[illegible]	23	[illegible]	[illegible]	[illegible]	[illegible]	23	23	23	23	23	23
TIME	[illegible]	0520	[illegible]	[illegible]	[illegible]	[illegible]	0550	0550	0550	0550	[illegible]	0550
FEB	[illegible]	.04	[illegible]	.06	.10	[illegible]	[illegible]	[illegible]	.23	.26	[illegible]	.34
DATE	02	[illegible]	[illegible]	02	[illegible]	[illegible]	[illegible]	02	02	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2310	[illegible]	1945	2000	2005	[illegible]	2050	2120	2200
MAR	[illegible]	[illegible]	.06	.08	[illegible]	.12	.17	.21	[illegible]	[illegible]	.34	.38
DATE	[illegible]	[illegible]	[illegible]	17	17	[illegible]	[illegible]	[illegible]	17	[illegible]	17	17
TIME	[illegible]	[illegible]	1816	1900	[illegible]	[illegible]	1920	[illegible]	[illegible]	2020	2020	2020
APR	[illegible]	[illegible]	[illegible]	.13	.17	.22	[illegible]	.35	[illegible]	[illegible]	.59	[illegible]
DATE	[illegible]	10	10	10	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	10	10
TIME	1015	1910	[illegible]	[illegible]	[illegible]	1945	2000	2010	[illegible]	2103	2103	[illegible]
MAY	.11	[illegible]	[illegible]	[illegible]	.25	[illegible]	.33	[illegible]	.37	.42	.50	[illegible]
DATE	[illegible]	[illegible]	29	29	[illegible]	29	29	[illegible]	28	28	28	28
TIME	1135	1135	1145	[illegible]	[illegible]	1155	1200	[illegible]	[illegible]	[illegible]	1745	[illegible]
JUN	.12	[illegible]	[illegible]	[illegible]	.21	[illegible]	.22	[illegible]	.23	.24	.27	.30
DATE	21	[illegible]	21	[illegible]	[illegible]	[illegible]	21	21	[illegible]	[illegible]	15	15
TIME	[illegible]	1915	[illegible]	[illegible]	1932	[illegible]	1953	2015	2010	2010	1415	0110
JUL	.34	[illegible]	[illegible]	.59	[illegible]	.83	.86	.91	[illegible]	.96	1.04	[illegible]
DATE	[illegible]	08	[illegible]	[illegible]	08	[illegible]	[illegible]	08	[illegible]	[illegible]	04	04
TIME	[illegible]	0145	0150	0145	[illegible]	0210	0230	[illegible]	[illegible]	0235	0305	0335
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.21	.26	.36	.46	.50	.53	[illegible]
DATE	[illegible]	[illegible]	[illegible]	12	[illegible]	02	[illegible]	02	02	02	02	02
TIME	1650	[illegible]	1700	[illegible]	[illegible]	2135	[illegible]	2235	2250	2245	2255	2325
SEP	[illegible]	.23	.26	.27	.28	[illegible]	.34	.37	.40	.44	.49	.54
DATE	06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	06	06	06	06	06	06
TIME	[illegible]	1425	1430	1435	[illegible]	1455	1740	1500	1500	1545	[illegible]	1620
OCT	[illegible]	[illegible]	[illegible]	[illegible]	.13	[illegible]	.20	[illegible]	.30	.35	.37	.38
DATE	[illegible]	05	05	05	05	05	05	05	05	05	05	05
TIME	[illegible]	1315	1320	1325	1335	1350	[illegible]	[illegible]	1445	1505	1535	1605
NOV	.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.19	.21	.26
DATE	[illegible]	[illegible]	[illegible]	25	[illegible]	25	25	25	[illegible]	[illegible]	14	[illegible]
TIME	[illegible]	[illegible]	0815	0820	0830	[illegible]	[illegible]	0915	[illegible]	[illegible]	[illegible]	[illegible]
DEC	[illegible]	.09	[illegible]	[illegible]	.19	.23	.28	.38	[illegible]	.53	.63	.73
DATE	[illegible]	[illegible]	[illegible]	17	17	[illegible]	17	17	[illegible]	17	17	17
TIME	[illegible]	[illegible]	2030	2035	[illegible]	2045	2045	[illegible]	2045	2045	2045	2045
YEAR	.34	[illegible]	.52	[illegible]	.66	.83	.86	[illegible]	[illegible]	.96	1.04	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	07	07	07	[illegible]	07	[illegible]	[illegible]	07

PORTLAND, MAINE

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.06	[illegible]	.14	[illegible]	.24	.30	[illegible]	.45	.50	.53	.59
DATE	[illegible]	23	23	23	23	23	23	23	23	23	23	[illegible]
TIME	0200	0115	0115	0120	0130	0130	0200	0145	0220	0200	0220	0230
FEB	.05	.07	[illegible]	.09	.10	.14	.18	.23	.28	.31	.40	.49
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	02	02	02	02	02	02	02
TIME	2050	2055	2100	2100	2100	[illegible]	[illegible]	1805	1840	1905	1930	2000
MAR	.07	[illegible]	.10	.12	.13	.19	.20	.24	.29	.30	.33	[illegible]
DATE	17	[illegible]	17	17	17	17	08	17	17	17	17	17
TIME	[illegible]	2005	2005	[illegible]	2005	2005	[illegible]	[illegible]	2005	2005	2005	2005
APR	.13	[illegible]	[illegible]	.25	[illegible]	.39	.55	.67	[illegible]	.95	1.07	1.33
DATE	[illegible]	27	[illegible]	27	[illegible]	[illegible]	02	02	[illegible]	[illegible]	02	02
TIME	[illegible]	2244	2244	2244	1544	1516	1500	1445	1448	1401	1401	1401
MAY	.12	.20	[illegible]	.25	.33	[illegible]	.46	.51	.65	.74	.89	1.06
DATE	31	31	29	[illegible]	21	21	21	21	21	21	21	21
TIME	1403	[illegible]	1403	0840	0830	0315	0300	0250	0220	0200	0130	0130
JUN	.28	.34	[illegible]	.35	.35	.35	.35	.35	.39	[illegible]	.45	.63
DATE	07	07	07	07	07	07	07	07	22	22	07	07
TIME	1441	1206	1206	1206	1206	1206	1206	1206	1701	1701	1206	1206
JUL	.17	[illegible]	.27	.29	[illegible]	.40	.40	.42	.45	.47	.47	.47
DATE	20	20	04	04	04	04	04	04	04	04	04	04
TIME	2041	[illegible]	2012	2012	2012	2012	[illegible]	[illegible]	1913	1913	1913	1913
AUG	.22	.34	.37	.58	.76	[illegible]	.96	1.03	1.10	1.19	1.30	1.35
DATE	03	03	03	03	[illegible]	02	02	02	02	02	02	02
TIME	[illegible]	0155	0155	0155	0155	1207	1207	1207	1207	1207	1130	[illegible]
SEP	.31	.42	.47	.54	.56	.61	.62	.62	.62	.62	.64	.66
DATE	06	06	06	06	06	06	06	06	06	06	18	18
TIME	1440	1440	1440	1440	1440	1440	1440	1440	1440	1440	[illegible]	[illegible]
OCT	.07	[illegible]	[illegible]	.13	.15	.24	.35	.41	.44	.58	.64	.72
DATE	05	05	30	30	30	30	30	30	30	30	30	30
TIME	[illegible]	[illegible]	0725	0725	0933	0933	0847	0833	0808	[illegible]	0826	0255
NOV	.10	.17	.19	.21	.22	[illegible]	[illegible]	.27	.28	.30	.32	.35
DATE	01	01	01	01	01	01	28	28	28	28	28	28
TIME	1102	1056	1056	1056	1056	1052	1950	1950	1950	1950	1932	1932
DEC	[illegible]	[illegible]	.17	.19	.27	.38	.49	.57	.73	.85	.97	[illegible]
DATE	21	21	21	21	21	21	21	17	17	17	17	17
TIME	0912	0907	0902	[illegible]	0847	[illegible]	0816	[illegible]	1012	1012	0900	0900
YEAR	.31	.42	.47	.58	.76	.82	.96	1.03	1.10	[illegible]	1.30	1.35
MONTH	09	09	09	08	08	08	08	08	08	08	08	08

BALTIMORE, MARYLAND

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.03	.05	.10	.11	.18	.21	[illegible]	.37	[illegible]	[illegible]	.50	.53
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	1020	1100	1100	1100	1100	[illegible]	1115	1130	1130	[illegible]	[illegible]	1200
FEB	.05	.07	.09	.10	[illegible]	.16	[illegible]	.21	.25	.34	.40	.48
DATE	02	02	02	02	02	02	02	02	02	02	02	02
TIME	0935	0940	0945	0950	0955	[illegible]	[illegible]	[illegible]	1000	[illegible]	1000	[illegible]
MAR	.15	[illegible]	.23	.26	.28	.30	.35	.44	.50	.55	.57	.60
DATE	16	16	16	16	16	25	25	25	25	25	25	25
TIME	2241	2241	2241	2241	2241	2300	2300	2300	2300	2300	2300	2300
APR	.36	.45	.47	.48	.48	.48	.48	.54	.67	.74	.90	.92
DATE	01	01	01	01	01	01	01	26	04	04	04	04
TIME	1655	1655	1655	1655	1655	1655	1655	0142	1205	1205	1205	1205
MAY	[illegible]	.12	.13	.15	.19	.20	.25	.31	.35	.43	.50	.62
DATE	03	03	03	03	03	03	24	24	24	24	24	24
TIME	1155	1203	1205	[illegible]	1210	1220	1440	1440	1440	1440	1440	1440
JUN	.16	.27	.33	.43	.55	.56	.61	.68	[illegible]	.71	.75	.76
DATE	29	29	21	21	21	21	22	22	22	22	22	22
TIME	0015	0025	1428	1438	1448	1503	0958	0950	1020	1018	1055	1125
JUL	.60	.97	1.25	1.31	1.47	1.48	1.60	1.62	1.62	1.62	1.62	1.62
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	1752	1802	1807	1802	1808	1813	1832	1048	1908	1928	1958	2028
AUG	.20	.33	.40	.41	.60	.69	.89	1.18	1.27	1.28	1.28	1.28
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	1420	1418	1514	1514	1430	1430	1502	1514	1514	1530	1530	1530
SEP	.63	1.00	1.15	1.35	1.60	1.68	1.68	1.68	1.78	1.78	1.78	1.78
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	1810	[illegible]	1825	1820	1830	1840	1840	1900	1930	1930	1950	1950
OCT	.21	.24	.26	.33	.45	.48	.52	.55	.58	.65	.80	.90
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	0345	0350	0355	0400	0410	0425	0438	0456	0520	0522	0600	0610
NOV	.25	.36	.38	.40	.44	.45	.45	.45	.45	.45	.45	.45
DATE	28	28	28	28	28	28	28	28	28	28	28	28
TIME	1552	1555	1600	1605	1615	1630	[illegible]	1640	1700	1720	1750	1820
DEC	.06	[illegible]	[illegible]	.15	.20	.25	.33	.40	.48	.49	.56	.60
DATE	09	09	09	09	09	09	20	09	09	09	09	09
TIME	0605	0612	0612	0620	0620	0630	2002	0630	0630	0630	0630	0630
YEAR	.63	[illegible]	1.25	1.35	1.60	1.68	1.68	1.68	1.78	1.78	1.78	1.78
MONTH	09	09	07	09	09	09	09	09	09	09	09	09

BLUE HILL [illegible]

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	[illegible]	.15	.25	[illegible]	[illegible]	.48	.51	[illegible]	[illegible]	.66
DATE	[illegible]	[illegible]	[illegible]	23	23	23	[illegible]	[illegible]	23	23	29	29
TIME	0005	0010	[illegible]	0020	[illegible]	0045	0100	[illegible]	[illegible]	[illegible]	0630	0700
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.27	.30	.40	[illegible]	.56	.76	.84
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	02	[illegible]	02	02	02
TIME	[illegible]	1910	1915	[illegible]	[illegible]	[illegible]	2000	[illegible]	[illegible]	2100	2130	2200
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.21	[illegible]	.29	[illegible]	.35	.36	.38
DATE	[illegible]	[illegible]	[illegible]	[illegible]	08	[illegible]	08	[illegible]	[illegible]	[illegible]	08	08
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1230	1245	1300	1320	1300	1400	1400	1400
APR	[illegible]	[illegible]	[illegible]	.10	.12	[illegible]	[illegible]	.19	[illegible]	.33	.43	[illegible]
DATE	01		01	[illegible]		[illegible]	[illegible]	[illegible]	01	01	[illegible]	[illegible]
TIME	1605	[illegible]	[illegible]	[illegible]	1630	1045	1700	1620	[illegible]	1700	1730	1800
MAY	[illegible]	[illegible]	.15	.20	.25	.35	.40	[illegible]	.58	[illegible]	[illegible]	.78
DATE	20	20	[illegible]	20	[illegible]	[illegible]	[illegible]	20	20	[illegible]	20	20
TIME	2305	2310	2315	2320	[illegible]	2345	[illegible]	2320	[illegible]	[illegible]	[illegible]	2359
JUN	.15	[illegible]	.35	[illegible]	[illegible]	.76	[illegible]	[illegible]	1.00	1.00	1.00	[illegible]
DATE	[illegible]	29	[illegible]	[illegible]	[illegible]	29	29	29	29	29	29	29
TIME	[illegible]	1900	[illegible]	1905	1915	[illegible]	1945	2000	2040	2050	2120	2155
JUL	[illegible]	[illegible]	[illegible]	[illegible]	.87	1.18*	[illegible]	1.30	1.32	[illegible]	1.32	1.32
DATE	[illegible]	[illegible]	[illegible]	29	29	[illegible]	[illegible]	29	[illegible]	29	29	29
TIME	1555	[illegible]	[illegible]	[illegible]	[illegible]	1630	1630	1650	1730	1750	[illegible]	1850
AUG	.30	.60	[illegible]	[illegible]	.62	[illegible]	.76	.94	[illegible]	[illegible]	1.30	1.30
DATE	11	11	[illegible]	[illegible]	11	[illegible]	11	11	11	[illegible]	11	[illegible]
TIME	1555	[illegible]	1605	[illegible]	1620	[illegible]	[illegible]	[illegible]	1630	[illegible]	1720	1750
SEP	[illegible]	[illegible]	[illegible]	.95*	1.08	1.10*	[illegible]	[illegible]	1.30	1.30	[illegible]	1.30
DATE	[illegible]	04	[illegible]	[illegible]	04	04	04	[illegible]	04	04	[illegible]	[illegible]
TIME	1710	1710	[illegible]	1715	[illegible]	1740	1753	[illegible]	1753	1753	1753	1753
OCT	.15	.17	[illegible]	.32	[illegible]	.32	[illegible]	.45	[illegible]	.65	.85	.99
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30	30	30	30	30
TIME	2145	2150	[illegible]	[illegible]	2210	2225	0700	0520	0540	0600	0630	0700
NOV	.02	[illegible]	.05	[illegible]	[illegible]	.14	.16	[illegible]	[illegible]	[illegible]	[illegible]	.29
DATE	24	[illegible]	[illegible]	[illegible]	24	[illegible]	[illegible]	24	[illegible]	[illegible]	[illegible]	[illegible]
TIME	2305	[illegible]	2305	[illegible]	[illegible]	[illegible]	2305	[illegible]	0040	[illegible]	0700	0800
DEC	[illegible]	.11	[illegible]	.19	.25	[illegible]	[illegible]	.50	.70	[illegible]	1.04	1.14
DATE	18	[illegible]	[illegible]	18	[illegible]	18	[illegible]	18	18	[illegible]	18	[illegible]
TIME	[illegible]	1005	[illegible]	1005	[illegible]	[illegible]	1005	[illegible]	1005	1005	1005	1300
YEAR	[illegible]*	.81*	[illegible]	[illegible]*	1.08	[illegible]*	[illegible]	1.30	[illegible]	1.32	[illegible]	1.32
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	09	[illegible]	07	[illegible]	07	07

BOSTON, MASSACHUSETTS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.05	.08	.14	.16	.20	.24	.26	.34	.38	.42	.47	.52
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	0535	0540	0545	0550	0545	0545	0545	0545	0545	0550	0550	0550
FEB	.05	[illegible]	.09	.14	[illegible]	.26	.35	[illegible]	.47	.53	.55	.58
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	0530	0535	0600	0615	[illegible]	0615	[illegible]	0615	0630	0645	0700	0730
MAR	[illegible]	.07	.08	.09	.13	.15	[illegible]	.24	.27	.27	.28	[illegible]
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	1208	[illegible]	1215	[illegible]	1253	1245	[illegible]	1255	1315	1335	1405	1435
APR	.07	[illegible]	.10	.13	[illegible]	.23	.29	.33	.35	.40	.45	.53
DATE	02	[illegible]	[illegible]	01	[illegible]	01	[illegible]	01	01	01	01	[illegible]
TIME	0159	[illegible]	[illegible]	2105	2045	2045	2037	2045	2045	2010	1900	[illegible]
MAY	.07	.13	[illegible]	.19	.28	.36	.45	.52	.57	.63	.74	.81
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	2337	2335	2330	2315	2320	2315	2300	2240	2252	2207	2145	2130
JUN	.15	.30	.30	.31	.34	.40	.50	.54	.55	.56	.57	.57
DATE	30	30	30	30	30	22	22	22	22	22	22	22
TIME	[illegible]	1002	1011	[illegible]	1013	1655	1700	1713	[illegible]	[illegible]	1825	1825
JUL	.24	.39	.43	.63	.87	.98	1.00	1.01	[illegible]	[illegible]	1.47	1.59
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	1350	1352	1535	1540	1548	1603	1618	1638	1658	1718	1554	1619
AUG	.17	.20	.20	.21	.22	.23	.24	.29	.35	.38	.40	.40
DATE	31	31	31	31	31	31	31	31	31	31	31	31
TIME	1838	1845	1850	1900	1908	1923	1935	1955	2015	2035	2103	[illegible]
SEP	.14	.18	.21	.27	[illegible]	.42	.44	[illegible]	.60	.80	.94	1.01
DATE	18	18	06	06	18	18	18	18	18	18	18	18
TIME	1132	1330	1758	1758	1200	1200	1200	1204	[illegible]	[illegible]	1332	1332
OCT	.09	.13	[illegible]	.18	.20	.22	.40	.47	.60	.60	.74	.85
DATE	31	31	31	31	31	31	29	29	29	29	29	29
TIME	[illegible]	1000	1000	[illegible]	[illegible]	[illegible]	0500	0515	0510	0555	0614	0100
NOV	.04	.05	.05	.07	.09	[illegible]	.16	.19	.22	.23	.24	[illegible]
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	0300	0300	0313	0307	0330	0330	0300	0330	0330	0400	0300	0400
DEC	[illegible]	.14	.15	.19	.30	.35	.42	.50	[illegible]	.68	.74	.82
DATE	17	17	17	17	17	17	17	17	17	17	17	17
TIME	[illegible]	[illegible]	1058	1058	1112	1115	1140	1150	[illegible]	1230	1300	1330
YEAR	.24	.39	.43	.63	.87	.98	1.00	[illegible]	[illegible]	1.03	1.47	1.59
MONTH	[illegible]	07	[illegible]	[illegible]	[illegible]	[illegible]	07	07	07	07	[illegible]	[illegible]

ALPENA, MICHIGAN

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.01	.01	.01	.02	[illegible]	.04	.06	.07	[illegible]	.11	.13	.16
DATE	04	04	04	04	04	15	04	04	04	04	04	04
TIME	1210	1215	1220	1230	1235	1240	1300	1300	1300	1300	1300	1300
FEB	.01	.01	[illegible]	[illegible]	[illegible]	.02	.03	.04	.05	.06	.07	.07
DATE	02	02	02	02	02	02	02	21	21	21	21	21
TIME	0645	0645	0645	0650	0650	0650	0700	0800	0805	0805	0810	0815
MAR	.05	[illegible]	.08	[illegible]	[illegible]	.15	.15	.17	[illegible]	.23	.30	.30
DATE	31	31	31	31	31	31	31	31	31	31	31	31
TIME	0345	0345	0330	0630	0600	0215	0215	0632	0700	0320	0400	0400
APR	.05	[illegible]	[illegible]	.06	[illegible]	.11	.14	[illegible]	[illegible]	.22	.29	.31
DATE	01	01	01	01	01	10	10	10	10	10	10	10
TIME	1502	1502	1502	1502	1502	0315	0315	0315	0315	0315	0315	0315
MAY	.13	.21	.28	.32	.37	.43	.53	.68	.93	1.13	1.28	1.39
DATE	28	28	28	28	28	28	28	28	27	27	27	27
TIME	[illegible]	0120	0120	0115	0115	0115	0030	0010	2350	2330	2305	2305
JUN	.11	[illegible]	.20	.23	.27	.37	[illegible]	.42	.42	.42	.42	.42
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	[illegible]	[illegible]	2130	[illegible]	2145	2140	2155	2215	2215	2215	2215	2215
JUL	[illegible]	.72	.72	.75	.85	.98	1.01	1.01	1.09	1.11	1.38	1.41
DATE	30	30	30	30	30	30	30	30	30	30	30	30
TIME	[illegible]	1805	1805	[illegible]	1045	1100	[illegible]	1115	1115	[illegible]	1050	1050
AUG	[illegible]	.90	.95	1.02	[illegible]	[illegible]	[illegible]	1.40	1.42	1.44	1.48	1.67
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	2050	2050	2055	2055	2055	2055	2055	2055	2055	2055	2055	[illegible]
SEP	.28	.55	.62	.65	.67	.67	.67	.74	.87	.97	1.09	1.13
DATE	04	04	04	04	04	04	04	22	22	22	22	22
TIME	1455	1455	1455	1500	1510	1525	1540	0200	0220	0240	0310	0310
OCT	.16	.32	.35	[illegible]	[illegible]	.50	.52	.56	.57	.59	.65	.68
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	[illegible]	1220	1220	1225	1225	1225	1240	1300	1300	1300	1300	1300
NOV	.04	.06	.06	.06	.08	[illegible]	.12	[illegible]	.17	.18	.19	.19
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	1750	1755	1755	1755	0950	1000	1015	1035	1035	[illegible]	1125	1125
DEC	[illegible]	[illegible]	.05	.07	.08	.09	.12	.16	.20	.23	.26	.29
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	1955	1955	[illegible]	1905	1915	[illegible]	1945	2005	2025	2045	2055	2055
YEAR	.68	[illegible]	.95	1.02	1.17	[illegible]	1.32	1.40	1.42	1.44	1.48	1.67
MONTH	[illegible]	08	08	08	08	08	08	08	08	08	08	08

MAXIMUM SHORT DURATION PRECIPITATION

DETROIT, MICHIGAN CITY AP

JAN	.05	.06	[illegible]	.12	.16	.23	[illegible]	.35	[illegible]	.44	.46	.53
DATE	[illegible]	[illegible]	[illegible]	[illegible]	03	03	[illegible]	03	03	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1930	1930	[illegible]	1730	[illegible]	2000	2020	2030	[illegible]	[illegible]	[illegible]
FEB	.01	[illegible]	[illegible]	.03	[illegible]	.04	[illegible]	.07	[illegible]	[illegible]	.12	[illegible]
DATE	[illegible]	21	[illegible]	21	[illegible]	[illegible]	21	[illegible]	[illegible]	21	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1025	1030	1030	1045	1200	[illegible]	1145	1145	[illegible]	1145
MAR	M	M	M	M	M	M	M	M	M	M	M	M
DATE												
TIME												
APR	[illegible]	[illegible]	[illegible]	.20	.20	.25	[illegible]	.32	.35	.45	[illegible]	.45
DATE	22	22	[illegible]	22	[illegible]	22	22	[illegible]	22	[illegible]	22	22
TIME	[illegible]	[illegible]	[illegible]	0817	[illegible]	0845	0900	0900	0930	[illegible]	1000	[illegible]
MAY	[illegible]	[illegible]	[illegible]	.35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.45	.45
DATE	02	[illegible]	[illegible]	[illegible]	02	02	02	[illegible]	[illegible]	[illegible]	02	02
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1630	[illegible]	1630	1630	[illegible]	[illegible]	1630	[illegible]
JUN	M	M	M	M	M	M	M	M	M	M	M	M
DATE												
TIME												
JUL	M	M	M	M	M	M	M	M	M	M	M	M
DATE												
TIME												
AUG	[illegible]	.40	.40	.40	.45	[illegible]	[illegible]	.50	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	09	09	[illegible]	09	[illegible]	[illegible]	09	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1538	[illegible]	[illegible]	1715	1715	[illegible]	[illegible]	1712	[illegible]	1800	1800
SEP	M	M	M	M	M	M	M	M	M	M	M	M
DATE												
TIME												
OCT	.15	.35	[illegible]	[illegible]	[illegible]	[illegible]	.40	.40	.40	.40	[illegible]	[illegible]
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	[illegible]	02	02	[illegible]	[illegible]	02	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1710	[illegible]	[illegible]	1745	1745	[illegible]	[illegible]	[illegible]	1745
NOV	.10	[illegible]	.17	[illegible]	.22	.24	.24	[illegible]	.35	.40	.55	[illegible]
DATE	[illegible]	[illegible]	[illegible]	15	[illegible]	15	15	[illegible]	15	[illegible]	[illegible]	15
TIME	[illegible]	0945	[illegible]	0947	1000	[illegible]	1015	1045	[illegible]	[illegible]	[illegible]	1231
DEC	M	M	M	M	M	M	M	M	M	M	M	M
DATE												
TIME												
YEAR	M											
MONTH												

GRAND RAPIDS, MICHIGAN

JAN	[illegible]	.05	.07	.09	.12	[illegible]	[illegible]	.22	.26	[illegible]	.34	.36
DATE	[illegible]	[illegible]	18	18	[illegible]	[illegible]	[illegible]	18	[illegible]	03	03	03
TIME	[illegible]	1625	[illegible]	[illegible]	[illegible]	1630	[illegible]	1630	1835	[illegible]	1915	1930
FEB	[illegible]	[illegible]	[illegible]	[illegible]	.06	[illegible]	[illegible]	.08	[illegible]	[illegible]	.09	[illegible]
DATE	[illegible]	02	02	02	[illegible]	02	02	02	02	02	02	[illegible]
TIME	[illegible]	[illegible]	0259	0300	[illegible]	[illegible]	[illegible]	0350	0410	0430	[illegible]	1500
MAR	[illegible]	[illegible]	.18	.20	.24	.25	[illegible]	[illegible]	[illegible]	.40	.40	.48
DATE	[illegible]	31	31	31	[illegible]	[illegible]	29	[illegible]	[illegible]	29	14	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	2359	[illegible]	2245	[illegible]	[illegible]	2315	[illegible]	[illegible]
APR	[illegible]	.23	[illegible]	.26	[illegible]	[illegible]	.46	[illegible]	[illegible]	.51	[illegible]	[illegible]
DATE	[illegible]	30	22	22	[illegible]	22	22	22	[illegible]	22	22	[illegible]
TIME	[illegible]	2245	0035	0035	0046	0100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0305
MAY	.15	.21	.22	.22	[illegible]	.27	.36	.44	.48	.56	.56	.59
DATE	[illegible]	25	25	25	[illegible]	25	01	25	[illegible]	01	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1755	[illegible]	[illegible]	0200	[illegible]	[illegible]	0200	0200	0220
JUN	[illegible]	[illegible]	.52	[illegible]	[illegible]	[illegible]	.96	[illegible]	1.07	[illegible]	1.13	[illegible]
DATE	[illegible]	03	[illegible]	[illegible]	[illegible]	03	[illegible]	03	03	[illegible]	03	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0650	0705	[illegible]	[illegible]	0730	[illegible]
JUL	[illegible]	.74	[illegible]	.80	[illegible]	.87	[illegible]	.89	[illegible]	[illegible]	.89	[illegible]
DATE	02	02	[illegible]	[illegible]	02	02	[illegible]	02	[illegible]	02	02	02
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1429	1430	[illegible]	1415	[illegible]	1415	1415	1415
AUG	[illegible]	[illegible]	.44	[illegible]	[illegible]	[illegible]	.51	[illegible]	[illegible]	.52	.52	.52
DATE	[illegible]	30	30	[illegible]	[illegible]	30	30	30	30	[illegible]	30	30
TIME	[illegible]	[illegible]	[illegible]	1109	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1203	1203
SEP	.08	[illegible]	.09	.15	[illegible]	.28	.33	[illegible]	.50	.56	.76	.82
DATE	[illegible]	25	25	17	[illegible]	17	[illegible]	[illegible]	[illegible]	17	17	[illegible]
TIME	[illegible]	[illegible]	1728	[illegible]	[illegible]	1000	1015	[illegible]	1055	[illegible]	[illegible]	1215
OCT	.23	[illegible]	[illegible]	.60	[illegible]	[illegible]	[illegible]	.89	[illegible]	.93	.94	[illegible]
DATE	[illegible]	[illegible]	[illegible]	08	08	02	02	02	[illegible]	02	02	02
TIME	[illegible]	[illegible]	[illegible]	0720	[illegible]	0859	[illegible]	0914	[illegible]	1010	1040	1110
NOV	[illegible]	.17	.23	.29	[illegible]	.41	[illegible]	.52	.59	[illegible]	[illegible]	[illegible]
DATE	[illegible]	24	[illegible]	[illegible]	[illegible]	24	[illegible]	[illegible]	[illegible]	24	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0610	[illegible]	[illegible]	0615	0630	[illegible]	0710	[illegible]	0750	0805
DEC	[illegible]	.14	.16	[illegible]	.27	[illegible]	.36	.44	.54	.72	.72	.72
DATE	[illegible]	04	[illegible]	[illegible]	04	04	04	[illegible]	[illegible]	[illegible]	04	04
TIME	1740	1740	[illegible]	1745	[illegible]	[illegible]	1900	[illegible]	1830	1835	1835	[illegible]
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.96	[illegible]	[illegible]	1.07	1.13	1.17
MONTH	[illegible]	07	07	07	[illegible]	07	06	06	06	06	[illegible]	06

MARQUETTE, MICHIGAN

JAN	[illegible]	[illegible]	.06	.07	.10	.13	.16	.20	[illegible]	.26	.29	.32
DATE	[illegible]	03	[illegible]	[illegible]	03	[illegible]	[illegible]	03	[illegible]	[illegible]	04	04
TIME	[illegible]	[illegible]	[illegible]	[illegible]	2210	2225	2230	2250	2310	[illegible]	[illegible]	[illegible]
FEB	[illegible]	.01	.02	.03	[illegible]	[illegible]	[illegible]	.09	.10	.12	.16	[illegible]
DATE	[illegible]	[illegible]	01	01	[illegible]	[illegible]	01	01	01	01	01	01
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1845	1900	1900	[illegible]	[illegible]	1900	1900
MAR	[illegible]	.10	.12	.13	[illegible]	.18	.22	.32	.40	[illegible]	.52	[illegible]
DATE	11	11	11	[illegible]	[illegible]	[illegible]	10	[illegible]	11	[illegible]	11	[illegible]
TIME	[illegible]	[illegible]	0912	0916	[illegible]	[illegible]	[illegible]	2340	0000	[illegible]	[illegible]	[illegible]
APR	.07	[illegible]	.11	.12	[illegible]	.23	.29	.38	[illegible]	.49	.57	[illegible]
DATE	[illegible]	21	21	[illegible]	[illegible]	16	[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	2302	2307	0952	1007	1000	1020	1040	1033	[illegible]	[illegible]
MAY	[illegible]	.09	.11	.13	[illegible]	[illegible]	.28	.36	.43	.52	[illegible]	.75
DATE	[illegible]	09	09	09	09	02	[illegible]	02	[illegible]	02	[illegible]	02
TIME	[illegible]	2047	[illegible]	2057	[illegible]	0908	[illegible]	[illegible]	0938	0938	[illegible]	[illegible]
JUN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.52	[illegible]	.65	.65	[illegible]	.65	[illegible]
DATE	[illegible]	08	[illegible]	08	08	[illegible]	[illegible]	25	25	[illegible]	25	25
TIME	[illegible]	[illegible]	1532	[illegible]	1547	1550	[illegible]	1915	[illegible]	[illegible]	1915	1915
JUL	[illegible]	.31	[illegible]	[illegible]	[illegible]	[illegible]	.43	[illegible]	.44	[illegible]	.44	[illegible]
DATE	[illegible]	[illegible]	30	[illegible]	30	30	30	[illegible]	30	[illegible]	30	[illegible]
TIME	[illegible]	1330	1335	[illegible]	[illegible]	1402	[illegible]	1410	1410	1410	1440	[illegible]
AUG	[illegible]	.25	[illegible]	[illegible]	[illegible]	[illegible]	.34	[illegible]	[illegible]	.38	.51	.53
DATE	[illegible]	30	[illegible]	30	[illegible]	13	[illegible]	13	[illegible]	[illegible]	30	[illegible]
TIME	[illegible]	[illegible]	1430	1435	[illegible]	[illegible]	1622	1620	[illegible]	[illegible]	1645	1702
SEP	.19	.27	.33	[illegible]	.42	[illegible]	[illegible]	[illegible]	[illegible]	.49	.52	.55
DATE	[illegible]	26	[illegible]	26	26	[illegible]	[illegible]	26	21	21	22	[illegible]
TIME	[illegible]	1957	1959	[illegible]	2008	2023	[illegible]	2038	2310	[illegible]	[illegible]	0030
OCT	.10	.11	.12	.13	[illegible]	[illegible]	.21	.24	.25	[illegible]	.30	.38
DATE	10	10	[illegible]	10	10	[illegible]	04	04	04	04	[illegible]	04
TIME	[illegible]	1715	[illegible]	[illegible]	[illegible]	[illegible]	1503	1523	[illegible]	1603	1633	[illegible]
NOV	[illegible]	.04	[illegible]	.08	.10	[illegible]	.19	.20	.21	[illegible]	.23	.24
DATE	[illegible]	09	09	[illegible]	[illegible]	09	09	09	[illegible]	[illegible]	09	09
TIME	[illegible]	1245	[illegible]	[illegible]	[illegible]	1320	[illegible]	1355	1355	1410	[illegible]	1410
DEC	[illegible]	.03	.03	.03	[illegible]	.05	[illegible]	.09	.12	.14	.17	.19
DATE	[illegible]	05	05	[illegible]	05	05	[illegible]	[illegible]	05	[illegible]	05	05
TIME	1100	[illegible]	1110	[illegible]	[illegible]	0555	0545	0605	0625	0645	0715	0745
YEAR	.25	[illegible]	[illegible]	.45	[illegible]	.52	.52	[illegible]	.65	.65	[illegible]	.75
MONTH	06	[illegible]	[illegible]	06	[illegible]	06	[illegible]	06	06	06	06	[illegible]

DETROIT, MICHIGAN METRO

JAN	.02	[illegible]	.05	.09	[illegible]	.19	.21	.26	.34	[illegible]	[illegible]	[illegible]
DATE	[illegible]	03	03	03	[illegible]	[illegible]	03	[illegible]	03	03	03	03
TIME	1830	1830	1845	[illegible]	[illegible]	[illegible]	2000	2010	2010	[illegible]	2015	2015
FEB	.01	[illegible]	[illegible]	.04	.06	.09	.10	.12	.13	.14	.14	[illegible]
DATE	01	01	[illegible]	01	01	01	01	[illegible]	[illegible]	01	01	01
TIME	1625	[illegible]	1630	1635	[illegible]	[illegible]	1700	1700	1700	1700	1800	1800
MAR	.16	.20	.22	.30	[illegible]	.41	[illegible]	.42	.42	.44	[illegible]	.54
DATE	14	14	14	14	14	14	[illegible]	[illegible]	14	14	11	[illegible]
TIME	[illegible]	[illegible]	0717	0730	0732	0755	0800	0800	0800	[illegible]	0725	0755
APR	.10	.18	.19	.22	[illegible]	.30	.30	.31	.38	[illegible]	.50	.57
DATE	22	22	22	22	22	22	[illegible]	[illegible]	22	[illegible]	22	[illegible]
TIME	[illegible]	0600	[illegible]	0557	0544	0544	0544	0544	0544	0540	0540	0540
MAY	.28	[illegible]	.33	[illegible]	.43	[illegible]	.51	[illegible]	.51	.51	.51	[illegible]
DATE	02	02	02	02	02	02	02	02	02	02	02	[illegible]
TIME	[illegible]	[illegible]	1513	[illegible]	1510	1513	1523	1530	1530	1530	1530	1530
JUN	.53	.60	[illegible]	[illegible]	.80	.81	.81	.85	[illegible]	[illegible]	[illegible]	[illegible]
DATE	26	26	[illegible]	28	28	28	28	[illegible]	[illegible]	[illegible]	26	26
TIME	1705	1710	1120	[illegible]	[illegible]	1150	1205	1815	[illegible]	1855	1915	[illegible]
JUL	.23	.36	[illegible]	.50	.58	.70	.80	.86	[illegible]	1.06	1.09	1.09
DATE	[illegible]	26	[illegible]	26	[illegible]	26	[illegible]	[illegible]	02	02	02	02
TIME	0759	0759	0802	0803	[illegible]	[illegible]	0830	[illegible]	1940	[illegible]	[illegible]	2005
AUG	[illegible]	.45	.54	.67	[illegible]	.76	[illegible]	[illegible]	.80	[illegible]	[illegible]	.81
DATE	[illegible]	09	[illegible]	[illegible]	09	[illegible]	[illegible]	09	09	09	09	09
TIME	[illegible]	[illegible]	[illegible]	1545	1555	1605	1620	1645	[illegible]	1720	1750	[illegible]
SEP	.10	[illegible]	.18	.22	[illegible]	[illegible]	.50	[illegible]	.68	.75	[illegible]	[illegible]
DATE	[illegible]	[illegible]	29	29	29	[illegible]	[illegible]	29	29	29	[illegible]	29
TIME	0525	0530	0531	0540	[illegible]	[illegible]	0620	0639	[illegible]	0715	0810	0850
OCT	.05	.09	.10	.13	.15	.17	[illegible]	.19	[illegible]	.21	.24	.30
DATE	[illegible]	02	02	02	[illegible]	02	[illegible]	02	02	[illegible]	28	[illegible]
TIME	[illegible]	1525	1525	1525	1535	1546	1601	1623	[illegible]	1417	[illegible]	[illegible]
NOV	.08	.10	.11	[illegible]	.15	.19	.21	[illegible]	[illegible]	.33	[illegible]	.48
DATE	[illegible]	[illegible]	21	21	15	21	15	21	28	28	28	[illegible]
TIME	[illegible]	[illegible]	0510	0508	0545	0505	[illegible]	0520	0600	[illegible]	0600	[illegible]
DEC	.08	[illegible]	.14	[illegible]	.22	.28	.31	[illegible]	.38	[illegible]	[illegible]	.60
DATE	[illegible]	26	[illegible]	[illegible]	26	26	26	26	26	28	[illegible]	[illegible]
TIME	[illegible]	2005	2005	2005	2005	2005	2005	2015	2010	2010	2015	2015
YEAR	.53	[illegible]	.67	.79	.80	[illegible]	.81	[illegible]	[illegible]	1.06	1.09	1.09
MONTH	[illegible]	06	06	06	06	06	[illegible]	07	07	07	[illegible]	07

HOUGHTON LAKE, MICHIGAN

JAN	.02	[illegible]	.05	.05	.07	.11	[illegible]	.19	.23	.28	.32	[illegible]
DATE	[illegible]	03	03	03	03	03	[illegible]	[illegible]	03	03	03	[illegible]
TIME	[illegible]	2018	[illegible]	[illegible]	[illegible]	2115	0745	2100	[illegible]	2130	2200	2200
FEB	[illegible]	[illegible]	.07	.08	[illegible]	.09	[illegible]	.10	[illegible]	[illegible]	[illegible]	.15
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	02	[illegible]	02	02	02	02	02
TIME	0005	[illegible]	0015	[illegible]	0030	0725	[illegible]	0725	[illegible]	0500	0530	[illegible]
MAR	[illegible]	[illegible]	.11	.12	.17	.24	.32	.40	[illegible]	.50	[illegible]	.65
DATE	[illegible]	14	[illegible]	14	[illegible]	14	[illegible]	14	14	14	[illegible]	14
TIME	[illegible]	[illegible]	0635	[illegible]	0646	0646	0646	0745	0745	0745	[illegible]	0745
APR	[illegible]	[illegible]	.05	[illegible]	.06	.08	.09	.10	.13	.15	.16	[illegible]
DATE	[illegible]	02	[illegible]	02	16	[illegible]	[illegible]	[illegible]	16	16	[illegible]	[illegible]
TIME	0445	0445	0445	0445	[illegible]	1252	[illegible]	1252	1252	1252	1330	[illegible]
MAY	.23	.57	.58	[illegible]	.63	[illegible]	[illegible]	1.20	1.23	1.25	1.28*	[illegible]
DATE	25	25	[illegible]	25	[illegible]	25	25	25	[illegible]	[illegible]	25	25
TIME	1902	[illegible]	[illegible]	[illegible]	[illegible]	1902	1902	[illegible]	[illegible]	1902	2055	2055
JUN	.15	[illegible]	.32	[illegible]	[illegible]	[illegible]	.48	[illegible]	[illegible]	.71	[illegible]	[illegible]
DATE	26	26	[illegible]	26	26	[illegible]	26	28	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0700	0700	0700	0700	[illegible]	0700	0400	0400	[illegible]	0400	0400
JUL	.13	.23	[illegible]	.30	.38	.39	[illegible]	.39	[illegible]	[illegible]	.39	.39
DATE	31	31	31	31	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31	[illegible]
TIME	0505	0505	0505	0505	0505	0505	0505	0505	0505	0505	0505	0505
AUG	.25	.33	.37	.43	[illegible]	[illegible]	[illegible]	.50	[illegible]	.50	[illegible]	[illegible]
DATE	[illegible]	08	08	01	01	[illegible]	[illegible]	01	01	01	30	30
TIME	[illegible]	1828	1835	1028	1028	1028	1028	1028	1028	1028	2300	2300
SEP	.10	.18	[illegible]	.26	.30	.34	.39	[illegible]	[illegible]	[illegible]	.45	.48
DATE	22	[illegible]	[illegible]	22	22	22	[illegible]	22	[illegible]	[illegible]	21	21
TIME	0145	0145	0150	0155	0200	[illegible]	[illegible]	[illegible]	0240	2305	2330	[illegible]
OCT	.15	[illegible]	[illegible]	.67	[illegible]	[illegible]	[illegible]	[illegible]	.65	.65	.65	.68
DATE	[illegible]	02	[illegible]	02	[illegible]	02	02	02	02	02	02	02
TIME	[illegible]	1050	[illegible]	[illegible]	1105	1147	1205	1200	1215	[illegible]	[illegible]	[illegible]
NOV	.04	.05	.05	[illegible]	[illegible]	.08	[illegible]	.13	.15	.17	.21	.21
DATE	[illegible]	[illegible]	15	15	[illegible]	14	[illegible]	15	[illegible]	[illegible]	15	15
TIME	[illegible]	1533	1533	1533	1559	[illegible]	0000	[illegible]	0000	[illegible]	0000	0000
DEC	[illegible]	.04	[illegible]	.05	[illegible]	.07	[illegible]	.10	.12	.12	.15	.18
DATE	[illegible]	04	04	[illegible]	[illegible]	[illegible]	27	[illegible]	04	04	[illegible]	04
TIME	1557	1601	1610	1610	[illegible]	0145	0200	1645	1658	1658	[illegible]	1810
YEAR	.25	.57	.58	.60	[illegible]	.80	.95	1.20	1.23	[illegible]	1.28*	1.45
MONTH	08	05	05	05	05	[illegible]	05	[illegible]	05	[illegible]	[illegible]	05

MUSKEGON, MICHIGAN

JAN	.02	.04	[illegible]	.09	.11	[illegible]	[illegible]	.26	.31	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	03	[illegible]	03	[illegible]	[illegible]	03	03
TIME	1735	1740	1745	[illegible]	[illegible]	1800	1800	1820	1840	1900	1915	[illegible]
FEB	.10	.16	.20	.20	.20	.20	.20	.20	.20	.22	.24	.25
DATE	[illegible]	[illegible]	01	01	01	01	[illegible]	01	[illegible]	[illegible]	14	[illegible]
TIME	[illegible]	2111	2116	2120	2120	2120	2120	2120	2240	2300	2300	2300
MAR	.08	.08	.08	.10	.19	.21	[illegible]	.33	.35	.35	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	11	11	[illegible]	11	[illegible]	11	11	[illegible]
TIME	[illegible]	[illegible]	0605	0358	0358	0403	[illegible]	0440	0501	[illegible]	0543	[illegible]
APR	.30	.34	.38	.41	.43	.46	[illegible]	.52	[illegible]	[illegible]	[illegible]	.76
DATE	[illegible]	21	[illegible]	21	21	21	21	21	[illegible]	[illegible]	[illegible]	22
TIME	[illegible]	[illegible]	2245	[illegible]	[illegible]	[illegible]	[illegible]	2350	0010	0030	[illegible]	0130
MAY	.12	[illegible]	.19	.21	.25	.32	.41	[illegible]	[illegible]	.67	[illegible]	.77
DATE	[illegible]	27	27	[illegible]	[illegible]	01	01	01	27	01	01	01
TIME	1945	[illegible]	[illegible]	1945	0114	0114	0114	[illegible]	[illegible]	[illegible]	[illegible]	0124
JUN	.07	.10	[illegible]	[illegible]	.18	.23	.28	.30	.31	.31	.32	.36
DATE	03	03	[illegible]	03	03	[illegible]	03	03	[illegible]	03	[illegible]	[illegible]
TIME	0650	0655	[illegible]	0705	0710	[illegible]	0740	0800	0800	0840	[illegible]	[illegible]
JUL	.35	[illegible]	[illegible]	[illegible]	[illegible]	1.38	1.44	1.46	1.46	1.46	1.46	1.46
DATE	02	[illegible]	02	02	02	02	02	[illegible]	[illegible]	02	02	02
TIME	1332	[illegible]	[illegible]	1338	1338	1350	1405	1502	[illegible]	[illegible]	1515	[illegible]
AUG	.39*	[illegible]	[illegible]	.97	1.28	1.40	1.44	[illegible]	1.60	1.64	1.64	1.65
DATE	[illegible]	17	[illegible]	17	[illegible]	17	17	[illegible]	17	[illegible]	17	[illegible]
TIME	0917	[illegible]	[illegible]	0920	0920	0935	0950	1010	1030	1040	1110	1140
SEP	.13	.18	.22	.23	.23	.26	.28	[illegible]	.35	.35	.35	.36
DATE	04	04	04	[illegible]	04	04	[illegible]	04	[illegible]	[illegible]	04	[illegible]
TIME	1300	[illegible]	1359	1403	[illegible]	[illegible]	[illegible]	[illegible]	1520	[illegible]	1520	[illegible]
OCT	.14	.21	.27	[illegible]	.38	.55	.65	.72	.76	.82	.87	[illegible]
DATE	13	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	13	[illegible]	[illegible]	13	13
TIME	0005	0010	0015	0020	0030	[illegible]	0030	0020	0100	[illegible]	0111	[illegible]
NOV	[illegible]	.10	[illegible]	.15	.18	[illegible]	[illegible]	.32	.41	[illegible]	.52	[illegible]
DATE	14	[illegible]	[illegible]	24	24	[illegible]	24	24	24	24	24	[illegible]
TIME	2104	2109	[illegible]	0654	0704	[illegible]	0728	0644	0656	0715	[illegible]	0728
DEC	.06	.07	.08	.09	.10	[illegible]	.15	.19	[illegible]	.25	[illegible]	.35
DATE	[illegible]	[illegible]	04	[illegible]	[illegible]	[illegible]	[illegible]	04	[illegible]	04	04	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1315
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	08	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	08	[illegible]

FLINT, MICHIGAN

JAN	.12	[illegible]	[illegible]	[illegible]	.10	.14	.17	.21	.28	[illegible]	.39	[illegible]
DATE	[illegible]	22	22	22	[illegible]	[illegible]	22	22	22	22	[illegible]	[illegible]
TIME	0205	0210	0215	0220	[illegible]	0215	0300	0250	0315	0400	0400	0430
FEB	[illegible]	[illegible]	.02	.03	[illegible]	[illegible]	[illegible]	.06	[illegible]	.08	.09	.11
DATE	[illegible]	21	21	21	21	21	[illegible]	21	21	21	14	14
TIME	[illegible]	0900	[illegible]	[illegible]	[illegible]	0900	0900	[illegible]	[illegible]	1000	0600	0645
MAR	.10	[illegible]	.14	[illegible]	[illegible]	.27	.30	.36	[illegible]	[illegible]	.45	.47
DATE	[illegible]	29	14	14	[illegible]	29	29	[illegible]	[illegible]	14	[illegible]	14
TIME	1630	[illegible]	[illegible]	0752	[illegible]	[illegible]	[illegible]	0755	0755	0800	0800	0800
APR	.28	.30	[illegible]	.32	[illegible]	[illegible]	[illegible]	.38	[illegible]	.54	.62	[illegible]
DATE	[illegible]	22	22	22	[illegible]	[illegible]	22	22	22	22	[illegible]	[illegible]
TIME	1225	1229	1230	[illegible]	1230	1230	[illegible]	0603	[illegible]	[illegible]	0610	0655
MAY	.31	.43	.50	[illegible]	[illegible]	[illegible]	[illegible]	.54	[illegible]	.54	.54	.54
DATE	28	[illegible]	[illegible]	[illegible]	[illegible]	28	[illegible]	28	[illegible]	28	28	[illegible]
TIME	1059	1103	[illegible]	[illegible]	1120	1130	1136	1136	1136	1136	1136	[illegible]
JUN	.25	.30	[illegible]	.50	[illegible]	.62	[illegible]	.62	[illegible]	.62	.62	.62
DATE	03	03	[illegible]	03	[illegible]	[illegible]	03	03	03	03	03	03
TIME	1628	1628	1628	1630	1635	[illegible]	1635	1635	[illegible]	[illegible]	1635	[illegible]
JUL	[illegible]	.19	[illegible]	.21	[illegible]	[illegible]	[illegible]	.30	.30	.30	[illegible]	.46
DATE	[illegible]	31	[illegible]	[illegible]	24	24	24	24	[illegible]	24	[illegible]	31
TIME	2110	2115	2115	2120	1908	[illegible]	1930	1930	1930	1930	[illegible]	2120
AUG	.19	[illegible]	[illegible]	.39	[illegible]	[illegible]	[illegible]	.68	.72	[illegible]	[illegible]	.79
DATE	20	20	20	20	20	20	20	20	20	20	[illegible]	20
TIME	[illegible]	1025	1025	0130	[illegible]	0125	0140	0200	0217	[illegible]	[illegible]	[illegible]
SEP	.14	.21	.22	[illegible]	.75	.28	.38	[illegible]	.57	[illegible]	[illegible]	.86
DATE	25	25	25	25	25	25	[illegible]	[illegible]	17	[illegible]	[illegible]	17
TIME	[illegible]	[illegible]	1945	1950	2000	2015	1035	1045	1110	1125	1200	1225
OCT	.08	[illegible]	.11	[illegible]	[illegible]	.18	.22	.24	.28	[illegible]	[illegible]	[illegible]
DATE	[illegible]	02	04	[illegible]	[illegible]	13	[illegible]	13	13	[illegible]	[illegible]	13
TIME	0945	[illegible]	0550	0550	1152	[illegible]	1452	1452	1452	1452	[illegible]	1452
NOV	.09	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.36	[illegible]	.51	.66	.80	.96
DATE	24	24	24	24	24	24	24	[illegible]	[illegible]	24	24	[illegible]
TIME	[illegible]	[illegible]	0915	0730	0746	0746	0808	0946	0950	0915	0930	[illegible]
DEC	.04	.06	.07	[illegible]	.12	[illegible]	.21	[illegible]	.36	[illegible]	.45	.50
DATE	[illegible]	[illegible]	[illegible]	[illegible]	26	[illegible]	26	26	26	[illegible]	26	26
TIME	1950	1955	1955	1955	2015	[illegible]	2015	2100	2120	[illegible]	2145	2150
YEAR	.31	[illegible]	.50	.51	[illegible]	.62	.63	.68	.72	.74	.80	[illegible]
MONTH	05	[illegible]	05	05	06	06	08	08	[illegible]	[illegible]	11	11

LANSING, MICHIGAN

JAN	.02	[illegible]	.06	.08	[illegible]	[illegible]	[illegible]	[illegible]	.26	[illegible]	.38	.45
DATE	[illegible]	03	[illegible]	03	03	03	[illegible]	03	[illegible]	03	03	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1850	1900	1915	[illegible]	1900	1900	1900	[illegible]	2000
FEB	[illegible]	.02	.03	.04	.05	[illegible]	[illegible]	.09	[illegible]	.12	.15	.18
DATE	[illegible]	14	14	[illegible]	14	[illegible]	14	14	[illegible]	14	14	14
TIME	[illegible]	[illegible]	[illegible]	0450	[illegible]	0500	0500	[illegible]	0540	[illegible]	0700	0700
MAR	.10	.14	.15	.15	.24	.25	[illegible]	.28	.30	.30	.30	.35
DATE	07	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]	14	[illegible]	14	[illegible]
TIME	[illegible]	0558	[illegible]	0558	[illegible]	0610	[illegible]	0645	0701	[illegible]	[illegible]	[illegible]
APR	.09	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.21	.26	[illegible]	.37	[illegible]
DATE	[illegible]	[illegible]	[illegible]	01	01	22	22	[illegible]	22	[illegible]	22	[illegible]
TIME	[illegible]	1554	[illegible]	1554	1554	0345	[illegible]	0550	0550	[illegible]	[illegible]	[illegible]
MAY	[illegible]	[illegible]	[illegible]	[illegible]	.34	[illegible]	[illegible]	.45	[illegible]	[illegible]	.51	.52
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28	[illegible]
TIME	[illegible]	1505	1508	[illegible]	[illegible]	1535	1550	1610	[illegible]	[illegible]	[illegible]	[illegible]
JUN	.18	.35	.38	.42	.46	[illegible]	[illegible]	[illegible]	[illegible]	1.03	[illegible]	[illegible]
DATE	03	16	16	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
TIME	1504	0455	[illegible]	[illegible]	0545	0550	[illegible]	[illegible]	0610	[illegible]	0705	0740
JUL	.20	[illegible]	[illegible]	.87	1.25	[illegible]	[illegible]	[illegible]	1.31	1.31	[illegible]	[illegible]
DATE	[illegible]	[illegible]	10	10	10	10	[illegible]	10	[illegible]	10	10	10
TIME	0050	[illegible]	0100	0100	0100	[illegible]	[illegible]	0150	0210	0230	[illegible]	[illegible]
AUG	[illegible]	.23	[illegible]	[illegible]	[illegible]	.66	.76	[illegible]	.76	.76	.76	.76
DATE	[illegible]	08	08	08	08	08	[illegible]	[illegible]	[illegible]	[illegible]	08	08
TIME	2239	[illegible]	2239	2239	[illegible]	2239	[illegible]	2240	[illegible]	2240	2240	[illegible]
SEP	.09	.14	[illegible]	.15	[illegible]	[illegible]	.27	.34	[illegible]	[illegible]	.52	.61
DATE	25	[illegible]	25	25	17	17	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	2213	2322	2330	[illegible]	[illegible]	1437	0944	1004	[illegible]	1044	1114	[illegible]
OCT	.05	[illegible]	.10	.10	.12	.12	.15	[illegible]	.27	.28	.32	.36
DATE	[illegible]	[illegible]	13	[illegible]	13	13	13	13	13	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1237	1237	1237	[illegible]	1237	1350	[illegible]	1355	[illegible]	[illegible]
NOV	[illegible]	.15	.17	[illegible]	.33	.37	.45	.47	[illegible]	[illegible]	.55	.58
DATE	[illegible]	[illegible]	[illegible]	[illegible]	14	14	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	0720	2100	2000	2100	[illegible]	2105	[illegible]	[illegible]	2200	2215	[illegible]	[illegible]
DEC	.05	.06	.07	.08	.10	.13	.18	.20	.22	.25	.27	.35
DATE	[illegible]	[illegible]	[illegible]	[illegible]	04	04	04	[illegible]	[illegible]	04	[illegible]	04
TIME	[illegible]	1147	1147	1147	[illegible]	1245	1245	1258	1258	[illegible]	1258	[illegible]
YEAR	.23	.45	.70	.87	1.25	1.31	1.31	1.31	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	05	[illegible]	07	[illegible]	07	07	07	07	07	07	07	[illegible]

SAULT STE. MARIE, MICHIGAN

JAN	.02	.07	.03	[illegible]	.06	[illegible]	.11	[illegible]	.17	.19	.20	[illegible]
DATE	[illegible]	03	[illegible]	03	03	[illegible]	03	03	04	04	04	04
TIME	[illegible]	2300	2305	[illegible]	[illegible]	[illegible]	[illegible]	2359	0015	0035	0105	0135
FEB	[illegible]	.03	[illegible]	.05	[illegible]	.10	[illegible]	[illegible]	.18	[illegible]	.24	[illegible]
DATE	[illegible]	18	[illegible]	[illegible]	[illegible]	28	28	28	28	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	2310	2315	[illegible]	2340	[illegible]	2345	[illegible]	[illegible]	[illegible]	[illegible]
MAR	[illegible]	[illegible]	[illegible]	.13	[illegible]	[illegible]	.31	[illegible]	.37	[illegible]	.44	[illegible]
DATE	10	[illegible]	10	10	[illegible]	[illegible]	11	11	[illegible]	[illegible]	11	11
TIME	[illegible]	[illegible]	2355	[illegible]	0020	0031	0047	0055	[illegible]	[illegible]	[illegible]	0225
APR	[illegible]	.25	[illegible]	[illegible]	.31	[illegible]	.39	[illegible]	.53	.59	.66	.73
DATE	[illegible]	20	[illegible]	[illegible]	20	20	20	20	20	[illegible]	21	[illegible]
TIME	2250	2252	[illegible]	2259	2256	[illegible]	2304	2256	2256	2301	[illegible]	[illegible]
MAY	.05	.09	.10	.14	[illegible]	.24	.30	.39	[illegible]	.51	.57	.67
DATE	[illegible]	25	25	26	26	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	2023	2031	2033	0101	0110	0124	1530	1530	1540	[illegible]	[illegible]	[illegible]
JUN	[illegible]	.24	.24	.26	[illegible]	.29	.32	.34	[illegible]	[illegible]	[illegible]	.43
DATE	[illegible]	27	27	27	27	[illegible]	[illegible]	27	[illegible]	27	[illegible]	[illegible]
TIME	[illegible]	2255	2255	[illegible]	[illegible]	[illegible]	2345	[illegible]	2330	[illegible]	[illegible]	2359
JUL	.22	.44	.49	[illegible]	[illegible]	.66	[illegible]	.85	.90	1.01	1.20	[illegible]
DATE	02	02	02	02	[illegible]	[illegible]	[illegible]	02	02	02	02	[illegible]
TIME	1350	1355	1400	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1630	1650	1720	1750
AUG	.26	[illegible]	.40	.43	.52	.64	.71	.77	.77	[illegible]	.78	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	20	20	20	20	[illegible]	[illegible]
TIME	[illegible]	0454	[illegible]	[illegible]	2350	0001	0015	0015	0015	0015	[illegible]	0015
SEP	.17	.24	.28	[illegible]	.37	.44	[illegible]	.51	[illegible]	.75	.78	[illegible]
DATE	[illegible]	27	27	[illegible]	27	27	[illegible]	[illegible]	27	[illegible]	[illegible]	[illegible]
TIME	0005	[illegible]	0015	[illegible]	0020	[illegible]	0050	[illegible]	0130	0150	0220	[illegible]
OCT	.09	.11	.11	.13	.19	.25	.27	[illegible]	.27	[illegible]	.27	.27
DATE	11	[illegible]	13	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]
TIME	1118	1124	[illegible]	[illegible]	[illegible]	1742	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NOV	[illegible]	[illegible]	[illegible]	[illegible]	.13	.17	[illegible]	.28	.35	.44	[illegible]	.56
DATE	[illegible]	21	21	21	[illegible]	21	[illegible]	[illegible]	[illegible]	21	[illegible]	21
TIME	1238	1238	1238	[illegible]	[illegible]	1238	1253	1323	[illegible]	[illegible]	[illegible]	[illegible]
DEC	.03	[illegible]	.06	.07	.09	.11	[illegible]	.16	.19	.21	[illegible]	.24
DATE	25	[illegible]	[illegible]	25	25	25	[illegible]	25	25	25	25	25
TIME	[illegible]	[illegible]	2150	2158	2213	2217	2200	2205	2217	[illegible]	[illegible]	[illegible]
YEAR	[illegible]	[illegible]	[illegible]	.51	[illegible]	[illegible]	.84	.85	[illegible]	1.01	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	07	07	07	07	07	[illegible]	[illegible]	[illegible]	[illegible]

MAXIMUM SHORT DURATION PRECIPITATION

YEAR 1973

Maximum precipitation in inches (5 to 180 minutes)

DULUTH, MINNESOTA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.01	.02	.04	.04	.05	.05	.10	.11	.12	.12	.13
DATE	03	03	03	03	03	03*	03*	03	03	03	03	03
TIME	1945	1945	1945	2000	[illegible]	1945	1800	2020	2055	2115	2000	2000
FEB	T	T	T	.01	.01	.02	.02	.02	.02	.03	.03	.04
DATE				13	13	13	13	13	13	13	13	13
TIME				2045	2100	2105	[illegible]	2100	2100	2100	2100	2100
MAR	[illegible]	[illegible]	.04	.06	[illegible]	.11	.13	.17	.18	.18	.19	.29
DATE	[illegible]	11	11	11	11	11	11	11	11	11	11	11
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1316	[illegible]	1330	1400	1200	1200	1445	1400
APR	.13	[illegible]	.21	.22	[illegible]	.24	.24	.24	.24	.24	.24	.24
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	[illegible]	1117	1130	1130	1145	1145	1205	1205	1205	1205	1205	1205
MAY	.05	.08	.10	.12	.14	.16	.18	.22	.28	.34	.42	.48
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	[illegible]	1858	1858	1858	1855	1855	1853	1852	1852	1853	1815	1745
JUN	[illegible]	[illegible]	.17	.19	.21	.24	.32	.38	.45	.46	.48	.53
DATE	25	25	25	25	25	08	08	08	08	08	08	08
TIME	0428	0428	0428	0426	0426	0307	0247	0233	[illegible]	[illegible]	1015	0043
JUL	[illegible]	.15	.18	.21	.23	.24	.31	.38	.44	.52	.58	.62
DATE	29	29	29	29	29	29	23	23	23	23	23	23
TIME	[illegible]	[illegible]	1026	1026	1026	1026	0430	0428	0358	0358	0358	0333
AUG	.31	.34	.35	.50	[illegible]	.71	.78	.91	1.10	1.17	1.28	1.46
DATE	08	08	13	13	06	06	06	06	06	06	15	15
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0258	0300	0247	0205	0205	[illegible]	1600	1301
SEP	.22	.46	.62	.76	.91	.97	1.01	1.01	1.01	1.01	1.01	1.01
DATE	02	02	02	02	02	02	02	02	02	02	02	02
TIME	1817	1822	1827	1832	1842	1857	1909	1909	1909	1909	1909	1909
OCT	.25	.51	.58	.70	1.04	1.12	1.18	1.53	1.57	1.58	1.61	1.61
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	[illegible]	1900	1910	1915	1920	1925	[illegible]	1925	1925	1925	1925	1925
NOV	.03	[illegible]	[illegible]	.07	[illegible]	.12	[illegible]	.18	.22	.25	.28	.31
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	[illegible]	[illegible]	0317	0323	0335	0347	0402	0112	0112	0112	0130	0200
DEC	.01	.02	.02	.02	.03	.03	[illegible]	.04	.04	.05	.05	.06
DATE	22	22	22	22	22	22	22	15	15	15	15	15
TIME	[illegible]	0229	0229	0229	0235	0235	0235	2145	2145	2300	2300	2340
YEAR	.31	.51	.62	[illegible]	1.04	1.12	1.18	1.53	1.57	1.58	1.61	1.61
MONTH	08	10	09	09	10	10	[illegible]	10	10	10	10	10

INTERNATIONAL FALLS, MINNESOTA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	M	M	M	M	M	M	.03	.03	.03	.03	.03	.03
DATE							22	22	22	22	22	22
TIME							1100	1100	1100	1100	1100	1100
FEB	M	M	M	M	M	M	.07	.07	.07	.09	.09	.12
DATE							11	11	11	11	11	11
TIME							2000	2000	2000	2100	2100	2200
MAR	.02	.05	.06	.07	.10	.12	.18	.23	.31	.35	.40	.45
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	1130	1132	1132	1133	1133	1133	1133	1133	1130	1133	1200	1230
APR	.10	.16	.17	.21	.24	.26	.31	.31	.33	.36	.38	.38
DATE	20	14	14	14	14	14	14	14	14	14	14	14
TIME	1225	1823	1828	1833	1843	1856	1845	1905	1925	1945	2015	2045
MAY	.13	.18	.20	.22	.32	.36	.43	.45	.50	.56	.61	.62
DATE	30	30	30	30	30	30	30	30	30	30	30	30
TIME	1407	1343	1348	1353	1403	1418	1430	1450	1510	1530	1600	1630
JUN	.65	.70	.70	.70	.71	.79	.79	.79	1.25	1.47	1.47	1.47
DATE	25	25	25	25	25	25	25	25	25	25	25	25
TIME	1447	1456	1459	1504	1514	1529	1544	1604	1624	1644	1714	1744
JUL	.24	.57	.66	.95	1.11	1.19	1.26	1.28	1.30	1.33	1.36	1.37
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	2240	2245	2257	2257	2257	2257	2257	2257	2257	2257	2257	2257
AUG	.40	.54	.59	.66	.79	.90	.93	1.05	1.08	1.12	1.22	1.95
DATE	12	05	05	05	05	05	05	05	05	05	05	05
TIME	2149	1905	1910	1915	2130	1940	1955	1943	2003	2023	2053	2123
SEP	.75*	1.40*	1.54	1.70*	1.97	2.10	2.73	2.73	2.73	2.73	2.73	2.74
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	1702	1705	1708	1715	1720	1733	1747	1812	1832	1852	1922	1952
OCT	.08	.11	.13	.15	.20	.26	.31	.36	.39	.42	.47	.52
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	1608	1608	1608	1608	1608	1608	1608	1608	1608	1608	1608	1615
NOV	.03	.04	.05	.05	.06	.09	.13	.14	.18	.21	.24	.26
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	0230	0233	0233	0233	0240	0248	0314	0250	0314	0331	0400	0416
DEC	.03	.04	.05	.05	.06	.08	.09	.10	.11	.11	.12	.13
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	1315	1315	1315	1320	1330	1345	1400	1420	1440	1500	1530	1530
YEAR	M	M	M	M	M	M	2.73	2.73	2.73	2.73	2.73	2.74
MONTH							09	09	09	09	09	09

MINN-ST. PAUL, MINNESOTA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.01	.02	.02	.03	.04	.05	.07	.09	.12	.13	.16	.18
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	1500	1500	1500	1500	1500	1500	1500	1515	1500	1500	1545	1600
FEB	.01	.01	.02	.02	.03	.04	.05	.07	.08	.09	.12	.13
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	1600	1600	1600	1600	1600	1530	1600	1605	1630	1600	1600	1600
MAR	.02	.04	.06	.08	.09	.10	.11	.11	.12	.14	.15	.16
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	0710	0715	0720	0725	0735	0745	0800	0800	0350	0500	0500	0500
APR	.22	.28	.29	.29	.29	.30	.30	.30	.32	.36	.40	.42
DATE	20	20	20	20	20	20	20	20	30	30	30	30
TIME	1952	1955	2000	2005	2003	2003	2015	2033	2235	2217	2228	2258
MAY	.08	.09	.10	.11	.12	.17	.20	.26	.29	.30	.33	.35
DATE	24	24	24	24	24	01	01	01	01	01	01	01
TIME	2012	2020	2025	2027	2035	0822	0838	0840	0900	0845	0900	0900
JUN	.04	.08	.12	.15	.20	.27	.34	.40	.44	.44	.45	.46
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	0725	0728	0735	0741	0746	0750	0753	0750	0750	0750	0752	0805
JUL	.23	.35	.44	.54	.62	.66	.72	.80	.86	.94	1.01	1.06
DATE	29	29	01	01	01	01	01	01	01	01	01	02
TIME	1107	1112	2200	2206	2213	2230	2245	2307	2327	2345	2356	0020
AUG	.16	.22	.33	.41	.50	.58	.64	.70	.75	.81	.84	.94
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	0117	0121	0121	0133	0137	0151	0207	0226	0247	0308	0224	0222
SEP	.05	.07	.09	.09	.10	.16	.20	.28	.32	.36	.41	.47
DATE	21	21	21	21	21	26	26	26	26	26	26	26
TIME	[illegible]	[illegible]	1144	1150	1600	0146	0200	0218	0238	0300	0330	0400
OCT	.20	.24	.38	.40	.40	.40	.40	.40	.40	.40	.40	.40
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	1730	1731	1730	1732	1732	1732	1732	1732	1732	1732	1732	1732
NOV	.05	.08	.10	.13	.16	.23	.28	.32	.34	.35	.38	.40
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	0738	0739	0744	0752	0753	0806	0822	0832	0851	0917	0939	1024
DEC	.02	.02	.03	.04	.05	.06	.09	.09	.11	.13	.14	.16
DATE	28	28	28	28	28	28	04	04	28	28	28	24
TIME	1036	1038	1038	1038	1040	1053	1900	1849	1142	1200	1230	1600
YEAR	.23	.35	.44	.54	.62	.66	.72	.80	.86	.94	1.01	1.06
MONTH	07	07	07	07	07	07	07	07	07	07	07	07

ROCHESTER, MINNESOTA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.01	.03	.05	[illegible]	.10	.14	.16	.20	.26	.28	.35	.38
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	[illegible]	1700	[illegible]	1645	1645	1645	1700	1645	[illegible]	1700	1645	1700
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.08	.11	.12	.16	.19	.21
DATE	[illegible]	27	27	27	27	01	01	01	01	01	01	01
TIME	[illegible]	[illegible]	1700	1700	1700	1145	1100	1100	1100	1145	1645	1145
MAR	[illegible]	[illegible]	[illegible]	.14	.19	.25	.33	.43	.50	.53	.60	.68
DATE	[illegible]	[illegible]	[illegible]	13	13	13	10	10	10	10	10	10
TIME	[illegible]	[illegible]	[illegible]	2300	2300	2300	1847	1847	1840	1900	1900	1900
APR	[illegible]	[illegible]	.11	.12	.15	.18	[illegible]	.32	.38	.42	.50	.54
DATE	29	29	29	29	29	29	29	29	29	15	15	15
TIME	[illegible]	[illegible]	[illegible]	0505	0516	0530	0545	[illegible]	0620	2035	2105	2135
MAY	.27	[illegible]	[illegible]	.42	.48	.50	.53	[illegible]	[illegible]	.55	.55	.55
DATE	01	01	[illegible]	[illegible]	[illegible]	[illegible]	01	01	[illegible]	[illegible]	01	[illegible]
TIME	0103	0105	0105	[illegible]	0120	0135	0150	0210	0210	0230	0300	0300
JUN	[illegible]	[illegible]	.50	.51	.52	.52	.53	.53	[illegible]	.62	.62	.62
DATE	16	16	16	16	16	16	16	16	02	02	02	02
TIME	[illegible]	0855	0858	0900	0904	0919	0939	0954	2147	2205	2205	2205
JUL	.28	[illegible]	[illegible]	.64	[illegible]	[illegible]	1.20	1.29	1.29	1.29	1.44	1.44
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	1715	1720	1725	1720	1725	1750	1800	1803	1808	1808	1808	1808
AUG	.24	.39	.60	.72	.93	1.04	1.10	1.14	1.17	1.27	1.27	1.27
DATE	04	04	[illegible]	22	22	22	22	22	22	22	22	22
TIME	0247	0247	2300	2303	2303	2303	2303	2318	2318	2355	2355	2355
SEP	[illegible]	[illegible]	.64	[illegible]	1.02	1.05	1.24	1.27	1.29	1.29	1.29	1.29
DATE	[illegible]	01	[illegible]	[illegible]	[illegible]	[illegible]	01	01	01	01	01	01
TIME	1540	[illegible]	1555	[illegible]	1610	1625	1640	1710	1720	1720	1720	1720
OCT	[illegible]	[illegible]	.48	.51	.60	.76	.99	1.04	1.06	1.06	[illegible]	1.19
DATE	[illegible]	[illegible]	[illegible]	03	[illegible]	03	03	03	03	03	03	03
TIME	1543	[illegible]	1553	1538	[illegible]	1623	1640	1645	1655	[illegible]	1750	1840
NOV	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.29	.34	[illegible]	.41	.45	[illegible]	[illegible]
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	[illegible]	[illegible]	1055	1055	1055	[illegible]	1030	1025	1025	1025	1025	1025
DEC	[illegible]	[illegible]	[illegible]	.05	.07	.09	[illegible]	[illegible]	.15	.17	.19	.21
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	[illegible]	1555	1600	[illegible]	[illegible]	1625	[illegible]	1625	1625	1625	1625	1625
YEAR	[illegible]	.52	[illegible]	.90	1.02	1.05	1.24	1.29	1.29	1.29	1.44	1.44
MONTH	[illegible]	09*	09	09	09	09	09	07	09*	09*	07	07

SAINT CLOUD, MINNESOTA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.05	.05	.05	.06	.06	.10	.10	.11	.11	.11	.11	.13
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	0625	0625	0625	0625	0625	0630	0630	0630	0630	1430	1500	1530
FEB	.01	.02	.03	.04	.05	.05	.05	.06	.06	.06	.08	.09
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1445	1445	1445	1445	1445	1500	1500	1500	1500	1500	1500	1500
MAR	.03	.05	.07	.09	.10	.13	.18	.24	.27	.29	.30	.32
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	[illegible]	[illegible]	0450	0500	0510	0525	0540	0545	0545	0550	0556	0605
APR	.11	.15	.16	.17	.18	.20	.25	.29	.32	.35	.37	.38
DATE	19	19	15	15	15	15	15	15	15	15	15	15
TIME	2348	2356	0139	0144	0153	0207	0137	0157	0217	0237	0307	0337
MAY	.03	.05	.07	.09	.13	.19	.25	.30	.36	.44	.54	.59
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	0006	0011	0016	0021	0031	0045	0103	0108	0108	0108	0108	0140
JUN	.24	.32	.37	.43	.57	.65	.68	.69	.70	.71	.71	.71
DATE	02	16	16	16	16	16	16	16	16	16	16	16
TIME	[illegible]	2017	2018	2021	2031	2045	2101	2121	2140	2200	2230	2300
JUL	.11	.11	.21	.23	.27	.33	.34	.35	.43	.46	.60	.66
DATE	23	23	23	23	06	06	06	01	01	01	01	01
TIME	2057	2058	0244	0249	0617	0626	0640	2213	2247	2248	2322	2348
AUG	.39	[illegible]	.65	.70	.91	.99	1.02	1.03	1.07	1.09	1.14	1.20
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	0342	[illegible]	0347	0352	0402	0413	0428	0448	0508	0528	0558	0628
SEP	.20	.31	.37	.43	.45	.50	.54	.55	.58	.59	.60	.61
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	1315	1315	1315	1317	1325	1317	1332	1346	1413	1432	1502	1532
OCT	.41	.60	.81	.83	.85	.86	.89	.91	.95	.99	1.07	1.13
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	1958	2003	2008	2013	2023	2038	2053	2113	2133	2153	2223	2253
NOV	.02	.04	.05	.06	.07	.10	.12	.17	.19	.20	.23	.25
DATE	20	20	20	20	19	20	20	20	20	20	20	20
TIME	2354	2359	2215	2015	2315	1000	1000	1000	1000	1000	1000	1030
DEC	.01	.02	.02	.02	.03	.03	.04	.05	.06	.08	.09	.10
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	1720	1725	1730	1735	1740	1740	1740	1740	1740	1740	1740	1740
YEAR	.41	.60	.81	.83	.91	.99	1.02	1.03	1.07	1.09	1.14	1.20
MONTH	10	10	10	10	08	08	08	08	08	08	08	08

JACKSON, MISSISSIPPI

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.05	.11	.19	.29	.47	.47	.47	.47	.47	.47	.47	.47
DATE	18	18	18	18	19	18	18	18	18	18	18	18
TIME	2005	2010	2015	2020	2025	2030	2030	2030	2030	2030	2030	2030
FEB	.52	.62	.65	.70	.77	1.03	1.12	1.20	1.25	1.78	2.00	2.15
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	0435	0440	0440	0445	0450	0525	0530	0545	0625	0630	0630	0630
MAR	.31	.37	.43	.48	.53	.60	.67	.71	.83	.95	1.25	1.37
DATE	11	24	24	24	24	24	24	24	24	24	24	24
TIME	[illegible]	1637	1642	1643	1643	1643	1643	1643	1643	1643	1643	1643
APR	.30	.50	.57	.71	1.01	1.46	1.72	1.94	2.16	2.65	3.08	3.50
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	0552	0057	0552	0720	0728	0740	0746	0746	0746	0746	0746	0746
MAY	.23	.38	.41	.52	.82	.96	1.09	1.11	1.11	1.11	1.12	1.12
DATE	23	23	23	23	23	23	23	23	23	23	23	23
TIME	2010	2010	2010	2010	2010	2010	2028	2045	2105	2125	2155	2320
JUN	.13	.16	.17	.17	.18	.20	.20	.20	.20	.20	.20	.20
DATE	05	05	05	05	05	05	05	05	05	05	05	05
TIME	1709	1715	1717	1725	1735	1737	1802	1802	1802	1802	1802	1802
JUL	.19	.34	.40	.46	.69	.69	.69	.69	.69	.69	.69	.69
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	1547	1545	1547	1547	1601	1601	1601	1601	1601	1601	1601	1601
AUG	.28	.47	.48	.49	.50	.50	.50	.50	.50	.50	.50	.50
DATE	16	16	16	16	16	16	16	16	16	16	16	16
TIME	0602	0607	0612	0617	0626	0640	0640	0816	0836	0842	0842	0842
SEP	.25	.43	.49	.55	.57	.58	.58	.58	.58	.81	.93	.99
DATE	12	12	12	12	12	12	12	12	12	04	04	04
TIME	1518	1518	1518	1520	1528	1540	1540	1540	1540	1915	1931	2002
OCT	.09	.17	.21	.26	.31	.43	.56	.63	.72	.78	.80	.82
DATE	31	09	09	09	31	31	31	31	31	31	31	31
TIME	0532	1818	1823	1828	0532	0600	0600	0600	0600	0625	0620	[illegible]
NOV	.38	.50	.52	.63	.93	.99	1.02	1.10	1.13	1.18	1.28	1.58
DATE	04	04	27	27	27	27	27	27	27	27	20	20
TIME	[illegible]	1646	1339	1344	1354	1400	1415	1435	1445	1457	1959	2057
DEC	.27	.53	.57	.62	.73	.82	.96	1.06	1.21	1.31	1.56	1.65
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	0745	0750	0755	0759	0805	0820	0815	0840	0825	0820	0830	0840
YEAR	.52	.62	.65	.71	1.01	1.46	1.72	1.94	2.16	2.65	3.08	3.50
MONTH	02	02	02	04	04	04	04	04	04	04	04	04

MERIDIAN, MISSISSIPPI

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.10	[illegible]	.25	.45	.65	.75	.83	.92	.95	1.13	1.18
DATE	[illegible]	21	[illegible]	21	21	21	21	21	21	21	21	21
TIME	[illegible]	[illegible]	0815	[illegible]	0830	0840	0840	0840	0845	0900	0910	1045
FEB	[illegible]	[illegible]	.20	.23	[illegible]	.42	.59	.75	.94	1.14	1.17	1.30
DATE	01	[illegible]	[illegible]	01	13	13	13	13	13	13	13	13
TIME	[illegible]	1355	[illegible]	1405	[illegible]	2245	2300	[illegible]	2335	2335	2340	[illegible]
MAR	[illegible]	.84	.90	[illegible]	1.40	1.50	1.65	2.05	2.60	2.87	3.43	3.49
DATE	[illegible]	[illegible]	[illegible]	[illegible]	30	30	[illegible]	[illegible]	[illegible]	31	31	31
TIME	[illegible]	[illegible]	0913	2235	[illegible]	[illegible]	1000	2325	[illegible]	0015	0045	0130
APR	[illegible]	[illegible]	[illegible]	[illegible]	1.20	1.50	2.05	2.08	2.17	2.33	2.36	2.36
DATE	[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]	18	18	18	18	18
TIME	[illegible]	[illegible]	0925	[illegible]	[illegible]	0940	0950	1015	1030	[illegible]	[illegible]	1110
MAY	[illegible]	.50	.60	1.20	1.41	1.52	1.62	[illegible]	1.62	1.62	[illegible]	1.62
DATE	[illegible]	[illegible]	27	08	[illegible]	08	08	08	[illegible]	08	08	08
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0205	0313	0313	[illegible]	0313	0313	0313
JUN	[illegible]	.35	[illegible]	[illegible]	[illegible]	[illegible]	.66	[illegible]	[illegible]	1.03	[illegible]	1.03
DATE	[illegible]	[illegible]	[illegible]	01	[illegible]	[illegible]	[illegible]	01	01	01	01	[illegible]
TIME	[illegible]	1332	[illegible]	1122	1132	1147	1202	[illegible]	[illegible]	[illegible]	1332	1402
JUL	.43	[illegible]	.95	1.35	1.86	1.87	1.91	2.41	2.48	2.94	3.41	3.49
DATE	30	13	13	13	[illegible]	13	13	13	13	13	13	13
TIME	[illegible]	[illegible]	1625	1625	1625	1610	[illegible]	1540	1520	1500	1430	1430
AUG	[illegible]	.25	.45	[illegible]	.50	[illegible]	.55	.55	.55	.55	.55	.55
DATE	[illegible]	13	[illegible]	13	[illegible]	13	13	13	13	13	13	13
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1745	1800	1815	1815	1815	1815	1815	1815
SEP	[illegible]	[illegible]	[illegible]	.62	[illegible]	[illegible]	.70	.85	.90	.95	1.05	1.08
DATE	[illegible]	[illegible]	[illegible]	05	[illegible]	05	05	05	05	05	05	05
TIME	[illegible]	[illegible]	1448	1448	1458	1520	1520	1458	1458	1515	1615	1615
OCT	[illegible]	.25	[illegible]	.37	.50	.53	[illegible]	[illegible]	.70	.73	.77	.80
DATE	[illegible]	[illegible]	16	16	16	16	[illegible]	[illegible]	[illegible]	16	16	16
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0622	[illegible]	[illegible]	[illegible]	0700	0700	[illegible]
NOV	.13	[illegible]	[illegible]	.60	[illegible]	[illegible]	[illegible]	.80	.80	.82	.83	.83
DATE	[illegible]	[illegible]	27	27	27	27	27	27	27	27	27	27
TIME	[illegible]	[illegible]	1825	1830	[illegible]	[illegible]	1845	1900	[illegible]	[illegible]	1900	1900
DEC	[illegible]	[illegible]	.38	.50	[illegible]	[illegible]	1.05	1.26	1.65	1.68	1.85	1.87
DATE	[illegible]	25	25	[illegible]	[illegible]	26	26	26	25	[illegible]	25	25
TIME	[illegible]	[illegible]	0405	0820	[illegible]	103	1030	1030	[illegible]	0800	0800	0800
YEAR	[illegible]	[illegible]	.95	[illegible]	1.86	[illegible]	2.05	2.4	2.60	2.94	3.43	3.49
MONTH	[illegible]	07	07	07	07	[illegible]	04	[illegible]	[illegible]	[illegible]	03	07*

COLUMBIA, MISSOURI

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.06	.08	.12	.16	.22	.32	.38	.44	.50	.55	.58	.61
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	[illegible]	0925	0930	0930	0930	0945	1000	1000	1020	[illegible]	1045	1110
FEB	.03	.06	.08	.10	.11	[illegible]	[illegible]	.18	.20	.24	.24	.25
DATE	12	12	12	12	12	12	12	01	01	01	01	01
TIME	[illegible]	2005	[illegible]	2015	[illegible]	2040	2050	0130	0145	0140	0215	0300
MAR	.21	[illegible]	.35	.44	.52	.57	.59	.62	.68	.78	.88	.90
DATE	[illegible]	[illegible]	13	13	13	13	31	31	31	10	10	10
TIME	2147	[illegible]	1432	1432	1432	1432	[illegible]	[illegible]	[illegible]	0930	0930	[illegible]
APR	.11	.16	.26	.35	.37	.41	.44	.45	.45	[illegible]	.49	.58
DATE	21	21	21	21	21	21	21	21	21	[illegible]	14	14
TIME	2315	[illegible]	2315	2315	2315	2305	2305	2305	2305	2305	1720	1650
MAY	.30	.54	.70	.83	.90	[illegible]	1.11	1.22	1.26	1.27	1.29	1.29
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	1540	1540	1540	1540	1540	1540	1540	1540	1540	1540	1540	1540
JUN	.26	.45	.52	.65	.89	.92	.95	.96	.96	[illegible]	1.18	1.19
DATE	17	17	17	17	17	17	17	17	18	17	18	18
TIME	2231	2235	2237	2240	2258	2305	[illegible]	2344	0000	2256	0048	0117
JUL	.24	.38	.45	.47	.58	.62	.70	.73	.73	.73	.73	.83
DATE	29	29	29	29	29	20	20	20	20	20	20	20
TIME	1755	1755	1755	1745	1745	1736	1736	1736	1736	1736	1736	1736
AUG	.25	.45	.50	.58	.60	.62	.63	.63	.63	.63	.63	.63
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1504	1509	1509	[illegible]	1523	1524	1525	1525	1525	1525	1525	1525
SEP	.34	.54	.85	1.01	1.13	1.18	1.36	1.49	1.51	1.52	1.54	1.59
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	[illegible]	1910	1915	1920	1930	1945	1920	1940	2000	2020	2050	[illegible]
OCT	.26	.36	.39	.41	.45	.69	.91	1.08	1.23	1.51	1.61	1.73
DATE	03	03	03	03	03	03	03	03	04	04	04	04
TIME	2240	2240	2245	2250	2300	2315	2330	2350	0010	0010	0030	0030
NOV	.12	.20	.30	.32	.34	.38	.40	.41	.41	.41	.46	.52
DATE	15	15	15	15	15	15	15	15	15	24	24	24
TIME	0155	0200	0205	0210	0220	0235	0250	0300	0300	2200	2200	2200
DEC	.07	[illegible]	.13	.15	.20	.28	.34	.37	.42	.45	.50	.59
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	0615	0140	0145	0150	0145	0145	0145	0145	0145	0155	0225	0255
YEAR	.34	.56	.85	1.01	1.13	1.18	1.36	1.49	1.51	1.52	1.61	1.73
MONTH	09	05	09	09	09	09	09	09	09	09	10	10

KANSAS CITY, MISSOURI INTL AP

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.04	.05	.07	.08	.12	.17	.19	.23	.25	.32	.39	.44
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	2040	2043	2200	2200	2200	2200	2200	2220	2240	2300	2300	2330
FEB	.02	.03	.04	.05	.06	.09	.10	.11	.13	.18	.22	.24
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	0650	0655	0700	0700	0400	0400	0400	0420	0440	0400	0400	[illegible]
MAR	.38	.62	.64	.69	.75	.76	.77	.87	.87	.88	.88	.88
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1921	1923	1932	1930	1932	1933	1930	1935	1935	1935	1935	1935
APR	.10	.16	.26	.30	.34	.45	.52	.61	.67	.72	.80	.83
DATE	30	30	30	30	30	15	15	15	15	15	15	15
TIME	2335	2335	2335	2335	2335	2330	2330	2330	2330	2330	2330	2330
MAY	.36	.45	.54	.64	.90	.98	1.02	1.16	1.26	1.28	1.28	1.28
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	1510	1510	1510	1510	1510	1510	1510	1510	1510	1510	1510	1510
JUN	.65	.69	.69	.70	.74	.82	.87	.87	.90	.97	1.03	1.03
DATE	26	13	13	12	12	12	12	12	12	12	26	26
TIME	1837	1857	1837	1837	1852	1852	1852	1852	1852	1852	1837	1837
JUL	.40	.60	.76	.85	1.18	1.50	1.56	1.58	1.58	1.58	1.58	1.58
DATE	02	02	02	02	02	02	02	02	02	02	02	02
TIME	1758	1803	1807	1815	1827	[illegible]	1848	1930	1930	1930	1930	1930
AUG	.32	.40	.60	.60	.70	.70	.70	.70	.70	.70	.78	.79
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	0119	0128	0130	0130	0130	0130	0130	0130	0130	0130	0330	0415
SEP	.36	.48	.50	.67	.76	1.18	1.28	1.37	1.43	1.60	1.69	[illegible]
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	1825	1820	1820	1810	2030	2015	2015	2015	1950	1900	1900	1810
OCT	.42	.58	.66	.80	1.00	1.40	1.60	1.80	1.96	2.10	2.10	2.52
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	2110	2110	2110	2110	2110	2110	2110	2110	2110	2110	2110	2110
NOV	.12	.14	.16	.20	.25	.29	.37	.48	.53	.58	.71	.95
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	0415	0415	0415	0415	0415	0415	0415	0400	0400	0400	0400	0200
DEC	.06	.08	.10	.13	.17	.24	.30	.38	.44	.51	.59	.67
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	0455	0450	0445	0440	0430	0415	0400	0400	0400	0400	0400	0400
YEAR	.65	.69	.76	.85	1.18	1.50	1.60	1.80	1.96	2.10	2.10	2.52
MONTH	06	06	07	07	07	07	10	10	10	10	10	10

MAXIMUM SHORT DURATION PRECIPITATION

ST. LOUIS, MISSOURI

	5	10	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	.11	.14	[illegible]	.20	.24	.27	[illegible]	[illegible]	.33	.38	[illegible]
DATE	[illegible]	[illegible]	[illegible]	03	03	[illegible]	03	03	03	03	03	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1155	1210	1200	[illegible]	[illegible]	[illegible]
FEB	[illegible]	[illegible]	[illegible]	.06	[illegible]	[illegible]	.16	[illegible]	.23	.25	.26	.26
DATE	[illegible]	[illegible]	[illegible]	12	[illegible]	12	13	13	[illegible]	13	[illegible]	13
TIME	[illegible]	[illegible]	2345	2350	2355	2355	[illegible]	0025	0025	0040	[illegible]	0130
MAR	[illegible]	[illegible]	.28	.28	[illegible]	[illegible]	.34	.48	.58	[illegible]	[illegible]	.78
DATE	14	[illegible]	[illegible]	14	[illegible]	06	[illegible]	06	[illegible]	06	06	06
TIME	[illegible]	0145	0150	[illegible]	0155	[illegible]	2000	2020	2040	2100	2100	2100
APR	.26	.34	[illegible]	[illegible]	[illegible]	.70	.76	.80	.84	.90	1.02	1.08
DATE	[illegible]	22	[illegible]	22	22	22	[illegible]	[illegible]	[illegible]	[illegible]	22	22
TIME	[illegible]	0214	0216	[illegible]	0230	0245	0300	[illegible]	0340	0400	0430	[illegible]
MAY	[illegible]	.42	[illegible]	.47	[illegible]	[illegible]	.51	.52	[illegible]	.76	.76	.76
DATE	[illegible]	[illegible]	[illegible]	10	10	[illegible]	07	07	[illegible]	10	10	10
TIME	[illegible]	[illegible]	0645	[illegible]	[illegible]	[illegible]	1800	[illegible]	0610	[illegible]	0655	[illegible]
JUN	[illegible]	[illegible]	1.14	1.20	[illegible]	1.40	[illegible]	1.56	[illegible]	1.60	1.60	[illegible]
DATE	[illegible]	18	[illegible]	18	[illegible]	18	18	[illegible]	[illegible]	[illegible]	18	[illegible]
TIME	[illegible]	[illegible]	1925	1930	[illegible]	1955	2010	2030	2050	2110	[illegible]	[illegible]
JUL	[illegible]	[illegible]	[illegible]	1.36	1.46	1.54	1.56	[illegible]	1.62	1.68	1.73	1.75
DATE	[illegible]	23	23	23	[illegible]	23	[illegible]	23	[illegible]	23	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1705	[illegible]	1710	1725	1740	[illegible]	[illegible]	1845	1915	[illegible]
AUG	[illegible]	.34	.38	.38	[illegible]	[illegible]	.72	[illegible]	[illegible]	.82	.86	.88
DATE	[illegible]	09	09	09	13	[illegible]	[illegible]	13	[illegible]	09	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1845	1900	[illegible]	1936	[illegible]	[illegible]	[illegible]	[illegible]
SEP	.24	.34	[illegible]	.62	.86	1.26	[illegible]	1.28	1.28	1.32	1.46	[illegible]
DATE	[illegible]	[illegible]	09	09	09	[illegible]	[illegible]	[illegible]	09	09	09	[illegible]
TIME	[illegible]	0100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0210	0230	[illegible]	0320	[illegible]
OCT	.06	.08	.10	.12	.12	[illegible]	.18	.22	.26	[illegible]	.32	[illegible]
DATE	[illegible]	01	[illegible]	01	13	[illegible]	13	31	31	[illegible]	31	[illegible]
TIME	0015	0020	[illegible]	[illegible]	0110	0125	0140	0901	0925	0944	1014	0730
NOV	.22	.26	[illegible]	.27	[illegible]	.32	[illegible]	[illegible]	[illegible]	.62	.62	.72
DATE	[illegible]	15	15	15	[illegible]	[illegible]	[illegible]	[illegible]	24	24	25	25
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0440	[illegible]	2255	2315	[illegible]	[illegible]	[illegible]
DEC	[illegible]	[illegible]	.12	.14	[illegible]	.22	.36	.38	[illegible]	[illegible]	.45	[illegible]
DATE	[illegible]	[illegible]	04	[illegible]	[illegible]	04	04	[illegible]	[illegible]	04	[illegible]	03
TIME	[illegible]	0150	0155	[illegible]	0210	[illegible]	0237	0300	[illegible]	0340	0410	2350
YEAR	.50+	[illegible]	1.20	[illegible]	[illegible]	1.54	1.56	1.60	1.62	1.68	1.73	[illegible]
MONTH	[illegible]	07	[illegible]	[illegible]	07	[illegible]	07	[illegible]	07	[illegible]	07	07

SPRINGFIELD, MISSOURI

	5	10	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	.15	.24	[illegible]	.25	[illegible]	.37	.44	[illegible]	.56	[illegible]	[illegible]	.70
DATE	18	18	[illegible]	18	20	20	20	20	20	[illegible]	20	[illegible]
TIME	0438	[illegible]	0444	[illegible]	2315	2330	[illegible]	2350	2350	[illegible]	[illegible]	[illegible]
FEB	.02	[illegible]	[illegible]	.05	.07	.09	.12	.15	.16	.18	.20	.22
DATE	07	[illegible]	07	[illegible]	07	07	[illegible]	07	[illegible]	07	07	07
TIME	1115	1120	[illegible]	1130	[illegible]	1145	1145	[illegible]	1200	1145	[illegible]	1310
MAR	.34	.54	.58	[illegible]	.62	.66	[illegible]	.71	.71	[illegible]	[illegible]	.71
DATE	13	13	13	[illegible]	[illegible]	13	[illegible]	13	[illegible]	13	13	[illegible]
TIME	2014	2019	2024	[illegible]	2024	2029	2030	2113	[illegible]	2113	2113	[illegible]
APR	.48	.64	[illegible]	.74	.82	1.00	[illegible]	1.56	[illegible]	1.82	1.85	1.95
DATE	21	21	[illegible]	21	21	22	22	22	22	[illegible]	22	22
TIME	2334	[illegible]	2338	2343	[illegible]	0007	[illegible]	0032	[illegible]	0112	[illegible]	0212
MAY	.13	.17	.19	[illegible]	.21	.32	[illegible]	.37	.37	.44	.45	.47
DATE	[illegible]	22	[illegible]	22	[illegible]	23	[illegible]	23	[illegible]	[illegible]	06	06
TIME	[illegible]	[illegible]	0230	0232	[illegible]	0718	[illegible]	0745	[illegible]	0000	0845	0000
JUN	.32	[illegible]	.78	[illegible]	.80	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.68	[illegible]
DATE	01	[illegible]	[illegible]	[illegible]	01	01	01	01	[illegible]	04	04	[illegible]
TIME	1635	1643	1821	1826	1801	1735	[illegible]	[illegible]	1620	1600	[illegible]	1825
JUL	[illegible]	.88	1.08	1.20	[illegible]	1.43	[illegible]	1.91	[illegible]	[illegible]	3.44	[illegible]
DATE	10	[illegible]	[illegible]	10	10	01	[illegible]	[illegible]	[illegible]	01	01	01
TIME	[illegible]	1425	1430	[illegible]	1440	[illegible]	[illegible]	0841	0901	[illegible]	0931	1001
AUG	.18	.28	.33	.37	[illegible]	.42	[illegible]	[illegible]	.42	.42	.42	[illegible]
DATE	[illegible]	[illegible]	12	[illegible]	12	12	12	12	12	12	12	12
TIME	[illegible]	1420	1425	1430	1435	1445	[illegible]	1445	1445	1445	1445	1445
SEP	.23	.27	.31	[illegible]	[illegible]	[illegible]	.50	.55	[illegible]	.66	[illegible]	.71
DATE	22	22	22	[illegible]	22	[illegible]	22	22	22	22	[illegible]	22
TIME	0638	[illegible]	0635	0635	[illegible]	0635	[illegible]	0646	0700	0717	0747	[illegible]
OCT	.24	.34	.44	.50	[illegible]	.54	.56	[illegible]	[illegible]	[illegible]	[illegible]	1.17
DATE	12	12	12	12	[illegible]	12	12	[illegible]	12	12	[illegible]	12
TIME	[illegible]	1930	[illegible]	1930	1930	[illegible]	1930	[illegible]	1930	1930	1930	[illegible]
NOV	.22	[illegible]	.40	.47	.51	.56	[illegible]	.92	[illegible]	1.08	1.12	1.28
DATE	24	[illegible]	24	[illegible]	[illegible]	[illegible]	[illegible]	24	[illegible]	24	24	[illegible]
TIME	0241	[illegible]	0251	0256	0300	0300	[illegible]	0345	[illegible]	0437	0448	[illegible]
DEC	.18	.21	[illegible]	.29	.33	[illegible]	.45	.50	.63	.68	.75	.82
DATE	[illegible]	04	03	[illegible]	[illegible]	03	03	03	[illegible]	03	03	03
TIME	[illegible]	0457	2230	2235	[illegible]	2245	2300	2320	2340	[illegible]	2359	[illegible]
YEAR	[illegible]	.88	1.08	[illegible]	1.27	[illegible]	1.61	1.91	2.23	[illegible]	3.44	[illegible]
MONTH	07	07	07	07	07	[illegible]	07	07	[illegible]	[illegible]	07	07

BILLINGS, MONTANA

	5	10	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	.02	[illegible]	[illegible]	.05	[illegible]	[illegible]	.11	.13	[illegible]	[illegible]	[illegible]	[illegible]
DATE	02	02	[illegible]	02	[illegible]	[illegible]	02	02	02	[illegible]	[illegible]	[illegible]
TIME	1645	1650	1655	1700	1700	1715	[illegible]	1750	[illegible]	1830	[illegible]	[illegible]
FEB	.01	.02	.03	[illegible]	[illegible]	.06	[illegible]	[illegible]	.06	.07	.08	[illegible]
DATE	[illegible]	05	05	05	05	[illegible]	[illegible]	05	05	[illegible]	05	05
TIME	[illegible]	0900	0900	0900	[illegible]	0920	[illegible]	[illegible]	1010	[illegible]	2130	2200
MAR	[illegible]	.05	[illegible]	.07	.08	[illegible]	[illegible]	.18	.20	[illegible]	[illegible]	[illegible]
DATE	[illegible]	22	22	22	22	22	22	22	22	22	22	22
TIME	1230	[illegible]	1240	1245	1300	[illegible]	1300	1320	1340	1300	[illegible]	1400
APR	.03	[illegible]	.07	[illegible]	.12	[illegible]	.21	.25	.27	.30	.34	[illegible]
DATE	[illegible]	19	19	[illegible]	[illegible]	19	20	20	[illegible]	20	20	20
TIME	2305	[illegible]	[illegible]	[illegible]	2330	[illegible]	0000	[illegible]	0040	0100	0130	[illegible]
MAY	[illegible]	[illegible]	.06	.06	[illegible]	[illegible]	[illegible]	.11	[illegible]	.14	.18	[illegible]
DATE	[illegible]	04	25	25	[illegible]	[illegible]	25	[illegible]	25	25	25	25
TIME	1510	1515	1136	1143	[illegible]	[illegible]	1223	1243	[illegible]	1323	1353	[illegible]
JUN	[illegible]	[illegible]	.07	[illegible]	.11	.12	[illegible]	.14	.15	[illegible]	.20	.21
DATE	01	01	01	01	[illegible]	[illegible]	[illegible]	01	[illegible]	[illegible]	01	01
TIME	2050	[illegible]	2100	2105	[illegible]	[illegible]	2145	2205	2225	2245	2300	2330
JUL	.03	.04	.05	.07	[illegible]	.12	.13	.14	[illegible]	.15	.16	.18
DATE	22	[illegible]	22	22	22	22	22	22	22	[illegible]	[illegible]	22
TIME	[illegible]	1600	1600	1603	[illegible]	1700	1645	1708	1708	[illegible]	1815	1845
AUG	.15	[illegible]	[illegible]	[illegible]	.46	.49	.51	.51	[illegible]	[illegible]	[illegible]	.51
DATE	22	[illegible]	[illegible]	22	[illegible]	22	22	22	22	[illegible]	22	22
TIME	1808	[illegible]	[illegible]	1817	1829	[illegible]	1848	1848	1848	1848	[illegible]	[illegible]
SEP	.03	[illegible]	[illegible]	.16	.23	.26	.27	.28	.28	.28	.28	.28
DATE	[illegible]	07	07	07	07	[illegible]	[illegible]	07	[illegible]	07	07	07
TIME	1740	1745	1750	[illegible]	1805	1820	1840	1840	[illegible]	1840	1840	1840
OCT	.02	.03	[illegible]	[illegible]	.06	.08	[illegible]	[illegible]	.15	.17	.17	.20
DATE	09	09	[illegible]	[illegible]	09	[illegible]	31	[illegible]	[illegible]	31	31	[illegible]
TIME	1616	1618	2217	2219	0545	[illegible]	1710	1717	[illegible]	1828	1847	1658
NOV	[illegible]	[illegible]	[illegible]	[illegible]	.05	[illegible]	.09	.12	[illegible]	.16	.18	.18
DATE	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	[illegible]	17	17	[illegible]	17	[illegible]
TIME	1615	[illegible]	1618	1618	[illegible]	1615	1000	1618	1640	1700	1715	1700
DEC	[illegible]	[illegible]	.04	[illegible]	[illegible]	.09	[illegible]	.13	[illegible]	[illegible]	.20	[illegible]
DATE	29	29	29	[illegible]	[illegible]	[illegible]	18	18	[illegible]	18	18	[illegible]
TIME	0535	[illegible]	0535	0535	[illegible]	0245	0300	0320	0340	[illegible]	0430	0500
YEAR	.15	.28	.30	.36	.46	[illegible]	[illegible]	.51	[illegible]	.51	.51	.51
MONTH	[illegible]	08	08	08	08	08	[illegible]	08	08	08	08	08

GLASGOW, MONTANA

	5	10	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	T
DATE												
TIME												
FEB	T	.01	.01	.02	[illegible]	[illegible]	.05	.05	.06	[illegible]	.06	.06
DATE		05	[illegible]	05	[illegible]	05	05	05	05	05	05	05
TIME		0130	0135	0140	[illegible]	0200	[illegible]	0235	[illegible]	[illegible]	0330	[illegible]
MAR	.02	.02	.02	.02	[illegible]	[illegible]	[illegible]	.04	.05	.06	[illegible]	.08
DATE	[illegible]	[illegible]	[illegible]	22	[illegible]	22	[illegible]	[illegible]	22	[illegible]	23	23
TIME	2006	[illegible]	2015	2015	1930	1930	[illegible]	2002	[illegible]	0330	0400	0445
APR	[illegible]	[illegible]	[illegible]	.05	[illegible]	[illegible]	.09	.11	.13	.13	.14	[illegible]
DATE	[illegible]	[illegible]	[illegible]	13	13	[illegible]	19	[illegible]	19	19	19	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0900	0617	[illegible]	0700	0928	0900
MAY	.03	[illegible]	.06	.08	.10	.14	.17	[illegible]	[illegible]	.20	.20	.20
DATE	[illegible]	26	[illegible]	26	[illegible]	26	[illegible]	26	[illegible]	26	[illegible]	26
TIME	[illegible]	[illegible]	[illegible]	1302	1316	1331	[illegible]	1452	[illegible]	1438	1512	[illegible]
JUN	[illegible]	[illegible]	[illegible]	.60	[illegible]	.87	.94	1.05	[illegible]	1.28	1.31	[illegible]
DATE	22	30	[illegible]	30	[illegible]	30	30	[illegible]	30	[illegible]	[illegible]	30
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1902	[illegible]	1931	1951	[illegible]	[illegible]	2046	[illegible]
JUL	.06	[illegible]	[illegible]	[illegible]	.20	.23	[illegible]	[illegible]	.28	.29	.29	.29
DATE	[illegible]	[illegible]	[illegible]	23	[illegible]	23	[illegible]	[illegible]	[illegible]	23	23	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1755	1801	1925	1847	[illegible]
AUG	.32	[illegible]	.38	.38	[illegible]	.39	.41	.42	[illegible]	.42	.43	.45
DATE	[illegible]	[illegible]	[illegible]	24	24	24	[illegible]	24	24	24	04	[illegible]
TIME	[illegible]	0156	0156	[illegible]	0215	[illegible]	[illegible]	[illegible]	0245	0304	[illegible]	1614
SEP	.04	.05	.06	.07	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.24	[illegible]	.32
DATE	[illegible]	01	01	01	[illegible]	01	01	[illegible]	01	01	01	01
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0750	0750	[illegible]	0750	0750	0750	[illegible]	0900
OCT	[illegible]	.04	[illegible]	.05	.07	.08	.08	.12	[illegible]	.12	.13	.14
DATE	[illegible]	02	02	02	[illegible]	02	[illegible]	02	[illegible]	02	02	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1500	1517	[illegible]	[illegible]	[illegible]	1411	[illegible]
NOV	[illegible]	.03	.03	[illegible]	.06	[illegible]	.11	.13	[illegible]	[illegible]	.14	.15
DATE	12+	[illegible]	[illegible]	12	[illegible]	12+	12	12	12	12	[illegible]	[illegible]
TIME	2215	2159	[illegible]	2152	2200	[illegible]	2200	2218	[illegible]	2300	2330	2253
DEC	T	.01	.02	.02	.03	[illegible]	.06	.06	.08	.09	.11	.11
DATE		23+	[illegible]	23+	[illegible]	23	[illegible]	[illegible]	23	[illegible]	[illegible]	23
TIME		0710	[illegible]	[illegible]	0445	0451	0500	[illegible]	[illegible]	0614	[illegible]	0654
YEAR	.32	[illegible]	[illegible]	[illegible]	[illegible]	.87	.94	[illegible]	[illegible]	1.28	1.31	1.32
MONTH	[illegible]	08	06	06	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]

GREAT FALLS, MONTANA

	5	10	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN		T	.01	.01	.02	.03	[illegible]	.04	.05	.06	.07	[illegible]
DATE			26	26	26	26	26	[illegible]	26	[illegible]	26	[illegible]
TIME			1830	[illegible]	1840	[illegible]	1920	[illegible]	1950	2000	[illegible]	[illegible]
FEB	.01	.02	.03	.04	.05	.07	.09	.09	[illegible]	[illegible]	.09	[illegible]
DATE	[illegible]	[illegible]	[illegible]	17	[illegible]	17	[illegible]	17	[illegible]	[illegible]	17	[illegible]
TIME	[illegible]	1920	[illegible]	1920	1930	[illegible]	1945	[illegible]	[illegible]	1945	1945	[illegible]
MAR	T	.01	.02	.03	.04	.04	[illegible]	[illegible]	.06	.06	.06	[illegible]
DATE		[illegible]	26	26	[illegible]	26	26	[illegible]	[illegible]	26	26	[illegible]
TIME		[illegible]	[illegible]	1330	1340	1350	[illegible]	[illegible]	1400	1400	[illegible]	1400
APR	.07	[illegible]	[illegible]	.14	[illegible]	.24	[illegible]	.36	[illegible]	.45	.50	.58
DATE	[illegible]	20	20	[illegible]	20	20	20	[illegible]	[illegible]	[illegible]	[illegible]	20
TIME	1300	[illegible]	1310	1315	1325	[illegible]	[illegible]	1415	1425	[illegible]	1425	1430
MAY	.02	.04	[illegible]	.07	[illegible]	.13	[illegible]	.24	.26	[illegible]	.37	.42
DATE	25	25	[illegible]	25	[illegible]	25	25	25	25	[illegible]	25	[illegible]
TIME	[illegible]	[illegible]	0910	[illegible]	0902	0900	[illegible]	[illegible]	[illegible]	0930	[illegible]	1030
JUN	[illegible]	.05	.11	.13	[illegible]	.21	.25	.27	.28	.29	.30	.31
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	[illegible]	02	[illegible]	02	02	02	02
TIME	1107	1112	1117	1122	1132	1147	1202	[illegible]	1225	1240	1310	1330
JUL	.04	[illegible]	.04	.04	[illegible]	[illegible]	[illegible]	.10	[illegible]	.10	.10	[illegible]
DATE	[illegible]	01	[illegible]	01	01	[illegible]	01	01	01	[illegible]	01	01
TIME	[illegible]	0010	0015	0020	0030	0045	0100	0100	[illegible]	0100	0100	0100
AUG	.02	[illegible]	[illegible]	.05	.05	.09	[illegible]	.11	.13	[illegible]	.18	.20
DATE	31	31	31	31	31	[illegible]	[illegible]	31	31	[illegible]	31	31
TIME	1705	1710	1715	[illegible]	1725	2032	2100	[illegible]	2127	2100	2130	[illegible]
SEP	[illegible]	[illegible]	.06	.08	.11	.12	[illegible]	.21	.25	[illegible]	.32	.34
DATE	[illegible]	14	14	[illegible]	[illegible]	[illegible]	[illegible]	01	[illegible]	01	01	01
TIME	[illegible]	1340	1345	[illegible]	1345	[illegible]	1400	1820	1840	1900	1900	1900
OCT	.02	.03	.04	.04	.07	.10	.12	[illegible]	[illegible]	[illegible]	.14	.16
DATE	[illegible]	01	[illegible]	[illegible]	[illegible]	[illegible]	01	[illegible]	01	[illegible]	31	[illegible]
TIME	1320	[illegible]	1330	1335	[illegible]	1345	1345	[illegible]	1410	[illegible]	0000	0000
NOV	.02	[illegible]	.04	[illegible]	.06	.06	.07	.08	[illegible]	.12	.13	.14
DATE	12	12	[illegible]	12	01	01	01	[illegible]	16	[illegible]	16	[illegible]
TIME	[illegible]	[illegible]	1545	1540	1855	[illegible]	1915	1320	1340	1330	[illegible]	1300
DEC	.02	.02	.02	.03	[illegible]	.08	.12	.14	[illegible]	.22	.25	.32
DATE	17	17	[illegible]	17	[illegible]	[illegible]	17	[illegible]	17	17	17	17
TIME	[illegible]	2115	2045	[illegible]	2100	[illegible]	2100	2120	[illegible]	2100	2100	2100
YEAR	[illegible]	.09	.11	.14	.18	.24	.28	.36	[illegible]	.45	.50	.58
MONTH	04	04	[illegible]	04	04	04	[illegible]	[illegible]	04	04	[illegible]	[illegible]

HAVRE, MONTANA

	5	10	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	T	T	[illegible]	T	[illegible]	T	T	T	T	T	[illegible]	T
DATE												
TIME												
FEB	[illegible]	[illegible]	[illegible]	.05	.06	[illegible]	.10	[illegible]	.14	.16	.18	.22
DATE	[illegible]	[illegible]	[illegible]	20	20	20	20	20	20	20	20	11
TIME	[illegible]	[illegible]	[illegible]	0350	0400	0415	[illegible]	0430	0440	0500	0515	[illegible]
MAR	[illegible]	[illegible]	[illegible]	.03	.03	.03	.03	[illegible]	.03	.03	.03	.03
DATE	[illegible]	[illegible]	[illegible]	01	01	01	01	01	[illegible]	01	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1910	1910	1928	[illegible]	[illegible]	1928	1928	[illegible]	[illegible]	1928
APR	[illegible]	[illegible]	[illegible]	.10	.12	.15	[illegible]	[illegible]	.28	.31	[illegible]	.46
DATE	[illegible]	[illegible]	[illegible]	20	[illegible]	20	[illegible]	[illegible]	[illegible]	[illegible]	20	20
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0633	0606	[illegible]	[illegible]	[illegible]	0633
MAY	.02	.04	[illegible]	.08	[illegible]	.12	[illegible]	[illegible]	[illegible]	.22	.24	.26
DATE	[illegible]	[illegible]	25	25	[illegible]	25	[illegible]	25	25	25	25	25
TIME	[illegible]	[illegible]	1830	[illegible]	1850	[illegible]	1900	1915	[illegible]	1945	[illegible]	2030
JUN	.03	[illegible]	.07	.09	.11	.15	.21	[illegible]	.31	.35	.38	.40
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	14	15+	[illegible]	15	15	[illegible]
TIME	2250	2250	[illegible]	2250	[illegible]	[illegible]	[illegible]	0238	0238	0247	0315	1335
JUL	.03	[illegible]	.06	.08	.10	[illegible]	.13	.14	.19	.24	.26	[illegible]
DATE	[illegible]	[illegible]	01	[illegible]	[illegible]	01	01	01	[illegible]	[illegible]	01	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0222	0233	0245	0300	0320	[illegible]	0400	0430	0440
AUG	[illegible]	.15	[illegible]	.15	[illegible]	.16	[illegible]	.16	[illegible]	.16	.16	.16
DATE	11	[illegible]	11	11	[illegible]	11	[illegible]	11	[illegible]	11	[illegible]	[illegible]
TIME	1320	1330	1330	[illegible]	1347	1347	1347	1347	1347	1347	1347	[illegible]
SEP	.03	.05	.06	.07	.10	[illegible]	.18	.21	.23	[illegible]	.33	.38
DATE	[illegible]	07	07	[illegible]	07	07	[illegible]	[illegible]	07	07	07	07
TIME	0910	[illegible]	[illegible]	[illegible]	0845	0910	0915	0925	0930	1005	1035	[illegible]
OCT	[illegible]	[illegible]	[illegible]	.24	.30	[illegible]	.30	.31	[illegible]	.31	.32	[illegible]
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	02	[illegible]	02	[illegible]	02	02	[illegible]
TIME	[illegible]	1040	1040	[illegible]	[illegible]	1100	1100	[illegible]	1115	1115	1115	1115
NOV	.03	[illegible]	.04	.04	[illegible]	.06	.06	[illegible]	.10	[illegible]	.13	.14
DATE	12	[illegible]	[illegible]	12	20	01	[illegible]	17	20	[illegible]	17	[illegible]
TIME	[illegible]	1510	1515	1520	[illegible]	1500	[illegible]	1700	1950	1700	1700	1700
DEC	[illegible]	[illegible]	.02	.03	.04	[illegible]	.07	.08	[illegible]	.11	.13	.14
DATE	[illegible]	05	05	05	[illegible]	[illegible]	[illegible]	05	05	[illegible]	05	05
TIME	0905	[illegible]	0915	0920	[illegible]	0945	1000	1020	1040	[illegible]	[illegible]	1100
YEAR	.16	[illegible]	.22	.24	.30	[illegible]	[illegible]	[illegible]	[illegible]	.35	[illegible]	.46
MONTH	10	10	10	10	10	10	10	10	[illegible]	[illegible]	04	04

HELENA, MONTANA

	5	10	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	[illegible]	.04	.04	.04	[illegible]	.04	.05	.06	.06	.07
DATE	[illegible]	25	25	25	[illegible]	25	26	26	26	26	[illegible]	26
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2355	[illegible]	0020	0045	[illegible]	0130	0200
FEB		T	T	T	.01	[illegible]	.02	.02	[illegible]	.03	[illegible]	.04
DATE					05	05	[illegible]	05	[illegible]	05	[illegible]	05
TIME					1645	[illegible]	1700	1700	[illegible]	1720	1800	1800
MAR	.01	[illegible]	.01	.01	[illegible]	[illegible]	.01	[illegible]	.01	.01	[illegible]	.01
DATE	26	[illegible]	[illegible]	[illegible]	26	26	26	26	26	26	26	26+
TIME	[illegible]	1235	1235	1235	1235	[illegible]	[illegible]	[illegible]	1235	[illegible]	1235	1235
APR	.05	[illegible]	[illegible]	.07	.09	.10	.12	.12	[illegible]	.13	[illegible]	[illegible]
DATE	06	06	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0644	0644	0644	0644	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0745	0745
MAY	.06	[illegible]	[illegible]	.09	.11	.12	.16	.19	.28	[illegible]	[illegible]	[illegible]
DATE	[illegible]	03	03	03	03	[illegible]	25	25	[illegible]	[illegible]	25	25
TIME	[illegible]	0450	0450	0450	0450	0400	[illegible]	0400	0402	0402	0402	0400
JUN	.05	[illegible]	.11	.11	.12	.12	.12	[illegible]	.15	.18	.22	[illegible]
DATE	[illegible]	29	29	29	[illegible]	29	29	[illegible]	[illegible]	14	[illegible]	14
TIME	1605	1605	1605	1605	[illegible]	1600	[illegible]	[illegible]	1635	[illegible]	1640	[illegible]
JUL	T	[illegible]	[illegible]	.02	.03	[illegible]	[illegible]	.04	.04	.05	.05	.05
DATE		21	21	[illegible]	21	21	21	21	21	21	21	21
TIME		[illegible]	0640	0640	0640	[illegible]	0650	[illegible]	0730	0750	0800	[illegible]
AUG	.06	[illegible]	.09	.10	.12	[illegible]	[illegible]	.14	.14	[illegible]	[illegible]	.14
DATE	27	[illegible]	[illegible]	06	06	[illegible]	06	06	06	[illegible]	06	[illegible]
TIME	1305	0155	[illegible]	[illegible]	0155	0155	0155	[illegible]	[illegible]	[illegible]	[illegible]	0155
SEP	[illegible]	.04	[illegible]	.07	.08	[illegible]	.14	.15	.16	[illegible]	[illegible]	.17
DATE	[illegible]	[illegible]	[illegible]	[illegible]	07	[illegible]	07	07	07	07	07	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1755	[illegible]	[illegible]	1825	[illegible]	1915
OCT	[illegible]	[illegible]	.05	.06	[illegible]	.06	.10	[illegible]	.15	.16	.20	.23
DATE	[illegible]	31	31	[illegible]	[illegible]	31	31	[illegible]	[illegible]	31	31	31
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1650	[illegible]	1650	1650	1650	[illegible]	1650	[illegible]
NOV	[illegible]	.03	[illegible]	[illegible]	.06	.06	[illegible]	[illegible]	[illegible]	.24	.25	.25
DATE	[illegible]	06	06	[illegible]	[illegible]	06	06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0700	[illegible]	0700	[illegible]	0800	0750	0700	0700	[illegible]	0700
DEC	[illegible]	[illegible]	[illegible]	.03	.03	.04	.06	[illegible]	.08	[illegible]	[illegible]	.13
DATE	[illegible]	27	[illegible]	[illegible]	[illegible]	[illegible]	27	27	[illegible]	27	[illegible]	27
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1245	[illegible]	1145	[illegible]	[illegible]	[illegible]	1015	0945
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.19	.28	.34	.38	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	05	05	[illegible]

KALISPELL, MONTANA

	5	10	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	.01	[illegible]	.02	.03	[illegible]	.05	[illegible]	.07	.07	.08	.08	.09
DATE	[illegible]	12	[illegible]	12	[illegible]	[illegible]	12	12	[illegible]	12	[illegible]	12
TIME	0935	0940	0940	[illegible]	[illegible]	[illegible]	[illegible]	1020	1040	[illegible]	1130	1200
FEB	.01	.02	.02	.03	[illegible]	.06	[illegible]	.09	.11	[illegible]	.15	.18
DATE	10	10	10	10	[illegible]	10	10	10	[illegible]	10	10	10
TIME	[illegible]	[illegible]	1715	1720	1730	1745	[illegible]	[illegible]	1820	1800	1830	1935
MAR	.02	.04	.05	.06	.08	[illegible]	[illegible]	.13	.13	[illegible]	.13	[illegible]
DATE	01	[illegible]	[illegible]	01	[illegible]	[illegible]	01	[illegible]	[illegible]	[illegible]	01	01
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1355	1400	[illegible]	1400	1400
APR	.01	.02	.02	.03	[illegible]	[illegible]	.05	[illegible]	[illegible]	.07	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]	06	06	[illegible]	06	06	[illegible]
TIME	[illegible]	0150	0150	[illegible]	[illegible]	0155	[illegible]	0200	0210	[illegible]	0400	0400
MAY	.02	.03	[illegible]	.04	.06	[illegible]	[illegible]	.10	[illegible]	.13	.17	.20
DATE	25	25	25	25	25	25	[illegible]	[illegible]	[illegible]	25	25	25
TIME	0150	[illegible]	0150	0150	[illegible]	0150	0205	[illegible]	[illegible]	0305	[illegible]	0405
JUN	.02	[illegible]	.06	.07	[illegible]	.10	.13	[illegible]	.22	.25	.32	[illegible]
DATE	[illegible]	[illegible]	03	03	03	14	[illegible]	14	14	14	14	14
TIME	[illegible]	0540	1847	1855	1905	0645	0615	0750	0745	0745	0745	0745
JUL	T	T	T	.01	[illegible]	.02	[illegible]	.02	.02	.02	.03	[illegible]
DATE				21	[illegible]	21	21	21	21	21	21	[illegible]
TIME				[illegible]	[illegible]	1249	1249	[illegible]	[illegible]	1249	[illegible]	1249
AUG	.03	[illegible]	.06	.07	[illegible]	.07	[illegible]	.10	.12	.14	.14	.14
DATE	[illegible]	11	11	[illegible]	[illegible]	11	31	31	31	[illegible]	31	31
TIME	0647	[illegible]	0647	0700	0702	0702	0010	0010	0010	0040	0040	0040
SEP	.02	.03	.03	.04	.04	.05	.06	.08	.09	.10	.12	.14
DATE	06	[illegible]	06	06	06	06	19	19	[illegible]	[illegible]	[illegible]	[illegible]
TIME	0637	0637	0645	[illegible]	0655	0700	1335	[illegible]	1400	1415	1450	1515
OCT	.02	.03	.04	.05	.06	.08	[illegible]	[illegible]	[illegible]	.19	.22	.24
DATE	28	28	[illegible]	[illegible]	[illegible]	[illegible]	28	28	28	28	[illegible]	[illegible]
TIME	1510	1510	[illegible]	1510	1510	[illegible]	1745	1810	[illegible]	1825	[illegible]	[illegible]
NOV	.03	.04	.05	.06	[illegible]	.11	.15	.17	[illegible]	[illegible]	.19	.21
DATE	16	16	16	12	12	12	12	12	12	12	12	09
TIME	[illegible]	[illegible]	1146	1305	[illegible]	[illegible]	[illegible]	1350	1350	1350	[illegible]	0815
DEC	.01	[illegible]	.03	.03	.05	.06	.07	.08	.10	[illegible]	.14	.15
DATE	[illegible]	20	20	20	20	[illegible]	[illegible]	[illegible]	20	20	07	[illegible]
TIME	[illegible]	1850	1850	[illegible]	1850	1850	1905	1805	1805	[illegible]	1350	1415
YEAR	[illegible]	.06	[illegible]	.07	[illegible]	[illegible]	.15	[illegible]	.22	.25	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	11	[illegible]	06	[illegible]	[illegible]	[illegible]

MISSOULA, MONTANA

	5	10	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	T	[illegible]	.01	[illegible]	.03	[illegible]	.03	[illegible]	[illegible]	.05	.05	[illegible]
DATE		16	[illegible]	16	[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]	16	16
TIME		[illegible]	[illegible]	2035	2045	2100	2100	0500	[illegible]	0500	0530	0600
FEB	T	[illegible]	.02	.02	.03	.03	[illegible]	.04	.05	.06	.07	[illegible]
DATE		10	10	[illegible]	[illegible]	10	[illegible]	10	[illegible]	10	[illegible]	[illegible]
TIME		[illegible]	2050	2055	2115	[illegible]	2130	2150	2150	2200	[illegible]	2300
MAR	[illegible]	[illegible]	.02	.02	[illegible]	.03	[illegible]	.04	.05	[illegible]	[illegible]	.07
DATE	22+	22+	[illegible]	22+	[illegible]	22	[illegible]	22	22	[illegible]	[illegible]	22
TIME	1425	[illegible]	1545	1545	1545	[illegible]	1530	1530	1545	1615	1645	1645
APR	[illegible]	[illegible]	.05	[illegible]	.05	.05	.05	[illegible]	[illegible]	.08	.08	[illegible]
DATE	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	17	20	20	20	20	[illegible]
TIME	0105	[illegible]	0109	0109	[illegible]	0109	0109	0800	0800	0800	[illegible]	0800
MAY	.03	[illegible]	.05	[illegible]	.06	[illegible]	[illegible]	[illegible]	.10	[illegible]	[illegible]	.12
DATE	[illegible]	24	24	24	24	24	[illegible]	24	24	[illegible]	24	[illegible]
TIME	2100	[illegible]	2105	2110	2115	2135	2155	2155	2210	2230	2200	[illegible]
JUN	.03	[illegible]	.07	.09	[illegible]	[illegible]	.22	.27	.32	[illegible]	[illegible]	.52
DATE	14	14	14	[illegible]	[illegible]	14	14	14	[illegible]	14	14	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0715	0735	0740	0805	0805	0805	0805	0805	0805
JUL	[illegible]	[illegible]	.02	[illegible]	[illegible]	[illegible]	[illegible]	.07	.08	[illegible]	.08	.08
DATE	20	20	[illegible]	20	[illegible]	[illegible]	[illegible]	20	20	[illegible]	20	[illegible]
TIME	1650	[illegible]	1650	1650	1650	1650	[illegible]	[illegible]	[illegible]	[illegible]	1730	1730
AUG	[illegible]	[illegible]	.09	.09	.09	[illegible]	.10	.14	[illegible]	[illegible]	[illegible]	[illegible]
DATE	13	13	[illegible]	13	13	13	13	13	13	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1938	[illegible]	[illegible]	[illegible]	2020	2048	2048	[illegible]	[illegible]	2048
SEP	.05	[illegible]	[illegible]	.06	[illegible]	.08	.10	.12	.13	[illegible]	[illegible]	.16
DATE	25	25	25	[illegible]	[illegible]	24	24	24	[illegible]	[illegible]	24	[illegible]
TIME	1515	[illegible]	1515	1922	[illegible]	0500	0515	[illegible]	0555	[illegible]	[illegible]	0715
OCT	.01	[illegible]	[illegible]	.04	.06	[illegible]	.08	[illegible]	.11	[illegible]	.13	[illegible]
DATE	[illegible]	[illegible]	24	[illegible]	24	24	24	24	31	31	31	[illegible]
TIME	2245	[illegible]	2225	2300	[illegible]	2325	[illegible]	2325	1900	[illegible]	1900	[illegible]
NOV	.02	[illegible]	[illegible]	.04	.06	.08	.16	[illegible]	.24	.26	.30	.33
DATE	[illegible]	[illegible]	07	07	07	07	07	07	07	07	07	07
TIME	2347	[illegible]	0000	0005	[illegible]	0025	[illegible]	0114	0132	0150	[illegible]	[illegible]
DEC	.02	[illegible]	[illegible]	.03	[illegible]	.06	.08	.10	[illegible]	.14	[illegible]	.19
DATE	[illegible]	[illegible]	[illegible]	28	[illegible]	28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0245	0245	0245	0245	0245	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	[illegible]	.09	.09	.09	.13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	08+	06	06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MAXIMUM SHORT DURATION PRECIPITATION

Maximum precipitation in inches for 5 to 180 minutes

[illegible], NEBRASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	.02	.03	[illegible]	[illegible]	.08	.10	.13	[illegible]	[illegible]	.19
DATE			20		20	20	[illegible]	20	20	20	20	20
TIME			[illegible]	1740	1745	1745	[illegible]	1820	1840	1900	[illegible]	1930
FEB		[illegible]	T	[illegible]	.01	[illegible]	.03	.04	.05	.06	[illegible]	.08
DATE				25	[illegible]	[illegible]	25	25	25	[illegible]	26	[illegible]
TIME				2300	[illegible]	2315	[illegible]	2345	2345	0000	0030	[illegible]
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.19	.22	.23	.25	.31	[illegible]
DATE	[illegible]		[illegible]	[illegible]	13	13	[illegible]	13	[illegible]	23	23	23
TIME	[illegible]	[illegible]	1350	1355	[illegible]	[illegible]	1440	[illegible]	1515	1315	1510	[illegible]
APR	.04	[illegible]	[illegible]	.12	.15	[illegible]	.24	[illegible]	.31	[illegible]	.35	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]	19	[illegible]	19	[illegible]	19
TIME	[illegible]	[illegible]	0647	0650	[illegible]	[illegible]	0715	0730	0740	0750	0800	[illegible]
MAY	[illegible]	.31	.33	[illegible]	[illegible]	.58	.82	.92	.92	.92	1.08	[illegible]
DATE	[illegible]	[illegible]	26	[illegible]	26	[illegible]	26	[illegible]	26	26	26	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1150	1158	1137	1151	[illegible]	1310	[illegible]	1310	1351
JUN	[illegible]	[illegible]	[illegible]	.15	.19	.25	.35	.40	[illegible]	.43	[illegible]	[illegible]
DATE	[illegible]	[illegible]	04	[illegible]	02	[illegible]	04	[illegible]	04	04	[illegible]	04
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0534	0549	0609	0629	0649	[illegible]	[illegible]
JUL	[illegible]	[illegible]	.28	[illegible]	.32	[illegible]	[illegible]	.44	.46	[illegible]	[illegible]	.51
DATE			10		24	24	24	24	24	[illegible]	24	24
TIME	[illegible]	[illegible]	[illegible]	0330	[illegible]	0350	0405	0425	0445	0505	0535	0605
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.83	[illegible]	.93	1.00	1.02	1.05	1.05
DATE	[illegible]	15	15	15	15	[illegible]	15	15	15	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0120	0136	0149	0210	0227	0251	0320	[illegible]
SEP	[illegible]	[illegible]	[illegible]	.63	[illegible]	[illegible]	[illegible]	1.11	1.20	1.62	1.75	1.75
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29	29
TIME	[illegible]	[illegible]	2129	[illegible]	2124	[illegible]	2124	2134	[illegible]	2119	2149	2217
OCT	[illegible]	[illegible]	[illegible]	.23	[illegible]	[illegible]	.32	[illegible]	.35	.42	.53	.60
DATE	[illegible]	[illegible]	[illegible]	09	09	[illegible]	09	09	[illegible]	11	[illegible]	[illegible]
TIME	[illegible]	1756	1801	[illegible]	[illegible]	1831	1846	1850	[illegible]	0419	0431	0431
NOV	[illegible]	[illegible]	.13	.15	.22	.28	.37	[illegible]	[illegible]	.54	.72	.90
DATE	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2022	[illegible]	2047	2102	2122	2142	2202	[illegible]	2302
DEC	[illegible]	.03	[illegible]	.05	.07	[illegible]	.13	.17	.18	[illegible]	[illegible]	.31
DATE	[illegible]	[illegible]	[illegible]	24	[illegible]	24	[illegible]	24	[illegible]	[illegible]	24	24
TIME	[illegible]	[illegible]	[illegible]	0445	0455	[illegible]	0505	0545	0605	[illegible]	0655	0725
YEAR	[illegible]	[illegible]	[illegible]	.74	[illegible]	[illegible]	.93	1.11	1.20	1.62	1.75	1.75
MONTH	[illegible]	[illegible]	08	[illegible]	[illegible]	[illegible]	09	09	[illegible]	09	09	09

LINCOLN, NEBR. AP

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	T	.01	.02	.03	.05	.07	.09	.10	.12	.14	.16	.18
DATE		20	20	20	20	20	20	20	20	20	20	20
TIME		2140	2140	2145	2145	2145	2200	2200	2200	2200	2230	2300
FEB	T	T	.01	[illegible]	.02	[illegible]	.04	.05	.06	.07	.08	.10
DATE			01	01	01	[illegible]	01	01	01	01	01	01
TIME			0915	0920	0930	0945	1000	1000	1000	1000	1030	1100
MAR	.04	.07	.10	.12	.16	.19	.24	.28	.32	.35	.42	[illegible]
DATE	10	10	10	10	10	10	10	31	31	31	31	31
TIME	2200	2200	2200	2215	2215	2230	2230	0930	0930	1000	1000	1000
APR	.36	.44	.49	.49	.50	.53	.54	.54	.58	.58	.60	[illegible]
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	1353	1357	1402	1406	1415	1430	1445	1505	1525	1545	1615	1645
MAY	.24	.45	.49	.55	.62	.77	.87	.92	.93	.96	.98	[illegible]
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	0445	0450	0450	[illegible]	0450	0450	0500	0510	0510	0510	0510	0510
JUN	.03	.05	.06	.08	.09	[illegible]	.11	[illegible]	.17	.19	.25	[illegible]
DATE	05	05	05	03	03	03	03	03	03	03	03	03
TIME	1620	1620	1620	2145	2145	2145	2200	2240	2240	2355	2355	2355
JUL	.24	.45	.53	.65	.80	.84	.85	.86	.87	.87	.87	.88
DATE	03	03	03	03	03	03	03	03	03	03	03	[illegible]
TIME	2135	2140	2145	2150	2200	2215	2230	2250	2335	2335	2335	0630
AUG	.07	.14	.17	[illegible]	.24	.26	.29	.30	.35	.38	.39	.39
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	0212	0212	0212	0212	[illegible]	0212	0212	0212	0212	0212	0212	0212
SEP	.15	.25	.32	.42	.50	.59	.79	.86	.91	1.06	1.25	1.33
DATE	25	25	25	25	25	25	03	03	03	03	03	03
TIME	2300	2300	2307	2313	2313	2313	0102	[illegible]	0145	0210	0235	0305
OCT	.32	.47	.53	.54	.56	.57	[illegible]	.65	.65	.72	.85	.91
DATE	09	09	09	09	09	09	09	09	[illegible]	10	10	10
TIME	[illegible]	0435	0438	0440	0452	0458	0500	0500	0500	0100	0138	0200
NOV	.14	.17	.17	.17	.22	.32	.39	.46	.54	[illegible]	.65	.67
DATE	19	19	19	19	20	20	20	20	20	20	20	20
TIME	1932	1932	1932	1932	0045	0045	0045	0045	0045	0110	0110	0110
DEC	.02	.03	.04	.05	.08	[illegible]	.15	[illegible]	.24	.28	.31	.33
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	0427	0437	0442	0447	[illegible]	[illegible]	0527	0547	0607	0627	0657	0727
YEAR	.36	.47	.53	.65	.80	.84	.87	.92	.93	1.06	1.25	1.33
MONTH	[illegible]	10	10+	07	07	07	05	05	[illegible]	09	09	09

NORFOLK, NEBRASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.02	.04	.06	.07	[illegible]	.14	.18	.24	.27	.30	.35	.38
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	2015	2015	2015	2015	[illegible]	2030	2030	2050	2110	2130	2130	2230
FEB	T	T	.01	.01	.02	.03	.04	.04	.05	.06	.07	.08
DATE			12	12	12	12	12	12	12	12	12	12
TIME			1930	1930	1930	1945	2100	2100	2100	2100	2130	2200
MAR	.08	.13	.14	.17	.25	.28	.32	.40	.47	.58	.63	.67
DATE	11	11	11	13	13	13	13	13	13	13	13	11
TIME	0040	0040	0040	1517	1528	1528	1532	1609	1632	1617	1647	1715
APR	.09	.12	.13	.14	.17	.19	.25	.33	.38	.43	.48	.52
DATE	19	19	19	19	19	19	24	24	24	24	24	25
TIME	1438	1438	1448	1458	1505	1455	2233	2340	2340	2345	2345	0000
MAY	.20	.31	.35	.42	.50	.60	.77	.86	1.06	1.16	1.29	1.38
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	1450	1455	1500	1500	1500	1500	1508	1500	1504	1522	1550	1700
JUN	.17	.27	.29	.29	.29	.32	.35	.37	.39	.41	.45	.50
DATE	14	14	14	14	14	12	12	12	12	12	12	12
TIME	1345	1346	1348	1351	1408	0318	0335	0355	0412	0430	0500	0530
JUL	.35	.85	.93	1.03	1.30	1.43	1.48	1.50	1.50	1.50	1.50	1.50
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	1912	1917	1922	1927	1930	1930	1945	1950	1950	1950	1950	1950
AUG	.28	.35	.41	.48	.50	.52	.57	.65	.66	.66	.66	.66
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	1755	1759	1800	1801	1815	1830	1845	1902	1910	1910	1910	1910
SEP	.15	.21	.24	.32	.42	.46	.47	.47	[illegible]	.55	.62	.82
DATE	24	25	25	25	25	25	25	25	03	03	03	03
TIME	0704	1855	1900	1905	[illegible]	1925	1930	1930	0045	0100	0130	0200
OCT	.08	.13	.14	.16	.18	.22	.23	.24	.27	.28	.29	.29
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	0615	1933	1933	1933	1944	1958	2013	2032	2038	2110	2140	2140
NOV	.09	.11	.12	.14	[illegible]	.24	.30	.37	.44	.45	.45	.52
DATE	14	14	14	14	19	19	20	20	20	20	20	20
TIME	1010	1010	1010	1010	2353	2353	0006	0025	0025	0045	0045	0032
DEC	.02	.03	.04	.05	.08	.09	.10	.11	.15	.19	.22	.23
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	0700	0700	0705	0710	0715	0735	0750	0810	0820	0835	0900	[illegible]
YEAR	.35	.85	.93	1.03	1.30	1.43	1.48	1.50	1.50	1.50	1.50	1.50
MONTH	07	07	07	07	07	07	07	07	07	07	07	07

NORTH PLATTE, NEBRASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.02	.03	[illegible]	[illegible]	.06	[illegible]	[illegible]	.10	[illegible]	[illegible]	[illegible]
DATE	[illegible]	26	26	[illegible]	[illegible]	26	26	[illegible]	[illegible]	26	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2005	[illegible]	2030	2045	2045	2050	2050	[illegible]	2140
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.03	.04	.04	.05	[illegible]	.06	[illegible]
DATE			[illegible]	25	[illegible]	25	25	[illegible]	25	[illegible]	25	25
TIME			1330	1330	[illegible]	1355	[illegible]	1420	[illegible]	[illegible]	1500	1500
MAR	.16	[illegible]	[illegible]	[illegible]	[illegible]	.54	[illegible]	.56	.56	.57	.57	.59
DATE	[illegible]	[illegible]	[illegible]	13	13	13	[illegible]	13	[illegible]	13	13	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1310	1335	1340	1400	1420	1440	1510	1540
APR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.22	.22	.22	.22	[illegible]
DATE	[illegible]	[illegible]	[illegible]	19	[illegible]	19	[illegible]	[illegible]	19	[illegible]	19	19
TIME	[illegible]	1330	1330	1330	1330	1600	1600	1630	1705	1705	1705	1705
MAY	[illegible]	[illegible]	.18	.22	.38	[illegible]	[illegible]	.59	[illegible]	.69	[illegible]	[illegible]
DATE	[illegible]	25	[illegible]	25	25	25	25	25	25	25	[illegible]	[illegible]
TIME	[illegible]	1930	[illegible]	1930	1930	[illegible]	[illegible]	[illegible]	1945	1945	1945	1945
JUN	[illegible]	.10	.11	.11	.17	.23	[illegible]	.32	.36	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	12	12	[illegible]	12	[illegible]	[illegible]	12	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2358	0314	0314	0314	0314	0314	0314	0314	[illegible]
JUL	[illegible]	[illegible]	.28	.34	[illegible]	.54	.56	.62	[illegible]	.69	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]	18	[illegible]	[illegible]	[illegible]	18	19
TIME	[illegible]	[illegible]	1455	[illegible]	[illegible]	[illegible]	1415	1415	1415	1415	1415	1600
AUG	[illegible]	[illegible]	.58	[illegible]	[illegible]	[illegible]	1.44	1.50	1.58	1.58	1.58	1.58
DATE	22	22	[illegible]	13	[illegible]	13	[illegible]	13	13	[illegible]	13	[illegible]
TIME	[illegible]	[illegible]	0025	0025	0025	0025	0025	0025	0025	0025	0025	0025
SEP	.10	.16	[illegible]	.19	[illegible]	.24	.39	[illegible]	.52	.63	.73	[illegible]
DATE	[illegible]	[illegible]	25	25	25	28	28	[illegible]	[illegible]	[illegible]	28	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1745	[illegible]	0220	[illegible]	0220	[illegible]	[illegible]	[illegible]
OCT	.04	[illegible]	.08	[illegible]	.12	.22	[illegible]	.32	.36	[illegible]	.46	.48
DATE	[illegible]	[illegible]	11	[illegible]	11	11	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]
TIME	[illegible]	[illegible]	0915	[illegible]	[illegible]	0915	0925	0915	[illegible]	0915	[illegible]	0915
NOV	[illegible]	.02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.17	[illegible]	.24	.26	.29
DATE	[illegible]	19	[illegible]	19	19	19	[illegible]	[illegible]	[illegible]	19	19	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2145	[illegible]	2130	[illegible]	2130	[illegible]	2100	2105	2000
DEC	[illegible]	[illegible]	[illegible]	.04	.05	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.16	.17
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	1650	[illegible]	1700	[illegible]	1840	1735	1220	1810	[illegible]	1850	1850	1950
YEAR	.25	[illegible]	.58	[illegible]	1.20	[illegible]	1.44	1.50	1.58	[illegible]	1.58	1.58
MONTH	[illegible]	[illegible]	08	[illegible]	08	[illegible]	[illegible]	08	[illegible]	[illegible]	08	[illegible]

OMAHA, NEBRASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.01	.02	.03	[illegible]	.05	.07	.08	.09	[illegible]	.16	.18	.22
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	1030	1030	1030	1035	1045	[illegible]	[illegible]	1100	1120	1120	1130	1200
FEB	T	T	T	.01	.01	.02	.03	.04	.05	.06	.08	.09
DATE				13	13	13	13	13	13	13	13	13
TIME				0330	0330	0345	[illegible]	0340	0340	0400	0430	0500
MAR	.08	[illegible]	[illegible]	.14	.21	.31	.40	.49	.51	.56	.60	.71
DATE	13	13	13	10	10	10	10	10	10	10	10	10
TIME	1425	1425	1425	1845	1830	1815	1815	1815	1815	1730	1730	1730
APR	.13	.25	.30	.33	.44	.62	.75	.97	[illegible]	[illegible]	1.46	1.55
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158
MAY	[illegible]	.23	.23	.29	.49	.57	.58	.58	.59	.59	.59	.59
DATE	01	06	04	04	04	04	04	04	04	04	04	04
TIME	1747	[illegible]	2041	2041	2041	2041	2041	2041	2041	2041	2041	2041
JUN	.17	.22	.24	.25	.26	.26	.26	.27	.36	.37	.39	.41
DATE	04	04	04	04	04	04	04	04	30	30	30	30
TIME	0827	0827	0827	0827	0827	0827	0827	0827	0745	0745	0745	0745
JUL	.18	[illegible]	.33	.44	.51	.61	.64	.67	.77	.82	1.07	1.07
DATE	24	24	24	01	02	02	02	02	02	02	02	02
TIME	0539	0539	0539	2232	0007	0007	0007	0007	0007	0007	0007	0007
AUG	.40	[illegible]	.63	.64	[illegible]	.67	.67	.67	.67	.67	.67	.67
DATE	08	08	08	08	09	08	08	08	08	08	08	08
TIME	2155	2159	2200	2205	[illegible]	2230	2230	2230	2230	2230	2230	2230
SEP	.44	.60	.71	.89	1.02	[illegible]	1.51	2.12	2.51	2.57	2.60	3.14
DATE	23	23	25	25	25	25	25	25	25	25	25	25
TIME	1350	[illegible]	2051	2051	2100	2200	2215	2200	2215	2245	2332	2340
OCT	.07	.12	.15	.17	.21	.25	.34	.44	.60	.66	.73	.75
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	1616	[illegible]	1617	1617	[illegible]	1617	1616	1616	1616	[illegible]	1657	1715
NOV	[illegible]	.09	[illegible]	.13	.14	[illegible]	.20	.28	.33	.35	.36	.38
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	1808	1759	1759	1759	0130	[illegible]	0100	0045	0045	0045	0045	0045
DEC	.02	.03	[illegible]	[illegible]	[illegible]	.12	.15	.22	.27	.31	.39	.42
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	0445	0445	0445	0445	0445	0445	0445	0445	0445	0445	0445	0445
YEAR	.44	.62	.71	.89	1.02	1.28	[illegible]	2.12	2.51	2.57	2.60	3.14
MONTH	09	08	09	09	09	09	09	09	09	09	09	09

SCOTTSBLUFF, NEBRASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	T	.01	.02	.02	.03	.05	[illegible]	.07	[illegible]	.12	.16	[illegible]
DATE		20	20	20	20	20	20	20	20	20	20	20
TIME		1140	1140	1145	1200	1225	1225	1220	1200	1200	1230	1300
FEB	M	M	M	M	M	M	.08	M	M	.11	M	.13
DATE							18			18		18
TIME							2300			2300		2359
MAR	.09	.13	.15	.21	.25	.31	.34	.36	.43	.45	.53	.62
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	1608	1613	1618	1623	[illegible]	1648	1703	1723	1743	[illegible]	1833	1903
APR	.05	.09	.13	.15	.19	.24	[illegible]	.30	.34	.39	.47	[illegible]
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	0600	0605	0610	0615	0620	0635	0650	0710	0730	0750	[illegible]	[illegible]
MAY	.04	.07	.10	.13	.19	.24	.35	.40	.43	.44	.45	.46
DATE	25	05	05	05	05	05	05	05	05	05	05	05
TIME	[illegible]	[illegible]	1935	1945	1955	2010	2025	2045	2105	2125	2155	2225
JUN	.11	.23	.23	.23	.23	.23	.23	.23	.23	.23	.23	.23
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755
JUL	.14	.27	.32	.40	.42	.46	.54	.61	.63	.63	.70	.78
DATE	29	29	29	29	24	24	24	24	24	24	29	29
TIME	2005	2005	2010	2010	1900	[illegible]	1930	1950	2010	2010	1645	1715
AUG	.03	.04	.05	.05	.06	.07	.07	.07	.07	.07	.07	.07
DATE	12	12	12	12	12	12	12	12	12	12	12	12
TIME	1928	1932	1937	1937	1954	2002	2002	2002	2002	2002	2002	2002
SEP	.14	[illegible]	.23	.23	.25	.29	.32	.35	.37	.39	.50	.55
DATE	01	[illegible]	01	01	14	14	09	09	09	09	11	11
TIME	1704	1709	1713	1713	[illegible]	1815	0000	0000	0000	0000	2315	2315
OCT	.03	.05	.07	.09	[illegible]	.18	.22	.26	.28	.33	.36	.38
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	0729	0729	0729	0734	0740	0743	0743	0743	0757	0825	0848	0848
NOV	.02	.03	.04	.06	.08	.11	.15	.19	.22	.26	.29	.32
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	0428	0428	0428	0430	0430	0445	0500	0520	0530	0545	0550	0550
DEC	.02	.03	.05	.06	.09	[illegible]	.14	[illegible]	[illegible]	.22	.26	.31
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	0607	0607	0607	0607	0607	0007	0607	0618	0637	0657	0727	0759
YEAR	M	M	M	M	M	M	.54	M	M	.63	M	.78
MONTH							07			07		07

[illegible]

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	[illegible]	.04	[illegible]	[illegible]	.12	[illegible]	[illegible]	.19	.22	[illegible]
DATE	[illegible]	20	[illegible]	[illegible]	[illegible]	20	20	20	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0715	[illegible]	[illegible]	[illegible]	0730	[illegible]	[illegible]	0815	[illegible]	[illegible]
FEB	T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.02	[illegible]	[illegible]	.05	.06
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.25	.26	[illegible]	[illegible]	[illegible]	.38	.51
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1923	1923	[illegible]	[illegible]	[illegible]	1923	[illegible]
APR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.35	.40	.45
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1305	[illegible]	[illegible]	[illegible]	1402	[illegible]	1442	[illegible]	[illegible]
MAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.20	[illegible]	[illegible]	.35	.39	.43
DATE	[illegible]	[illegible]	26	26	[illegible]	[illegible]	27	27	[illegible]	[illegible]	27	23
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN	[illegible]	.37	[illegible]	.50	.52	.53	[illegible]	.54	[illegible]	[illegible]	.55	.55
DATE	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	14	14	[illegible]	[illegible]	14	14
TIME	[illegible]	[illegible]	2125	[illegible]	[illegible]	2150	2200	2220	[illegible]	2230	2230	2230
JUL	[illegible]	[illegible]	.45	[illegible]	[illegible]	.62	[illegible]	.68	[illegible]	.68	.68	.68
DATE	[illegible]	[illegible]	04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	04	04	04
TIME	[illegible]	2025	[illegible]	2025	2025	2025	2025	[illegible]	[illegible]	[illegible]	2025	2025
AUG	[illegible]	[illegible]	[illegible]	.56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.82	.88
DATE	[illegible]	[illegible]	[illegible]	[illegible]	07	07	[illegible]	07	[illegible]	[illegible]	29	29
TIME	[illegible]	[illegible]	[illegible]	1833	1833	[illegible]	1833	1833	1833	[illegible]	1917	[illegible]
SEP	.3	.35	.39	[illegible]	.41	[illegible]	.45	[illegible]	.72	[illegible]	.83	[illegible]
DATE	[illegible]	[illegible]	[illegible]	01	[illegible]	01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1714	1710	[illegible]	[illegible]	[illegible]	1405	1405	[illegible]
OCT	[illegible]	[illegible]	[illegible]	.09	[illegible]	[illegible]	.24	.30	.35	.41	[illegible]	.58
DATE	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	11	11
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0935	[illegible]	[illegible]	0945	[illegible]
NOV	[illegible]	[illegible]	.08	.13	[illegible]	.20	.20	[illegible]	[illegible]	[illegible]	.20	.20
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	14	14	[illegible]	[illegible]	[illegible]	14
TIME	[illegible]	[illegible]	1900	[illegible]	1917	1917	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1917
DEC	[illegible]	[illegible]	.02	[illegible]	[illegible]	.03	.04	[illegible]	[illegible]	[illegible]	.05	.06
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26	25	[illegible]	[illegible]	[illegible]	[illegible]	26
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0315	[illegible]	0315	0315	[illegible]	[illegible]	0315
YEAR	[illegible]	[illegible]	[illegible]	.50	[illegible]	[illegible]	[illegible]	[illegible]	.72	.73	.83	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07	09	[illegible]	[illegible]	09

ELKO, NEVADA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.02	.04	.05	.06	.07	.08	.09	.09	.10	.10	M	[illegible]
DATE	16		16	16	16	16	16	16	16	16		[illegible]
TIME	1925	1930	1935	1940	1950	2005	2020	2040	[illegible]	[illegible]		1500
FEB	.01	.02	.03	.04	.06	.08	.10	.11	.13	.13	.16	.20
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	[illegible]	[illegible]	0400	0405	0415	0430	0445	0500	0520	0600	0630	0700
MAR	.05	.06	.07	.07	.07	.07	.08	.08	.10	.10	.10	[illegible]
DATE	[illegible]	[illegible]	10	10	10	10	11	11	11	11	11	[illegible]
TIME	0720	0730	0735	0740	0750	0805	0100	0120	0140	0200	0230	0300
APR	.03	[illegible]	.07	.10	.13	.18	.24	.28	.35	.39	.40	[illegible]
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	[illegible]	0025	[illegible]	0030	0040	0035	0040	[illegible]	[illegible]	0110	0150	0220
MAY	.05	.06	.07	.07	[illegible]	[illegible]	.16	.20	.20	.25	.29	.31
DATE	31	31	31	31	31	31	31	31	31	31	31	31
TIME	1500	1500	2100	2100	2100	2100	2115	2157	2130	2220	2220	[illegible]
JUN	.03	.05	.06	.07	.08	.09	.09	.09	.10	.10	.12	.13
DATE	13	13	13	13	13	13	13	14	14	14	14	14
TIME	1730	1731	1736	1741	1751	1815	1815	0345	0400	0420	0450	0520
JUL	.04	.07	.10	.12	.15	.15	.15	.15	.15	.15	.15	.15
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	0010	0010	0015	0018	0027	0035	0035	0035	0035	0035	0035	0035
AUG	.02	.03	.04	.05	.06	.08	.09	[illegible]	.11	[illegible]	.12	.12
DATE	22	22	22	22	[illegible]	04	04	04	04	04	04	04
TIME	1438	1440	1440	1440	1440	1900	1900	1920	1940	2000	2030	2030
SEP	.04	.06	.08	.10	.10	.10	.10	.10	.10	.10	.10	.10
DATE	25	25	25	25	25	25	25	25	25	25	25	25
TIME	1014	1016	1018	1023	1023	1023	1023	1023	1023	1023	1023	1023
OCT	.01	.02	.03	.04	.05	.06	.07	.08	.09	.10	.11	.12
DATE	07	07	07	07	07	[illegible]	07	07	08	08	08	08
TIME	2250	2255	2300	2300	2300	2315	2330	2350	0010	0010	0010	0010
NOV	.03	.05	.07	.08	.10	.15	.20	.25	.30	.32	.34	.34
DATE	17	17	17	17	17	17	17	17	17	18	18	18
TIME	2208	2208	2208	2208	2208	[illegible]	2300	2330	2345	0000	0030	0030
DEC	.04	.05	.05	.07	[illegible]	.10	.10	.10	.12	.15	.20	.20
DATE	17	17	17	17	17	17	17	17	27	27	27	27
TIME	1430	1430	1430	1430	1430	1430	1430	1430	0200	0200	0200	0200
YEAR	.06	.07	[illegible]	.12	.15	.18	.24	.28	.35	.39	M	[illegible]
MONTH	05	07	07	07	07	04	04	04	04	04		04

ELY, NEVADA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.03	.04	.05	.06	.09	.12	.15	.19	.24	.30	.32	.34
DATE	31*	17	17	19	19	19	19	19	19	19	19	19
TIME	1315	0045	0050	0045	0055	0100	0100	0120	0140	0200	0230	0300
FEB	.02	.03	.03	.04	.05	.06	.07	.07	.08	.09	.13	.13
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	2015	[illegible]	2020	2025	1830	1845	1900	1920	1940	2000	2030	2050
MAR	.02	.03	.04	.05	.07	.10	.11	.13	.15	.17	.19	[illegible]
DATE	12	12	12	12	12	12	12	12	12	12	12	12
TIME	1637	1643	1647	1657	1710	1720	1739	1800	1818	1830	1910	1940
APR	.02	.03	.03	.03	.03	.03	.03	.04	.04	.04	.04	.04
DATE	17	17	17	17	17	17	17	17	17	17	17	17
TIME	1340	1345	1345	1345	1345	1345	1345	1500	1500	1500	1500	1500
MAY	.08	.12	.13	.14	.14	.14	.14	.14	.14	.14	.16	.16
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	1359	1402	1410	1412	1412	1412	1412	1412	1412	1412	1412	1412
JUN	.06	.07	.07	.07	.12	.15	.19	.20	.24	.29	.36	.48
DATE	27	27	27	27	01	01	01	01	01	01	01	01
TIME	1236	1237	1237	1237	0933	0956	1008	1003	1020	1042	1132	1207
JUL	.09	.12	.16	.19	.23	.23	.23	.23	.23	.23	.23	.23
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	1117	1122	1127	1132	1142	1157	1212	1232	1252	1312	1342	1412
AUG	.21*	.39	.46	.54	.57	.59	.67	.67	.67	.67	.67	.67
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	1250	1255	1259	1204	1214	1229	1244	1244	1244	1244	1244	1244
SEP	.01	.02	.02	.03	.04	.06	.07	.07	.07	.07	.07	.07
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	0912	0912	0912	0900	0858	0854	0845	0820	0820	0820	0820	0820
OCT	.02	.04	.06	.07	.08	.11	.16	.18	.19	.19	.20	.22
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	1415	1418	1420	1426	1428	1446	1504	1530	1600	1600	0302	0302
NOV	.03	.04	.07	.08	.13	.16	.19	.23	.26	.31	.34	.37
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	1600	1602	1605	1609	1615	1635	1650	1715	1728	1737	1749	1810
DEC	.02	.03	.04	.06	.07	.07	.09	.15	.16	.18	.18	.18
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	1546	1546	1546	1546	1546	1600	1600	1614	1615	1615	1630	1630
YEAR	.21*	.39	.46	.54	.57	.59	.67	.67	.67	.67	.67	.67
MONTH	08	08	08	08	08	08	08	08	08	08	08	08

MAXIMUM SHORT DURATION PRECIPITATION

MAXIMUM SHORT DURATION PRECIPITATION

YEAR 1973

Maximum precipitation in inches (5 to 180 minutes)

[illegible], NEW YORK

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	[illegible]	.03	[illegible]	.06	[illegible]	.08	[illegible]	[illegible]	.14	.15
DATE	[illegible]	[illegible]	07	[illegible]	[illegible]	06	06	06	06	[illegible]	06	06
TIME	1115	[illegible]	1120	1125	1135	1220	[illegible]	1530	1550	[illegible]	1630	1700
FEB	.01	.02	.03	.03	.04	.05	.07	.08	[illegible]	.11	.13	.16
DATE	[illegible]	21	[illegible]	21	[illegible]	[illegible]	[illegible]	[illegible]	07	07	07	08
TIME	[illegible]	0530	0530	[illegible]	0530	[illegible]	[illegible]	0620	[illegible]	2300	2330	0000
MAR	[illegible]	.04	[illegible]	.07	[illegible]	.13	.18	.24	.30	[illegible]	.43	.50
DATE	10	[illegible]	[illegible]	10	[illegible]	[illegible]	10	10	[illegible]	[illegible]	10	[illegible]
TIME	[illegible]	0055	[illegible]	0100	[illegible]	[illegible]	0700	0720	0740	0800	0800	[illegible]
APR		.01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.06	.07	[illegible]	.07
DATE		02	02	[illegible]	02	[illegible]	[illegible]	[illegible]	02	02	[illegible]	02
TIME		[illegible]	1645	[illegible]	1700	1715	[illegible]	1715	1715	1715	1715	1715
MAY	[illegible]	[illegible]	.10	.11	[illegible]	.12	.12	.12	.12	.15	.19	.21
DATE	[illegible]	[illegible]	11	11	11	11	[illegible]	[illegible]	[illegible]	14	14	14
TIME	[illegible]	[illegible]	1837	[illegible]	[illegible]	[illegible]	[illegible]	1900	1900	0730	0730	0800
JUN	[illegible]	[illegible]	[illegible]	[illegible]	.23	.25	.27	.28	.28	.28	.32	.38
DATE	[illegible]	[illegible]	13	[illegible]	13	[illegible]	13	13	[illegible]	13	12	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2200	2210	[illegible]	2240	[illegible]	[illegible]	2130
JUL	[illegible]	[illegible]	.30	.42	[illegible]	[illegible]	.82	.86	.92	.94	.99	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26	26	26	26	26	26	26
TIME	[illegible]	[illegible]	[illegible]	0254	0304	0320	0315	0313	0333	0350	0420	0450
AUG	[illegible]	.50	.58	.72	[illegible]	[illegible]	[illegible]	.85	.85	.85	.85	.85
DATE	[illegible]	[illegible]	[illegible]	06	[illegible]	06	06	06	06	06	[illegible]	06
TIME	[illegible]	[illegible]	1433	1433	[illegible]	1433	1433	1433	1433	[illegible]	1433	1433
SEP	.10	.34	[illegible]	[illegible]	.92	[illegible]	.96	.96	.96	.96	.96	.96
DATE	11	[illegible]	[illegible]	11	[illegible]	[illegible]	11	11	[illegible]	11	11	[illegible]
TIME	[illegible]	1950	[illegible]	[illegible]	1950	[illegible]	1950	[illegible]	1950	[illegible]	1950	1950
OCT	.04	.06	[illegible]	.09	.10	.11	.15	.19	.22	.23	.30	.32
DATE	[illegible]	[illegible]	[illegible]	[illegible]	10	10	10	10	[illegible]	[illegible]	[illegible]	10
TIME	1005	[illegible]	1005	[illegible]	[illegible]	1005	[illegible]	[illegible]	0645	[illegible]	0735	0805
NOV	.01	.01	[illegible]	.01	[illegible]	.01	.01	.01	.01	.01	.01	.01
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24	24	24	24	[illegible]	24	24
TIME	[illegible]	0605	0605	[illegible]	[illegible]	0605	0605	[illegible]	0605	0605	0605	[illegible]
DEC	T	.01	.01	.02	.02	.02	.02	.02	.02	.02	.02	.02
DATE		03	[illegible]	[illegible]	03	[illegible]	03	03	03	03	[illegible]	03
TIME		1301	1301	1301	1301	1301	1301	1301	1301	1301	1301	1301
YEAR	.22	[illegible]	.58	.72	.92	.96	.96	.96	.96	.96	.99	[illegible]
MONTH	[illegible]	08	08	08	[illegible]	09	[illegible]	09	09	09	07	[illegible]

ALBANY, NEW YORK

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.04	.10	.12	.13	.16	.20	.21	.25	.29	.33	.43	.46
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	2025	2030	2035	2040	2050	2105	2120	2140	2200	2220	2250	2320
FEB	.02	.03	.04	.05	.06	.08	.10	.11	.16	.20	.24	.26
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	0305	0310	0315	0320	0330	0345	0400	0420	0315	0330	0400	0430
MAR	.08	.11	.12	.13	.15	.17	.18	.21	.26	.29	.32	.33
DATE	15	15	15	15	15	08	08	17	17	17	17	17
TIME	1346	1347	1350	1350	1350	0605	0620	1355	1405	1405	1407	1415
APR	.05	.07	.10	.12	.18	.22	.31	.39	.45	.50	.55	.59
DATE	28	[illegible]	01	01	01	01	01	01	01	01	01	01
TIME	1431	1638	1638	1638	1650	1707	1640	1655	1705	1725	1750	1810
MAY	.12	.15	.19	.20	.24	.26	.33	.40	.45	.51	.55	.62
DATE	12	30	30	30	30	10	10	10	10	10	10	10
TIME	1635	1931	1931	1936	1938	2230	2230	2235	2243	2245	2240	2240
JUN	.30	.46	.47	.64	.88	.92	1.10	1.32	1.40	1.51	1.54	1.56
DATE	12	30	29	29	29	29	29	29	29	29	29	29
TIME	[illegible]	1947	1835	1835	1843	1845	1940	1940	1955	2000	2035	2100
JUL	.23	.33	.33	.36	.36	.38	[illegible]	.47	.49	[illegible]	.51	.52
DATE	29	29	29	29	29	29	27	27	27	27	27	27
TIME	0040	0046	0046	0051	[illegible]	0116	0440	0440	0450	0510	0530	0610
AUG	.28	.44	.46	.47	.48	.51	.52	.52	.52	.52	.52	.53
DATE	[illegible]	10	10	10	10	10	10	10	10	10	10	02
TIME	1550	1554	1554	1559	1559	1600	1610	1610	1610	1610	1610	1002
SEP	.09	.12	.14	.16	.19	.22	.25	.28	.32	.36	.38	.39
DATE	[illegible]	18	18	18	18	18	18	18	18	18	18	18
TIME	[illegible]	0832	0832	0832	0842	0855	0910	0930	0950	1007	1007	1035
OCT	.15	.17	.32	.32	.32	.32	.44	.45	.48	.53	.56	.60
DATE	29	29	29	29	29	29	30	30	30	30	30	30
TIME	2145	2150	2255	2200	2210	2225	0455	0515	0535	0555	0625	0655
NOV	.06	.07	.08	.09	.11	.12	.14	.15	.16	.16	.16	.16
DATE	28	28	28	16	16	16	16	16	16	16	16	16
TIME	[illegible]	[illegible]	1805	0807	[illegible]	0832	0847	0707	0727	0727	0727	0727
DEC	.08	.11	.12	.15	.17	.18	.22	.28	.33	.39	.45	.53
DATE	05	05	05	05	05	05	21	21	21	21	21	21
TIME	1045	1050	1055	1100	1110	1125	0745	0805	0825	0840	0910	0940
YEAR	.30	.46	.47	.64	.88	.92	1.10	1.32	1.40	1.51	1.54	1.56
MONTH	[illegible]	06	06	06	06	06	06	06	06	06	06	06

BINGHAMTON, NEW YORK

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.02	.05	.08	.10	.11	.16	.17	.20	.22	.23	.24	.27
DATE	22	22	22	22	22	22	22	04	04	04	04	04
TIME	1605	1610	1615	1615	1615	1635	1640	0130	0130	0140	0200	0250
FEB	.12	.16	.19	.22	.26	.30	.34	.40	.44	.45	.48	.51
DATE	02	02	02	02	02	02	02	02	02	02	02	02
TIME	1935	1940	1945	1945	1950	2005	2020	2040	2105	2120	2150	2220
MAR	.07	.08	.08	.10	.15	.19	.22	.25	.28	.28	.28	.31
DATE	17	17	17	14	14	14	14	14	14	14	14	14
TIME	1028	1029	1029	1238	1246	1248	1249	1250	1258	1258	1258	1415
APR	.06	.06	.09	.10	.15	.19	.23	.33	.38	.44	.48	.52
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	1120	1050	1240	1135	1223	1235	1245	1230	1255	1315	1342	1413
MAY	.16	.24	.25	.26	.27	.27	.27	.27	.27	.27	.28	.32
DATE	12	12	12	12	12	12	12	12	12	12	20	20
TIME	1331	1331	1337	1343	1346	1346	1346	1346	1346	1346	1845	1850
JUN	.14	.24	.28	.32	.37	.41	.46	.49	.49	.51	.51	.51
DATE	28	28	28	28	28	28	28	28	28	29	29	29
TIME	2210	2215	2219	2235	2255	2255	2310	2330	2330	0015	0015	0015
JUL	.18	.37	.39	.40	.40	.40	.43	.44	.44	.45	.49	.50
DATE	28	28	28	28	28	28	28	28	28	27	27	27
TIME	2103	2113	2113	2113	2113	2113	2153	2215	2215	0100	0130	0145
AUG	.22	.45	.46	.48	.48	.48	.50	.52	.55	.61	.68	.71
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	1539	1847	1548	1350	1555	1550	1630	1650	1715	1730	1744	1830
SEP	.11	.12	.13	.17	.23	.24	.28	.34	.43	.46	.55	.60
DATE	18	18	18	18	18	18	18	18	18	18	06	06
TIME	0415	0415	0415	0413	0413	0413	0413	0413	0413	0415	0053	0125
OCT	.18	.20	.23	.24	.24	.24	.24	.30	.38	.41	.46	.48
DATE	09	09	09	09	09	09	09	29	29	29	29	29
TIME	0405	0410	0415	0420	0420	0420	0420	1404	1430	1500	1500	1515
NOV	.03	.05	.06	.06	.07	.09	.15	.18	.19	.21	.30	.32
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	1415	1413	1415	1455	1501	1553	1500	1530	1530	1545	1615	1630
DEC	.14	.15	.16	.21	.30	.40	.52	.62	.74	.88	.92	.95
DATE	05	05	05	05	05	05	05	05	05	05	05	05
TIME	1907	1915	1919	1824	1830	1832	1832	1835	1908	1908	1930	2001
YEAR	.22	.45	.46	.48	.48	.48	.52	.62	.74	.88	.92	.95
MONTH	08	08	08	08	08	08	12	12	12	12	12	12

BUFFALO, NEW YORK

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.15	[illegible]	.18	[illegible]	[illegible]	[illegible]	.19	.23	.29	.34	.39	.42
DATE	[illegible]	[illegible]	03	03	03	03	03	03	03	03	03	04
TIME	[illegible]	[illegible]	2330	2335	[illegible]	2300	[illegible]	2315	[illegible]	2345	2355	0030
FEB	[illegible]	[illegible]	[illegible]	.20	[illegible]	.25	.25	.25	.25	[illegible]	.25	.25
DATE	[illegible]	[illegible]	[illegible]	02	[illegible]	02	02	02	02	02	02	02
TIME	[illegible]	1645	1650	1650	1650	1655	1655	1655	1655	1655	1655	1655
MAR	[illegible]	[illegible]	.10	[illegible]	[illegible]	.23	.30	.35	[illegible]	.41	.45	.46
DATE	[illegible]	[illegible]	17	14	14	14	14	14	14	14	14	14
TIME	1200	[illegible]	1205	1115	1115	[illegible]	1135	1135	1215	1215	1215	1245
APR	[illegible]	[illegible]	[illegible]	.18	[illegible]	[illegible]	[illegible]	[illegible]	.20	[illegible]	.32	.32
DATE	[illegible]	01	[illegible]	01	[illegible]	22	22	[illegible]	22	01	01	[illegible]
TIME	[illegible]	1150	[illegible]	[illegible]	1335	[illegible]	1405	[illegible]	[illegible]	1345	[illegible]	[illegible]
MAY	[illegible]	.10	[illegible]	[illegible]	.19	.23	[illegible]	[illegible]	[illegible]	[illegible]	.30	[illegible]
DATE	[illegible]	[illegible]	[illegible]	08	08	08	[illegible]	[illegible]	08	[illegible]	08	08
TIME	[illegible]	[illegible]	[illegible]	2125	2135	2140	[illegible]	2205	2205	2205	2205	2205
JUN	.11	[illegible]	.22	.25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	12	12	12	12	[illegible]	[illegible]	12	[illegible]	12	12	12
TIME	[illegible]	2234	[illegible]	2234	[illegible]	2234	2335	2335	[illegible]	[illegible]	2359	2359
JUL	.25	.40	.45	[illegible]	.76	[illegible]	.85	.93	[illegible]	.93	.97	1.00
DATE	[illegible]	[illegible]	28	28	[illegible]	28	26	26	[illegible]	26	26	26
TIME	[illegible]	1455	1455	1455	1500	1500	1530	[illegible]	[illegible]	[illegible]	1540	[illegible]
AUG	[illegible]	.25	.30	.36	.53	.60	.64	[illegible]	.69	.73	.74	.74
DATE	[illegible]	[illegible]	19	[illegible]	[illegible]	20	[illegible]	[illegible]	20	[illegible]	[illegible]	[illegible]
TIME	0229	1945	1555	[illegible]	1948	1956	2000	2024	[illegible]	[illegible]	2130	[illegible]
SEP	[illegible]	.42	[illegible]	[illegible]	.48	[illegible]	.51	.52	.52	.52	[illegible]	.52
DATE	06	06	[illegible]	06	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	06
TIME	0040	[illegible]	[illegible]	0040	0040	0040	[illegible]	0005	[illegible]	[illegible]	0005	0005
OCT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.53	.55	[illegible]	[illegible]	.67	[illegible]	.80
DATE	[illegible]	04	[illegible]	04	[illegible]	04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	05
TIME	2319	[illegible]	2329	[illegible]	2342	2349	[illegible]	0024	0030	0104	0134	[illegible]
NOV	.05	[illegible]	.13	.18	[illegible]	[illegible]	.54	[illegible]	[illegible]	.78	[illegible]	.82
DATE	[illegible]	[illegible]	15	15	[illegible]	15	15	15	15	15	15	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1420	[illegible]	1420	[illegible]	1400	[illegible]	1345	[illegible]	1345
DEC	.08	[illegible]	[illegible]	.14	.14	[illegible]	[illegible]	.32	.38	[illegible]	.57	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	[illegible]	20	20	[illegible]	20	20
TIME	1230	[illegible]	[illegible]	[illegible]	[illegible]	1240	[illegible]	[illegible]	[illegible]	[illegible]	1400	1400
YEAR	.28	.42	[illegible]	[illegible]	.76	.76	.85	[illegible]	[illegible]	[illegible]	[illegible]	1.00
MONTH	[illegible]	[illegible]	[illegible]	07	[illegible]	[illegible]	07	07	[illegible]	07	07	07

NEW YORK CENTRAL PARK N.Y.

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.04	[illegible]	[illegible]	[illegible]	.17	[illegible]	.28	[illegible]	[illegible]	[illegible]	.58	.62
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	[illegible]	[illegible]	[illegible]	1705	[illegible]	[illegible]	[illegible]	1730	[illegible]	[illegible]	[illegible]	[illegible]
FEB	.10	.15	[illegible]	.37	.43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.15	1.25
DATE	02	02	02	02	[illegible]	02	[illegible]	02	[illegible]	02	02	02
TIME	1630	1635	[illegible]	[illegible]	[illegible]	[illegible]	1650	1650	1650	1650	1650	1650
MAR	.13	.20	.23	.24	[illegible]	[illegible]	[illegible]	.44	[illegible]	[illegible]	.89	1.03
DATE	[illegible]	01	01	[illegible]	[illegible]	[illegible]	[illegible]	25	25	25	25	25
TIME	2040	2045	[illegible]	2050	[illegible]	[illegible]	[illegible]	0217	0240	0259	0329	[illegible]
APR	[illegible]	.20	.26	[illegible]	[illegible]	[illegible]	.45	.53	.67	.79	.98	1.14
DATE	[illegible]	[illegible]	01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	04	04	04	04
TIME	[illegible]	[illegible]	2033	2033	2033	[illegible]	1457	1442	1442	[illegible]	1345	1345
MAY	[illegible]	.28	.29	[illegible]	[illegible]	[illegible]	.31	.35	.39	.41	.42	.45
DATE	03	[illegible]	03	[illegible]	[illegible]	[illegible]	[illegible]	29	[illegible]	[illegible]	29	29
TIME	[illegible]	[illegible]	1505	[illegible]	[illegible]	[illegible]	1505	0715	[illegible]	[illegible]	[illegible]	[illegible]
JUN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.42	1.47	[illegible]	[illegible]	1.65	[illegible]
DATE	22	22	22	22	[illegible]	22	22	22	[illegible]	[illegible]	22	22
TIME	[illegible]	1340	1345	[illegible]	1350	[illegible]	1405	1425	1445	[illegible]	[illegible]	1600
JUL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.22	[illegible]	1.52	[illegible]	[illegible]	1.89	[illegible]
DATE	05	[illegible]	05	[illegible]	[illegible]	05	20	[illegible]	[illegible]	[illegible]	20	20
TIME	0544	0540	[illegible]	0540	0540	[illegible]	2215	2215	[illegible]	2215	2210	[illegible]
AUG	[illegible]	.56	.74	[illegible]	1.23	1.41	1.65	[illegible]	2.11	2.14	2.21	2.25
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	02	[illegible]	[illegible]	02	02	02	02
TIME	[illegible]	0906	0906	[illegible]	0901	0858	[illegible]	[illegible]	[illegible]	[illegible]	0726	0656
SEP	[illegible]	[illegible]	[illegible]	[illegible]	.18	.25	[illegible]	.37	[illegible]	.47	.58	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	[illegible]	14	14	14	14	14
TIME	[illegible]	2255	[illegible]	2252	[illegible]	2243	1804	[illegible]	[illegible]	[illegible]	[illegible]	1804
OCT	[illegible]	.27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.85	[illegible]	1.01	[illegible]	1.41
DATE	[illegible]	29	29	29	[illegible]	29	[illegible]	29	[illegible]	[illegible]	29	29
TIME	2010	[illegible]	[illegible]	[illegible]	1945	[illegible]	1937	1937	1937	1937	[illegible]	1929
NOV	[illegible]	[illegible]	.10	[illegible]	.10	[illegible]	.20	.20	[illegible]	.24	[illegible]	.34
DATE	[illegible]	[illegible]	28	28	[illegible]	28	[illegible]	[illegible]	[illegible]	27	[illegible]	27
TIME	1813	[illegible]	[illegible]	[illegible]	1813	1813	[illegible]	1813	[illegible]	2220	2220	2220
DEC	.15	.21	.30	[illegible]	[illegible]	.62	[illegible]	[illegible]	.74	.80	.95	[illegible]
DATE	05	[illegible]	21	21	[illegible]	21	21	21	[illegible]	[illegible]	[illegible]	09
TIME	2108	[illegible]	1040	[illegible]	1040	[illegible]	1030	1015	0947	1030	1000	1000
YEAR	[illegible]	[illegible]	1.11	[illegible]	1.23	1.41	1.65	1.94	[illegible]	[illegible]	2.21	[illegible]
MONTH	07	[illegible]	07	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]

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	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.02	.04	.07	.12	[illegible]	.24	.30	.34	.38	.40	.44	.52
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	1615	1615	1630	1650	1650	1655	1700	1720	1745	1800	1830	1900
FEB	.08	.09	.10	[illegible]	[illegible]	.24	.31	.38	.44	.46	.56	.63
DATE	02	02	02	02	02	02	02	02	02	02	02	02
TIME	0745	0745	0750	0800	1530	1600	1600	1610	1610	1610	1610	1610
MAR	.08	.14	.16	.20	.26	.38	.40	.54	.60	.72	.82	1.00
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	0400	0400	0400	0400	0400	0415	0615	0415	0415	0515	0515	0430
APR	.20	.28	.30	.34	.37	.40	.40	.46	.50	.59	.72	.85
DATE	01	01	01	01	01	01	01	01	04	04	04	04
TIME	2045	2050	2055	2100	2110	2125	2130	2146	1440	1500	1530	1600
MAY	.10	.12	.14	.15	.17	.23	.30	.38	.38	.39	.40	.46
DATE	15	15	15	15	28	28	28	28	28	28	28	28
TIME	2155	2200	2205	2211	0815	0830	0845	0845	0845	0900	0930	0930
JUN	.22	.26	.32	.44	.48	.50	[illegible]	.83	1.03	1.20	1.40*	1.59
DATE	13	13	13	13	29	29	29	29	29	29	29	29
TIME	1404	1408	1415	1418	1543	1558	1613	1633	1653	1713	1743	1730
JUL	.28	.40	.48	.50	.70	.90	.90	.90	.90	.90	.90	.90
DATE	05	05	05	05	15	15	15	15	15	15	15	15
TIME	0600	0605	0610	0615	0745	0745	0745	0745	0745	0745	0745	0745
AUG	.08	.10	.13	.20	.23	.24	.24	.24	.24	.24	.24	.24
DATE	11	11	11	11	11	11	11	11	11	11	15	15
TIME	1220	1225	1230	1235	1250	1300	1300	1300	1300	1300	2145	2145
SEP	.08	.10	.12	.16	.18	.26	.29	.39	.45	.57	.70	.72
DATE	18	18	18	14	14	14	14	14	14	14	14	14
TIME	0950	1000	1005	1745	1915	1930	2000	2000	2000	2000	2000	2000
OCT	.10	.14	.18	.28	.28	.28	.32	.46	.54	.60	.76	.88
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	1940	1945	1945	1945	1945	1945	2015	2020	2228	2228	2228	2228
NOV	.05	.12	.15	.18	.20	.23	.24	.28	.31	.33	.42	.44
DATE	22	28	28	28	28	28	28	28	28	28	28	28
TIME	0300	0045	0045	0045	0045	0045	0045	0045	0045	0045	0045	0045
DEC	.09	.11	.13	.16	.19	.21	.25	.33	.40	.43	.49	.54
DATE	26	26	09	09	09	21	21	09	09	09	09	09
TIME	2005	2005	1130	1130	1145	0400	0400	1235	1255	1315	1345	1415
YEAR	.28	.40	.48	.50	.70	.90	.90	.90	1.03	1.20	1.40*	1.59
MONTH	07	07	07	07	07	07	07	07	06	06	06	06

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	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	[illegible]	.10	.14	.24	.24	.30	.34	.37	.43	.45
DATE	[illegible]	[illegible]	27	27	[illegible]	27	27	27	27	[illegible]	27	[illegible]
TIME	1630	[illegible]	1640	[illegible]	[illegible]	[illegible]	1725	[illegible]	[illegible]	1800	[illegible]	1800
FEB	[illegible]	[illegible]	.12	.16	.22	[illegible]	[illegible]	.40	.48	.50	.62	[illegible]
DATE	[illegible]	[illegible]	[illegible]	02	[illegible]	02	[illegible]	[illegible]	[illegible]	02	02	02
TIME	[illegible]	1540	[illegible]	[illegible]	[illegible]	[illegible]	1600	1600	1600	1600	1600	[illegible]
MAR	[illegible]	.10	.13	[illegible]	[illegible]	[illegible]	[illegible]	.49	.62	.72	.87	1.05
DATE	[illegible]	[illegible]	[illegible]	[illegible]	26	[illegible]	26	26	26	[illegible]	[illegible]	26
TIME	0210	[illegible]	[illegible]	[illegible]	0210	0250	[illegible]	0345	[illegible]	[illegible]	[illegible]	0417
APR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.63	[illegible]	.82	[illegible]
DATE	[illegible]	[illegible]	01	[illegible]	[illegible]	04	04	[illegible]	04	04	[illegible]	[illegible]
TIME	2033	2040	2045	2050	1640	1627	[illegible]	1625	1640	1630	[illegible]	[illegible]
MAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.46	.46	[illegible]	.50	.50
DATE	[illegible]	[illegible]	03	03	[illegible]	[illegible]	03	03	[illegible]	[illegible]	[illegible]	03
TIME	[illegible]	[illegible]	1517	[illegible]	[illegible]	1547	[illegible]	1622	[illegible]	[illegible]	1732	[illegible]
JUN	[illegible]	[illegible]	[illegible]	[illegible]	1.00	[illegible]	[illegible]	1.46	[illegible]	[illegible]	[illegible]	[illegible]
DATE	13	[illegible]	13	[illegible]	[illegible]	[illegible]	22	22	[illegible]	22	22	22
TIME	1332	[illegible]	[illegible]	1347	1357	[illegible]	1315	1319	1339	[illegible]	1429	1459
JUL	[illegible]	[illegible]	[illegible]	[illegible]	1.42	[illegible]	1.44	[illegible]	[illegible]	[illegible]	1.44	1.44
DATE	[illegible]	05	[illegible]	[illegible]	[illegible]	05	[illegible]	[illegible]	[illegible]	05	05	[illegible]
TIME	0548	0553	0558	0600	0610	0625	0625	[illegible]	0625	0625	0625	[illegible]
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.65	.85	[illegible]	.85	[illegible]	.85
DATE	03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	03	03
TIME	[illegible]	1205	1210	1210	1230	1230	[illegible]	1245	1245	1245	1245	[illegible]
SEP	.30	[illegible]	[illegible]	[illegible]	.59	.59	.59	.59	.59	[illegible]	.59	.59
DATE	05	[illegible]	[illegible]	05	05	05	05	05	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1147	[illegible]	1147	1147	1147
OCT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.37	.53	.56	.63	.75	[illegible]	1.13
DATE	[illegible]	29	29	29	29	[illegible]	29	29	[illegible]	[illegible]	29	[illegible]
TIME	[illegible]	[illegible]	1955	1957	[illegible]	[illegible]	[illegible]	2046	2112	[illegible]	2158	2228
NOV	[illegible]	[illegible]	[illegible]	[illegible]	.12	[illegible]	[illegible]	[illegible]	.24	.26	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	25	28	[illegible]	28	[illegible]	[illegible]	[illegible]	28	28
TIME	[illegible]	1615	1615	1620	0034	[illegible]	0100	0122	[illegible]	0202	[illegible]	[illegible]
DEC	[illegible]	.22	[illegible]	[illegible]	[illegible]	.54	[illegible]	[illegible]	[illegible]	[illegible]	.73	.81
DATE	[illegible]	[illegible]	05	21	21	[illegible]	21	05	21	[illegible]	[illegible]	[illegible]
TIME	2145	2122	2126	[illegible]	1115	[illegible]	1130	[illegible]	[illegible]	[illegible]	1235	1250
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	1.42	1.44	[illegible]	1.46	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	07	07	[illegible]	[illegible]	[illegible]	06	06	06

ROCHESTER, NEW YORK

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.05	[illegible]	.07	.08	.13	[illegible]	.25	.31	.38	.38	.38	.38
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	2315	[illegible]	2320	2320	[illegible]	2325	2355	2355	2355	2355	2355	2355
FEB	.02	[illegible]	.05	.05	[illegible]	.08	.08	.08	[illegible]	.08	.08	.08
DATE	02	[illegible]	02	02	02	08	08	08	08	08	08	08
TIME	[illegible]	1745	1745	1750	1800	[illegible]	0850	0850	0850	0850	0850	0850
MAR	[illegible]	[illegible]	[illegible]	.17	[illegible]	.24	.28	.36	.45	.47	.54	.61
DATE	17	17	17	17	17	14	14	14	14	17	14	14
TIME	[illegible]	[illegible]	0850	0850	0850	1210	1210	1210	1210	0900	1210	1210
APR	.05	[illegible]	.10	[illegible]	.12	.14	.17	[illegible]	.20	.24	.29	.31
DATE	10	10	10	10	02	02	02	02	02	02	02	02
TIME	0911	0911	0911	0911	0006	0015	0023	0033	0054	[illegible]	0159	0215
MAY	[illegible]	.10	[illegible]	.12	[illegible]	.19	.24	.27	.29	.29	.29	.29
DATE	30	30	30	30	30	30	30	30	30	30	30	30
TIME	2112	2115	2120	2126	2137	2141	2203	2223	2239	2239	2239	2239
JUN	.48	.53	.53	.56	.57	.57	.57	.57	.57	.60	.60	.60
DATE	06	06	06	06	06	06	06	06	06	06	06	06
TIME	1554	1549	1549	1549	1549	1549	1549	1549	1549	1420	1420	1420
JUL	[illegible]	[illegible]	.19	.29	[illegible]	.36	.36	.37	.37	.38	.39	.39
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	1908	1908	1908	1908	1908	1908	1908	2015	2015	2055	2115	2115
AUG	.24	.40	.50	.58	[illegible]	[illegible]	1.13	1.26	1.27	1.27	1.27	1.27
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	0800	0755	0755	0750	0735	0720	0705	0705	0619	0619	0619	0619
SEP	.20	.23	.23	.23	.23	.23	.28	.37	.37	.37	.40	.40
DATE	05	05	05	05	05	05	05	05	05	05	05	05
TIME	1505	1509	1509	1509	1509	1509	1602	1621	1621	1621	1718	1718
OCT	.17	[illegible]	.22	.25	.29	.43	.49	.53	.55	.57	.57	.58
DATE	05	05	05	05	05	05	05	05	05	05	05	05
TIME	[illegible]	0050	0346	0348	0358	0413	[illegible]	[illegible]	0428	0448	0448	0452
NOV	[illegible]	.19	.20	.24	[illegible]	.40	[illegible]	.69	.84	.92	.95	.98
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	1450	1445	1445	1445	1450	1450	1450	1430	1430	1430	1430	1400
DEC	[illegible]	.04	.05	.06	.09	.11	.15	.17	.20	.24	.27	.31
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	1205	1200	1200	[illegible]	1200	1135	1150	1115	[illegible]	1100	1100	1055
YEAR	.48	.53	.53	.58	.81	.90	1.13	1.26	1.27	1.27	1.27	1.27
MONTH	06	06	06	08	08	08	08	08	08	08	08	08

SYRACUSE, NEW YORK

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.02	.04	.05	.05	.06	.15	.18	.22	.24	.24	.27	.29
DATE	22	22	22	22	22	22	04	04	04	04	04	04
TIME	1130	1135	1145	1150	1150	1150	0050	0050	0050	0110	0130	0200
FEB	.03	.06	.08	.14	.18	.20	.22	.28	.29	.41	.54	.55
DATE	02	02	02	02	02	02	02	02	02	02	02	02
TIME	1710	1720	1725	1730	1735	1735	1735	1850	1900	1930	2005	2010
MAR	.08	.12	.18	.22	.28	.34	.37	.40	.45	.45	.54	.57
DATE	17	17	17	17	17	17	17	17	17	17	17	17
TIME	1135	1140	1145	1150	1159	1210	1222	1222	1222	1222	1222	1222
APR	.07	.14	.18	.21	.26	.33	.36	.48	.62	.74	.85	.98
DATE	22	01	01	01	01	01	01	01	01	01	01	01
TIME	1708	0548	0553	1203	1200	1215	1230	1251	1312	1332	1402	1432
MAY	.15	.23	.26	.33	.36	.45	.46	.47	.47	.48	.51	.56
DATE	15	03	03	03	03	03	03	03	03	03	03	03
TIME	1516	0905	0911	0905	0915	0930	0945	1007	1025	1045	1115	1145
JUN *	.76	1.16	1.24	1.24	1.28	1.28	1.28	1.28	1.28	1.98	1.98	2.02
DATE	12	12	12	12	12	12	12	12	12	12	12	12
TIME	1215	1215	1215	1215	1230	1230	1230	1230	1230	1230	1230	1230
JUL	.26	.60	.73	.77	1.01	1.03	1.17	1.21	1.21	1.21	1.21	1.21
DATE	28	28	28	28	28	28	28	28	28	28	28	28
TIME	1807	[illegible]	1815	1820	1830	1845	1900	1922	1944	2001	2032	2101
AUG	.16	.42	.53	.64	.76	.87	.90	.90	.90	.90	.90	.90
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	1217	1222	1230	1235	1231	1241	1245	1302	1328	1346	1417	1447
SEP	.16	.44	.60	.68	.76	.76	.76	.76	.76	.80	.82	.85
DATE	06	06	06	06	06	06	06	06	06	06	06	06
TIME	0329	0339	0344	0349	0359	0414	0429	0445	0502	0527	0555	0413
OCT	.22	.27	.29	.32	.50	.52	.54	.55	.55	.55	.56	.63
DATE	05	05	05	05	05	05	05	05	05	03	02	02
TIME	0225	0235	0240	0245	0255	0300	0315	0335	0345	0410	0547	0617
NOV	.10	.14	.18	.20	.27	.36	.43	.53	.68	.79	.84	.86
DATE	27	27	27	27	15	15	27	27	15	15	15	15
TIME	1648	1651	1656	1700	1730	1745	1820	1800	1735	1745	1825	1825
DEC	.05	.08	.10	.12	.15	.18	.22	.26	.27	.31	.36	.41
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	1135	1135	1135	1135	1135	1215	1200	1200	1200	1200	1200	1400
YEAR *	.76	1.16	1.24	1.24	1.28	1.28	1.28	1.28	1.28	1.98	1.98	2.02
MONTH	06	06	06	06	06	06	06	06	06	06	06	06

MAXIMUM SHORT DURATION PRECIPITATION

ASHEVILLE, NORTH CAROLINA

GREENSBORO, NORTH CAROLINA

BISMARCK, NORTH DAKOTA

CAPE HATTERAS, NORTH CAROLINA

JAN	.15	[illegible]	.22	.24	.42	.50	[illegible]	.65	[illegible]	[illegible]	[illegible]	[illegible]
DATE	22	22	[illegible]	22	22	22	22	22	22	22	22	[illegible]
TIME	1350	1355	1405	1410	1405	[illegible]	[illegible]	1435	[illegible]	1500	1530	1600
FEB	.05	[illegible]	.15	.21	[illegible]	[illegible]	.36	.42	.48	[illegible]	[illegible]	[illegible]
DATE	02	02	[illegible]	02	[illegible]	[illegible]	[illegible]	02	[illegible]	02	02	[illegible]
TIME	[illegible]	1410	1415	[illegible]	[illegible]	[illegible]	1440	1445	1500	1500	[illegible]	1615
MAR	.15	.20	.30	[illegible]	[illegible]	.55	.56	[illegible]	.56	.68	[illegible]	[illegible]
DATE	17	17	17	[illegible]	[illegible]	17	17	17	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1022	1022	[illegible]	1022	1022	[illegible]	1022	1022	0135	0205
APR	.12	.20	.23	.28	.32	[illegible]	.42	.55	.65	[illegible]	[illegible]	[illegible]
DATE	26	26	[illegible]	26	[illegible]	26	[illegible]	01	01	01	01	[illegible]
TIME	2343	2343	[illegible]	[illegible]	[illegible]	2359	0645	0646	[illegible]	0646	0646	0705
MAY	.25	.42	[illegible]	.62	[illegible]	.82	[illegible]	.91	.99	[illegible]	1.09	1.09
DATE	25	[illegible]	25	25	[illegible]	15	[illegible]	15	[illegible]	[illegible]	15	15
TIME	0145	[illegible]	0147	0152	0900	0917	[illegible]	[illegible]	1012	[illegible]	1102	1132
JUN	[illegible]	.55	.70	[illegible]	1.05	[illegible]	1.32	1.32	[illegible]	1.33	1.33	1.33
DATE	[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]	[illegible]	18	[illegible]	18	[illegible]
TIME	[illegible]	[illegible]	1530	1535	1545	1600	[illegible]	1645	[illegible]	1710	1710	1710
[illegible]	.30	[illegible]	.72	.81	.86	[illegible]	.92	.95	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	11	11	[illegible]	11	[illegible]	11	11	11	11	11
TIME	0752	0757	0802	0807	[illegible]	[illegible]	0847	[illegible]	0902	0902	0902	0902
[illegible]	.24	[illegible]	.42	[illegible]	[illegible]	[illegible]	[illegible]	.50	.52	.55	[illegible]	[illegible]
DATE	03	[illegible]	[illegible]	03	03	03	[illegible]	03	[illegible]	03	03	03
TIME	1119	1124	[illegible]	1134	1144	1159	1214	1234	1254	1156	1226	1256
SEP	[illegible]	.27	.36	.39	.45	.63	[illegible]	.73	[illegible]	.76	.77	[illegible]
DATE	[illegible]	09	[illegible]	[illegible]	09	[illegible]	[illegible]	[illegible]	09	10	10	[illegible]
TIME	[illegible]	2217	[illegible]	2224	[illegible]	2248	2302	[illegible]	[illegible]	0002	0025	[illegible]
[illegible]	[illegible]	.11	[illegible]	.16	[illegible]	.27	.32	[illegible]	.47	.52	.59	.62
DATE	[illegible]	[illegible]	29	29	[illegible]	29	29	29	29	29	29	29
TIME	1500	1500	1500	[illegible]	[illegible]	0740	[illegible]	0740	0740	[illegible]	0740	0740
[illegible]	.13	[illegible]	.26	.29	[illegible]	[illegible]	.50	[illegible]	.56	.57	[illegible]	[illegible]
DATE	[illegible]	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	19	[illegible]
TIME	0549	[illegible]	[illegible]	0600	0600	0615	0630	0650	0700	0730	0730	[illegible]
DEC	.29	[illegible]	[illegible]	.55	.61	[illegible]	[illegible]	1.28	[illegible]	1.43	1.63	1.90
DATE	20	[illegible]	[illegible]	20	09	21	21	21	21	[illegible]	21	[illegible]
TIME	2332	[illegible]	[illegible]	[illegible]	0015	0215	0215	0247	0310	[illegible]	0400	0220
YEAR	.30	.57	.72	[illegible]	[illegible]	[illegible]	1.32	1.32	[illegible]	1.43	1.63	1.90
MONTH	[illegible]	07	07	06	06	06	[illegible]	06	[illegible]	12	12	[illegible]

RALEIGH, NORTH CAROLINA

JAN	[illegible]	[illegible]	.11	.12	[illegible]	.25	.33	.37	.39	.46	.52	.60
DATE	[illegible]	28	28	28	[illegible]	28	[illegible]	28	28	28	28	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0500	[illegible]	[illegible]	[illegible]	0545	0615	0615	[illegible]	[illegible]
FEB	.20	.30	.35	.39	.42	.45	.45	1.20	[illegible]	1.48	1.65	2.05
DATE	[illegible]	02	02	02	02	02	02	02	02	[illegible]	02	02
TIME	0805	[illegible]	[illegible]	[illegible]	0825	[illegible]	0845	0845	0845	[illegible]	0945	0845
MAR	.25	[illegible]	[illegible]	.30	[illegible]	[illegible]	.35	[illegible]	[illegible]	[illegible]	.40	.43
DATE	11	11	11	11	11	11	11	[illegible]	[illegible]	11	[illegible]	03
TIME	[illegible]	2114	2114	[illegible]	2114	[illegible]	2114	2114	[illegible]	1124	0010	1355
APR	[illegible]	[illegible]	[illegible]	.28	.41	.45	.57	.69	[illegible]	[illegible]	.96	1.02
DATE	[illegible]	27	[illegible]	26	26	27	27	27	[illegible]	[illegible]	27	[illegible]
TIME	[illegible]	[illegible]	0231	2217	2257	[illegible]	[illegible]	0238	[illegible]	0316	[illegible]	0330
MAY	.30	[illegible]	.57	[illegible]	[illegible]	.76	[illegible]	[illegible]	[illegible]	[illegible]	.88	[illegible]
DATE	[illegible]	24	24	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24	[illegible]
TIME	[illegible]	1630	[illegible]	1635	[illegible]	[illegible]	1700	1725	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1.00	1.20	1.45	[illegible]	2.55	[illegible]	2.85	[illegible]	[illegible]	[illegible]	3.02
DATE	[illegible]	24	24	24	24	[illegible]	[illegible]	[illegible]	[illegible]	24	24	29
TIME	[illegible]	1635	1638	1644	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1810	0154
[illegible]	.25	[illegible]	[illegible]	.69	.96	[illegible]	1.10	[illegible]	[illegible]	1.14	[illegible]	1.15
DATE	[illegible]	[illegible]	17	17	[illegible]	17	17	[illegible]	[illegible]	[illegible]	17	[illegible]
TIME	[illegible]	0742	0742	0742	[illegible]	0800	0815	[illegible]	0845	[illegible]	[illegible]	0855
[illegible]	.40	.62	.64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.20	1.27	1.27	[illegible]
DATE	01	01	[illegible]	[illegible]	01	17	[illegible]	17	[illegible]	17	17	[illegible]
TIME	[illegible]	1938	1938	1944	1950	2200	1945	[illegible]	2110	2100	2100	2100
[illegible]	.05	.09	.18	.23	[illegible]	[illegible]	.38	[illegible]	[illegible]	[illegible]	.48	.48
DATE	14	[illegible]	14	14	14	14	14	[illegible]	[illegible]	[illegible]	[illegible]	14
TIME	[illegible]	[illegible]	0330	0330	[illegible]	0629	[illegible]	0618	0618	0618	0618	[illegible]
OCT	.17	.20	[illegible]	.26	[illegible]	[illegible]	[illegible]	.28	[illegible]	.29	.29	.24
DATE	[illegible]	30	30	[illegible]	30	[illegible]	[illegible]	[illegible]	30	[illegible]	30	30
TIME	0313	0320	0324	[illegible]	[illegible]	[illegible]	0352	0352	[illegible]	0440	0446	0446
[illegible]	[illegible]	[illegible]	.24	.26	[illegible]	[illegible]	.31	.32	.32	.32	.32	.32
DATE	[illegible]	21	24	21	21	21	21	21	21	21	21	[illegible]
TIME	1640	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1733	1752	[illegible]	[illegible]	1752	[illegible]
DEC	[illegible]	.20	.36	.42	[illegible]	.43	[illegible]	[illegible]	.52	[illegible]	.82	.90
DATE	[illegible]	20	[illegible]	20	[illegible]	20	[illegible]	20	20	[illegible]	20	20
TIME	1547	1555	[illegible]	1605	1605	[illegible]	[illegible]	[illegible]	1420	1600	[illegible]	1605
YEAR	.60	[illegible]	1.20	1.45	2.25	2.55	[illegible]	2.85	[illegible]	[illegible]	[illegible]	3.02
MONTH	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	06	06	06

FARGO, NORTH DAKOTA

JAN	M	M	M	M	M	M	.02	.02	.02	.03	[illegible]	[illegible]
DATE							[illegible]	03	[illegible]	03	03	[illegible]
TIME							1430	1430	1430	1430	1430	1500
FEB	.01	.02	.02	.02	[illegible]	.04	.05	.05	.06	.06	.06	[illegible]
DATE	[illegible]	[illegible]	26	26	[illegible]	26	26	[illegible]	26	26	26	26
TIME	1515	1525	1515	[illegible]	1530	1545	1530	1545	[illegible]	1600	1600	1600
MAR	[illegible]	[illegible]	[illegible]	.08	[illegible]	.14	.20	.24	[illegible]	.33	.42	[illegible]
DATE	14	14	[illegible]	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	14	14
TIME	[illegible]	[illegible]	0550	0650	[illegible]	[illegible]	0700	[illegible]	0746	[illegible]	0745	0808
APR	[illegible]	[illegible]	.11	.12	.13	.15	.18	.26	.29	.30	.30	[illegible]
DATE	25	[illegible]	[illegible]	25	[illegible]	[illegible]	25	25	[illegible]	26	26	[illegible]
TIME	2237	2244	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0011	0011	[illegible]	0011
MAY	[illegible]	.11	[illegible]	[illegible]	.28	.32	.39	.46	[illegible]	[illegible]	.60	.63
DATE	22	22	22	22	22	22	[illegible]	[illegible]	22	[illegible]	23	23
TIME	2305	2305	2305	2305	2305	[illegible]	2330	2349	2355	2356	0028	0028
JUN	[illegible]	[illegible]	.35	[illegible]	.38	[illegible]	[illegible]	.40	.42	.42	[illegible]	[illegible]
DATE	[illegible]	[illegible]	15	[illegible]	[illegible]	[illegible]	[illegible]	15	[illegible]	15	[illegible]	[illegible]
TIME	1913	1915	1915	1915	[illegible]	1915	[illegible]	1915	[illegible]	[illegible]	2030	[illegible]
[illegible]	[illegible]	[illegible]	.80	[illegible]	[illegible]	[illegible]	.97	.98	.98	.98	.99	1.03
DATE	[illegible]	09	[illegible]	[illegible]	[illegible]	09	[illegible]	09	09	09	09	09
TIME	0243	[illegible]	[illegible]	0243	[illegible]	0243	0243	[illegible]	0348	0348	[illegible]	0615
[illegible]	.22	[illegible]	[illegible]	.55	[illegible]	.83	[illegible]	1.08	[illegible]	[illegible]	1.35	[illegible]
DATE	21	01	01	[illegible]	[illegible]	31	[illegible]	31	31	31	[illegible]	[illegible]
TIME	0603	[illegible]	[illegible]	1820	[illegible]	1717	1717	1717	1717	1717	1645	1645
SEP	[illegible]	[illegible]	.53	.53	.54	.56	.62	.65	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	02	02	02	[illegible]	23	[illegible]	23	[illegible]	23	23	23
TIME	[illegible]	[illegible]	[illegible]	0918	0932	2350	2355	2355	[illegible]	2355	2355	[illegible]
[illegible]	[illegible]	.29	.34	[illegible]	.49	[illegible]	[illegible]	[illegible]	[illegible]	.59	[illegible]	.59
DATE	[illegible]	09	09	09	[illegible]	[illegible]	09	09	09	09	09	[illegible]
TIME	[illegible]	[illegible]	1330	[illegible]	[illegible]	1330	1330	1330	[illegible]	1330	1330	1330
[illegible]	[illegible]	[illegible]	.05	.07	.10	[illegible]	.12	.14	.16	[illegible]	[illegible]	[illegible]
DATE	10	[illegible]	[illegible]	[illegible]	10	[illegible]	[illegible]	21	21	21	[illegible]	21
TIME	[illegible]	0815	[illegible]	0815	0815	[illegible]	0122	0122	[illegible]	[illegible]	[illegible]	0100
DEC	[illegible]	[illegible]	.02	.03	[illegible]	[illegible]	[illegible]	.10	.12	.14	.17	[illegible]
DATE	[illegible]	[illegible]	08	12	[illegible]	12	12	12	[illegible]	[illegible]	12	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1605	[illegible]	1605	[illegible]	[illegible]	[illegible]	1530
[illegible]	[illegible]	[illegible]	[illegible]	M	M	[illegible]	.97	[illegible]	1.11	[illegible]	[illegible]	1.48
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible], NORTH CAROLINA

[illegible], NORTH CAROLINA

WILLISTON, NORTH DAKOTA

MAXIMUM SHORT DURATION PRECIPITATION

YEAR 19[illegible]

CINCINNATI, OHIO APBF

JAN	.04	.07	.09	.10	.12	.16	.22	.28	.31	.39	.46	.52
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	1735	1745	1735	1735	[illegible]	1745	[illegible]	[illegible]	1840	[illegible]	1830	1900
FEB	.03	.05	.06	.06	.08	.10	.11	.13	.14	.17	.21	.26
DATE	[illegible]	02	02	02	[illegible]	01	01	01	01	01	01	01
TIME	0321	0323	0325	0325	0325	[illegible]	1230	1245	1300	1300	1330	1400
MAR	[illegible]	.77	.80	.84	.85	.85	.85	.85	.85	.85	.85	.85
DATE	25	25	25	25	25	25	25	25	25	25	25	25
TIME	[illegible]	[illegible]	1845	[illegible]	[illegible]	1900	1900	1900	1900	1900	1900	1900
APR	.42	.47	.59	.65	.72	.79	.82	.94	.97	.99	1.02	1.04
DATE	23	23	23	23	23	23	23	23	23	23	23	23
TIME	0406	[illegible]	0413	[illegible]	0425	0439	0418	0434	0454	0515	0545	[illegible]
MAY	.13	.19	.22	.24	.27	.29	.29	.32	.35	.35	.35	.35
DATE	25	25	25	25	25	25	25	27	27	27	27	27
TIME	1715	1718	1722	1728	1735	1738	1738	0909	0930	0930	0930	0930
JUN	.36	[illegible]	.76	.83	.89	.99	1.37	1.56	1.89	1.97	2.10	2.13
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1902	1854	1938	1953	1939	1944	[illegible]	2024
JUL	.48	.49	.53	.64	.74	.77	.85	1.02	1.17	1.24	1.37	1.49
DATE	21	14	14	14	14	14	21	31	31	31	31	31
TIME	[illegible]	[illegible]	1718	1724	1730	1735	0045	1215	1245	1300	1300	1300
AUG	.15	.22	.30	.33	.34	.34	.34	.34	.34	.34	.34	.34
DATE	12	12	12	12	12	12	12	12	12	12	12	12
TIME	[illegible]	1545	[illegible]	1550	1600	[illegible]	1600	[illegible]	1600	1600	1600	1600
SEP	.09	.14	.16	[illegible]	.18	.33	.37	.43	.43	.43	.43	.44
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	[illegible]	1332	1332	1332	1330	1330	1352	1357	1357	1357	1357	1520
OCT	.33	.48	.49	.52	.53	.53	.53	.53	.53	.54	.56	.56
DATE	01	01	01	01	01	01	01	[illegible]	[illegible]	04	04	04
TIME	1750	1755	[illegible]	[illegible]	1815	1830	1845	1905	1925	1755	1755	1155
NOV	.13	.17	.18	.20	.27	.31	.35	.48	.52	.55	.56	.58
DATE	26	25	26	26	26	26	26	26	26	26	25	25
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1115	1115	1115	1115	1115	1115	0245	0245
DEC	.23	.28	.28	.28	.29	.29	.29	.31	.32	.33	.34	[illegible]
DATE	[illegible]	26	26	26	26	26	26	26	26	26	20	20
TIME	[illegible]	[illegible]	1613	[illegible]	1630	1645	1659	1601	1601	1601	0600	0600
YEAR	[illegible]	.77	.80	.85	.89	.99	1.37	1.56	1.89	1.97	2.10	2.13
MONTH	[illegible]	03	[illegible]	03	06	06	06	06	06	06	06	06

CLEVELAND, OHIO

JAN	.03	.06	.08	.10	.14	.18	.22	.25	.32	.37	.42	.46
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	[illegible]	[illegible]	[illegible]	2010	2010	[illegible]	[illegible]	2010	2040	2125	2130	2125
FEB	.02	.03	.04	.05	.07	.08	.09	.10	.12	.14	.16	.18
DATE	02	02	02	02	02	02	02	16	16	16	16	16
TIME	1315	1315	1315	1320	1325	1330	1025	0120	0140	0200	0230	0300
MAR	.08	.15	.18	.20	.22	.23	.33	.44	.46	.47	.49	.55
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	1157	1203	1206	1211	1221	1236	1251	1311	1331	1351	1421	1451
APR	.06	.11	.12	.14	.18	.23	.30	.34	.36	.36	.40	.42
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	1750	1755	1800	1805	1815	1830	1845	1905	1925	1925	2015	2045
MAY	.10	.19	.22	.22	.23	.24	.27	.32	.37	.38	.40	.40
DATE	02	02	02	02	23	23	23	23	23	23	23	23
TIME	2057	2059	2059	2059	1117	1132	1147	0735	0800	0800	0830	0830
JUN	.23	.45	.51	.56	1.00	1.07	1.25	1.30	1.39	1.44	1.45	1.46
DATE	03	03	05	05	05	05	05	05	05	05	05	05
TIME	1838	1838	[illegible]	1818	1828	1843	1858	1918	1938	1958	2008	2015
JUL	.13	.25	.33	.44	.57	.71	.82	.96	1.15	1.23	1.30	1.37
DATE	04	20	20	20	20	20	20	20	20	20	20	20
TIME	1354	1939	1944	1949	1955	2009	2020	1957	2017	2037	2037	2055
AUG	.14	.24	.28	.32	.47	.58	.63	.65	.66	.82	1.04	1.07
DATE	11	14	14	14	14	14	14	14	14	14	14	14
TIME	2140	[illegible]	[illegible]	1232	1242	1257	1307	1327	1347	1407	1437	1507
SEP	.12	.22	.28	.36	.47	.57	.68	.85	.91	.93	.96	.97
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	[illegible]	0906	0908	0914	0915	0928	0943	1003	1023	1043	1050	1120
OCT	.11	.21	.23	.27	.34	.40	.44	.44	.44	.44	.44	.44
DATE	04	04	02	02	[illegible]	02	02	02	02	02	02	02
TIME	2311	2313	0838	0838	0848	0903	0918	0918	0918	0918	0918	0918
NOV	.06	.11	.14	.14	.17	.22	.22	.23	.26	.31	.36	.38
DATE	18	15	15	15	15	15	15	25	25	25	25	25
TIME	[illegible]	1233	1238	1243	1243	1248	1301	0920	0920	0905	0935	1005
DEC	.04	.07	[illegible]	.10	.16	.19	.20	.20	.22	.25	.28	.34
DATE	05	05	26	26	26	26	26	26	20	20	20	20
TIME	0122	[illegible]	1954	1957	[illegible]	2014	2014	2014	0914	0934	1005	1126
YEAR	.23	.45	.51	.56	1.00	1.07	1.25	1.30	1.39	1.44	1.45	1.46
MONTH	06	06	[illegible]	06	06	06	06	06	06	06	06	06

DAYTON, OHIO

JAN	.05	.09	.12	.14	.19	.25	.32	.36	.40	.44	.45	.49
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	[illegible]	1740	1745	1750	1800	1800	1800	1805	1825	1845	1915	1930
FEB	.03	.06	.08	.10	[illegible]	.12	.15	.16	.17	.20	[illegible]	.22
DATE	[illegible]	[illegible]	01	[illegible]	01	01	01	01	[illegible]	01	[illegible]	[illegible]
TIME	[illegible]	1245	1245	[illegible]	1250	1300	1325	1345	[illegible]	1425	1450	[illegible]
MAR	.12	.19	.20	.21	.26	.28	.31	.32	.33	.36	.43	.45
DATE	14	14	14	14	14	14	14	14	[illegible]	11	14	14
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1439	1454	1514	0225	0245	1617	1647
APR	.10	[illegible]	[illegible]	.21	.22	.23	.23	.25	.30	.33	.38	.43
DATE	16	16	16	16	16	16	16	04	04	04	04	04
TIME	[illegible]	1938	1938	1938	1938	1938	[illegible]	0700	0700	0700	0700	0700
MAY	.17	[illegible]	.27	.29	.37	.39	.48	.54	.60	.62	.62	.66
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	0530	[illegible]	0527	0520	0515	0515	0440	0425	0415	0400	0330	0300
JUN	.28	.37	[illegible]	.45	[illegible]	[illegible]	.62	.70	.79	.79	.79	.79
DATE	19	27	27	27	27	27	17	17	17	17	17	17
TIME	0734	2307	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1535	[illegible]	1555	1555	1555
JUL	.35	.58	.60	.77	[illegible]	.98	.99	1.01	1.03	1.05	1.08	1.08
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	[illegible]	1201	1201	1201	1159	1159	1159	1159	1159	1159	1159	1159
AUG	.35	[illegible]	.50	[illegible]	.86	.89	.89	.89	.89	.89	.89	.89
DATE	14	14	11	11	11	11	12	12	12	12	12	12
TIME	0318	0323	2328	2333	2343	2358	0028	0048	0108	0128	0158	[illegible]
SEP	.16	[illegible]	.26	.28	.29	.29	.29	.29	.29	.29	.29	.29
DATE	05	05	05	05	05	05	05	05	05	05	05	05
TIME	1550	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1601	1601	1601	1601
OCT	.22	.28	[illegible]	.28	.28	.34	.45	.50	.50	.50	.50	[illegible]
DATE	02	02	02	02	02	02	02	02	02	02	02	02
TIME	[illegible]	[illegible]	[illegible]	0245	0245	0240	0240	0245	0245	[illegible]	[illegible]	[illegible]
NOV	.12	[illegible]	[illegible]	[illegible]	.32	.40	.64	.74	.84	.93	.94	1.02
DATE	25	25	25	25	25	25	25	25	25	25	25	25
TIME	[illegible]	0630	0630	0630	0630	0645	0645	0645	0645	0645	0645	0645
DEC	.27	[illegible]	.31	.33	.33	.33	.33	.33	.33	.33	.33	.36
DATE	26	26	26	26	26	26	26	26	26	26	26	20
TIME	[illegible]	[illegible]	[illegible]	1700	1700	[illegible]	1700	1700	1700	[illegible]	1700	[illegible]
YEAR	.35	.58	.60	.77	.91	.98	.99	[illegible]	[illegible]	1.05	1.08	1.08
MONTH	[illegible]	07	07	07	07	07	07	07	07	07	07	07

MANSFIELD, OHIO

JAN	.04	.07	.09	.11	.17	[illegible]	.28	.33	.38	[illegible]	.45	.46
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	1910	[illegible]	1915	[illegible]	1930	1945	2000	2020	2020	2030	2045	2045
FEB	[illegible]	.09	.11	.12	.13	.15	.17	.18	.19	.21	.21	.21
DATE	02	02	02	02	02	02	02	02	02	02	02	02
TIME	[illegible]	1112	1115	1120	[illegible]	[illegible]	1130	1200	1220	1230	1230	1230
MAR	.22	.34	.48	.56	.62	.66	.67	.73	.75	.87	.90	.90
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	1510	1515	1525	1530	1535	1545	1545	1628	1647	1710	1740	1810
APR	[illegible]	.09	.13	[illegible]	.19	.23	.24	.26	.36	.36	.36	.37
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	1620	1620	1620	1620	[illegible]	1620	1620	1620	1620	1620	1620	1620
MAY	*[illegible]	*1.20	*1.22	[illegible]	[illegible]	1.27	1.27	1.28	1.28	1.28	1.28	1.28
DATE	25	25	25	25	25	25	25	25	25	25	25	25
TIME	1831	1831	1831	1831	[illegible]	1831	1831	1831	1831	1831	1831	1831
JUN	.28	.44	.58	.78	.92	1.25	1.34	1.40	1.43	1.43	1.43	1.45
DATE	25	25	25	25	25	25	25	25	25	25	25	25
TIME	1545	1545	1545	1545	1545	1545	1545	1545	1545	1545	1545	1545
JUL	.14	.46	.72	.74	.74	.74	.84	.84	1.36	1.54	1.60	1.74
DATE	10	10	10	10	10	10	10	20	20	20	20	20
TIME	1130	1130	1130	1130	1130	1130	1130	1700	1700	1700	1700	1700
AUG	.21	.64	.73	.75	.78	.78	.79	.79	1.05	1.14	1.14	1.14
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	1550	1600	1605	1610	1615	1615	1615	1615	1610	1615	1615	1615
SEP	.14	.23	.37	.38	[illegible]	[illegible]	.48	.48	.48	.48	.48	.48
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME	1432	1432	1425	1432	[illegible]	[illegible]	1432	1432	1432	1432	1432	1432
OCT	.16	.18	.18	.20	.24	.31	.32	.33	.35	.49	.49	.49
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130	2130
NOV	.09	.13	.20	.21	.24	.24	.24	.40	.48	.58	.60	.62
DATE	15	15	25	25	25	25	25	25	25	25	25	25
TIME	1150	1150	0800	0800	0800	0800	0800	0645	0600	0600	0600	0600
DEC	.08	.15	.17	.18	.19	.19	.19	.19	[illegible]	.22	.26	.27
DATE	26	26	26	26	26	26	26	26	16	26	26	26
TIME	[illegible]	[illegible]	1850	1830	1401	1401	1401	1401	1401	1401	1401	1401
YEAR	*[illegible]	*1.20	*1.22	1.22	1.26	1.27	1.34	1.40	1.43	1.54	1.60	1.74
MONTH	05	05	05	05	05	05	06	06	06	07	07	07

[illegible]

JAN	.04	.07	.10	.12	.18	.25	.32	.37	.43	.47	.52	.58
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	[illegible]	[illegible]	2105	[illegible]	2115	2115	2130	2150	2150	2155	2155	2200
FEB	.01	[illegible]	[illegible]	[illegible]	.06	.08	.10	.13	.16	.19	.22	.25
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	[illegible]	1705	1710	1715	1715	1715	1715	1725	1740	1800	1830	1900
MAR	[illegible]	[illegible]	[illegible]	.27	[illegible]	.38	.46	.50	[illegible]	.71	.85	.89
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	[illegible]	1955	2005	2005	2015	2024	[illegible]	[illegible]	[illegible]	1729	1751	1805
APR	[illegible]	[illegible]	[illegible]	.23	[illegible]	.34	[illegible]	.49	.56	.59	.63	.70
DATE	[illegible]	22	22	22	[illegible]	[illegible]	[illegible]	01	01	01	01	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1832	1843	1559	[illegible]	1928	2002	2002	[illegible]
MAY	.25	.31	[illegible]	.35	.45	[illegible]	[illegible]	.68	.70	.80	.96	[illegible]
DATE	08	08	08	24	24	24	24	24	24	24	24	24
TIME	[illegible]	[illegible]	1833	1802	1615	[illegible]	1616	1636	[illegible]	1606	1640	[illegible]
JUN	.32	[illegible]	[illegible]	.43	.43	.73	[illegible]	[illegible]	.81	[illegible]	.90	[illegible]
DATE	03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	03	03	03	[illegible]	03	03
TIME	2108	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2111	2111	[illegible]	2111	2111	2111
JUL	.27	[illegible]	[illegible]	.37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.12	1.25	1.30
DATE	26	[illegible]	[illegible]	20	20	20	20	20	20	20	20	20
TIME	2211	[illegible]	[illegible]	2058	2058	[illegible]	2058	[illegible]	[illegible]	[illegible]	[illegible]	2102
AUG	.22	.26	[illegible]	[illegible]	[illegible]	[illegible]	.54	.55	.55	.55	.55	.55
DATE	17	[illegible]	30	[illegible]	30	14	14	14	14	14	14	14
TIME	[illegible]	220	220.	[illegible]	[illegible]	[illegible]	2028	2046	2105	2105	[illegible]	[illegible]
SEP	[illegible]	.34	[illegible]	[illegible]	[illegible]	[illegible]	.36	.36	[illegible]	[illegible]	.53	.58
DATE	06	[illegible]	[illegible]	06	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]	28	28
TIME	0148	0152	[illegible]	0156	0156	[illegible]	0156	0156	1824	1830	[illegible]	1900
OCT	.05	[illegible]	[illegible]	[illegible]	.13	[illegible]	.19	.21	.25	.26	.29	.29
DATE	[illegible]	[illegible]	[illegible]	13	13	30	13	13	13	13	13	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1755	1806	[illegible]	1807	1807	[illegible]	[illegible]	[illegible]	1835
NOV	[illegible]	[illegible]	[illegible]	.13	[illegible]	.21	.25	[illegible]	[illegible]	[illegible]	.43	[illegible]
DATE	[illegible]	15	[illegible]	15	25	25	25	25	25	25	[illegible]	25
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0955	0959	[illegible]	[illegible]	0959	[illegible]
DEC	.12	[illegible]	.19	[illegible]	[illegible]	[illegible]	.22	.23	[illegible]	[illegible]	.30	.36
DATE	[illegible]	26	[illegible]	[illegible]	[illegible]	[illegible]	26	[illegible]	[illegible]	20	[illegible]	20
TIME	[illegible]	0905	[illegible]	0905	[illegible]	0905	0905	0905	0905	[illegible]	[illegible]	[illegible]
YEAR	.32	.39	[illegible]	.43	[illegible]	.73	[illegible]	[illegible]	[illegible]	[illegible]	1.25	1.30
MONTH	[illegible]	[illegible]	06	06	[illegible]	[illegible]	06	07	[illegible]	[illegible]	07	[illegible]

OKLAHOMA CITY, OKLAHOMA

JAN	M	M	M	M	M	M	M	M	M	M	M	.65
DATE												21
TIME												0900
FEB	.01	.02	.02	.02	.03	.04	.06	.07	.08	.09	.09	.09
DATE	07	07	07	07	07	07	07	07	07	07	07	07
TIME	[illegible]	1335	1340	1345	1400	[illegible]	1500	1500	1500	1500	1500	1500
MAR	.15	.21	.35	.40	[illegible]	.65	.80	1.00	1.21	1.27	1.30	1.35
DATE	06	06	06	06	06	06	06	06	06	06	06	06
TIME	0250	0250	0252	0250	0252	0250	0252	0300	0303	0303	0400	0430
APR	.28	.29	.32	[illegible]	.34	.36	.42	.44	.48	.53	.55	.55
DATE	15	15	19	19	15	15	19	19	19	19	19	19
TIME	1635	1637	0305	[illegible]	1650	1701	0350	0400	[illegible]	0355	0436	[illegible]
MAY	.13	.29	.31	.32	.35	.37	.41	.58	.65	.75	.78	.86
DATE	24	24	24	24	24	31	31	30	30	30	30	30
TIME	1625	1625	1625	1625	1610	[illegible]	0100	2202	2202	2202	2305	2305
JUN	.20	.40	.80	.98	1.14	1.27	1.32	1.32	1.32	1.32	1.32	1.32
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	1845	1850	1855	[illegible]	1900	1929	1944	2004	2004	2004	2004	2010
JUL	.35	.51	.53	.64	.82	1.04	1.10	1.11	1.12	1.14	1.14	1.14
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	2052	2051	2050	[illegible]	2033	2024	2024	2024	2024	2024	2024	2024
AUG	.25	.45	.57	.59	.60	.62	.63	.64	.64	.64	.64	.64
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	1615	1620	[illegible]	1628	1633	1647	1648	1707	1707	1707	1707	1707
SEP	.45	.66	[illegible]	.81	[illegible]	1.37	1.66	1.71	1.72	1.72	1.72	[illegible]
DATE	12	12	12	12	12	12	12	12	12	12	12	12
TIME	[illegible]	2145	2150	2155	2205	[illegible]	2235	2255	2315	2315	2315	2315
OCT	.35	[illegible]	[illegible]	.64	[illegible]	.66	.73	.75	.82	.88	.93	.99
DATE	26	26	26	26	26	[illegible]	11	11	11	11	11	11
TIME	[illegible]	2329	[illegible]	2339	[illegible]	[illegible]	0205	0225	0245	0305	0335	0405
NOV	[illegible]	[illegible]	.87	.99	[illegible]	1.13	1.14	1.15	1.25	1.33	1.35	1.35
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	[illegible]	[illegible]	1943	1940	[illegible]	1905	1855	1911	1939	1933	1858	1838
DEC	.13	.15	.18	.23	.25	.25	.30	.31	.39	.39	.39	.39
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	[illegible]	1403	1400	[illegible]	[illegible]	1429	1444	1504	1524	1531	1531	1531
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	M	1.72
MONTH												09

MAXIMUM SHORT DURATION PRECIPITATION

(5 to 180 minutes)

TULSA, OKLAHOMA

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	100	[illegible]	[illegible]	[illegible]
JAN	.12	.16	.22	.23	[illegible]	.25	.30	.30	.33	.35	.40	.50
DATE	[illegible]	20	[illegible]	[illegible]	20	20	20	20	[illegible]	03	03	03
TIME	[illegible]	[illegible]	[illegible]	1820	1830	[illegible]	[illegible]	1920	[illegible]	1600	1600	1600
FEB	[illegible]	.02	.04	.05	[illegible]	[illegible]	.11	.12	.14	[illegible]	.20	.25
DATE	[illegible]	07	[illegible]	[illegible]	07	07	[illegible]	[illegible]	[illegible]	[illegible]	07	[illegible]
TIME	[illegible]	[illegible]	1945	[illegible]	1555	[illegible]	1300	[illegible]	1300	1300	[illegible]	1305
MAR	.25	[illegible]	[illegible]	.27	[illegible]	.42	.56	.66	.70	.80	.95	1.21
DATE	[illegible]	[illegible]	[illegible]	13	03	30	[illegible]	03	30	03	30	30
TIME	[illegible]	[illegible]	1602	[illegible]	0410	[illegible]	0445	0502	[illegible]	0545	[illegible]	1945
APR	[illegible]	[illegible]	.83	.84	[illegible]	[illegible]	.98	1.03	1.05	[illegible]	[illegible]	1.17
DATE	[illegible]	[illegible]	[illegible]	24	[illegible]	24	[illegible]	[illegible]	[illegible]	[illegible]	21	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1740	[illegible]	[illegible]	[illegible]	1840	1820	[illegible]	1815	[illegible]
MAY	.35	[illegible]	.78	[illegible]	[illegible]	[illegible]	[illegible]	.93	.94	1.12	1.65	[illegible]
DATE	24	[illegible]	[illegible]	24	24	24	[illegible]	06	06	[illegible]	06	06
TIME	1719	1720	1725	[illegible]	[illegible]	1728	1645	[illegible]	1645	1750	1820	[illegible]
JUN	[illegible]	[illegible]	[illegible]	[illegible]	1.04	[illegible]	1.05	[illegible]	1.35	1.36	1.46	[illegible]
DATE	[illegible]	29	[illegible]	29	[illegible]	29	29	[illegible]	[illegible]	29	29	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1025	[illegible]	1025	1025	1025	1025	1025	1025	[illegible]
JUL	.55	[illegible]	1.00	1.10	1.43	1.54	1.57	1.66	1.84	[illegible]	1.85	[illegible]
DATE	23	[illegible]	[illegible]	23	[illegible]	23	[illegible]	[illegible]	23	23	23	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1930	1945	[illegible]	1945	[illegible]	[illegible]	2015	2015
AUG	.35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.50	1.64	[illegible]	1.65	[illegible]
DATE	[illegible]	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15	[illegible]	[illegible]	[illegible]	15
TIME	[illegible]	[illegible]	2245	[illegible]	[illegible]	[illegible]	2300	[illegible]	2300	2300	2300	[illegible]
SEP	[illegible]	[illegible]	1.00	1.01	[illegible]	[illegible]	[illegible]	1.04	1.06	1.06	1.12	1.12
DATE	12	[illegible]	12	12	12	[illegible]	12	[illegible]	[illegible]	[illegible]	12	[illegible]
TIME	[illegible]	[illegible]	1622	[illegible]	1637	1652	1707	[illegible]	1745	[illegible]	1831	1907
OCT	.35	[illegible]	[illegible]	.84	[illegible]	1.50	1.59	1.62	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	11	[illegible]	[illegible]	11	[illegible]
TIME	[illegible]	0050	0055	0100	0443	0458	[illegible]	[illegible]	[illegible]	[illegible]	0645	0715
NOV	[illegible]	[illegible]	.90	1.01	1.33	1.57	1.76	[illegible]	2.16	2.27	2.40	[illegible]
DATE	[illegible]	19	19	[illegible]	[illegible]	19	[illegible]	19	[illegible]	19	19	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	2345	2345	2320	2300	[illegible]	2240	2240	[illegible]
DEC	[illegible]	[illegible]	.30	[illegible]	[illegible]	[illegible]	.50	.60	.67	[illegible]	.76	[illegible]
DATE	[illegible]	[illegible]	[illegible]	23	23	23	[illegible]	23	[illegible]	23	[illegible]	[illegible]
TIME	2050	[illegible]	2050	1740	[illegible]	[illegible]	[illegible]	1755	1815	[illegible]	0216	0202
YEAR	[illegible]	[illegible]	1.00	[illegible]	[illegible]	[illegible]	1.76	2.01	2.16	2.27	2.40	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	11	[illegible]	11	[illegible]

ASTORIA, OREGON

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	.05	[illegible]	.14	[illegible]	[illegible]	[illegible]	.28	[illegible]	[illegible]	[illegible]	[illegible]	.41
DATE	[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]	01	12	[illegible]	01	01	[illegible]
TIME	[illegible]	1350	1400	1400	1410	1410	[illegible]	2300	1730	1730	1835	1845
FEB	.03	[illegible]	.05	.06	[illegible]	.09	.13	[illegible]	[illegible]	.22	.24	.27
DATE	24	24	24	24	10	10	[illegible]	10	10	10	10	10
TIME	1900	[illegible]	[illegible]	1910	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1145	1245	1300
MAR	.07	[illegible]	.18	[illegible]	[illegible]	[illegible]	.38	[illegible]	.53	.62	[illegible]	[illegible]
DATE	[illegible]	18	[illegible]	[illegible]	18	18	18	18	18	18	18	18
TIME	0330	1700	[illegible]	[illegible]	1715	1730	1746	1805	1830	1945	[illegible]	1945
APR	.08	.16	[illegible]	[illegible]	[illegible]	.29	.34	.36	.42	.46	.48	.50
DATE	[illegible]	16	[illegible]	16	[illegible]	16	16	[illegible]	[illegible]	16	16	16
TIME	[illegible]	[illegible]	0200	0205	0200	[illegible]	0215	0300	0248	[illegible]	0330	[illegible]
MAY	[illegible]	[illegible]	[illegible]	.13	.13	[illegible]	.18	.22	.24	.25	.30	.35
DATE	[illegible]	[illegible]	[illegible]	[illegible]	08	08	08	08	[illegible]	08	08	08
TIME	[illegible]	0245	0245	0245	0245	0245	0245	0245	0245	0245	0251	0300
JUN	[illegible]	[illegible]	.13	.15	.18	.21	[illegible]	.29	.32	.40	[illegible]	.53
DATE	[illegible]	[illegible]	24	24	[illegible]	24	[illegible]	24	24	24	24	[illegible]
TIME	[illegible]	0825	0820	1025	1030	[illegible]	0900	0920	[illegible]	1025	1030	1100
JUL	.01	.01	.02	[illegible]	.03	.03	[illegible]	[illegible]	[illegible]	.04	[illegible]	.04
DATE	[illegible]	08	[illegible]	08	[illegible]	[illegible]	[illegible]	08	[illegible]	[illegible]	[illegible]	[illegible]
TIME	0430	0430	0430	0430	0430	0430	[illegible]	[illegible]	0430	[illegible]	0430	0430
AUG	.02	.04	[illegible]	.05	.05	.07	.11	.11	.16	[illegible]	.19	[illegible]
DATE	[illegible]	24	24	[illegible]	[illegible]	24	24	[illegible]	24	24	24	[illegible]
TIME	0810	0814	[illegible]	0815	0815	0815	0815	0815	0815	[illegible]	0815	0815
SEP	.09	.15	.20	.23	[illegible]	[illegible]	.43	.43	.43	.48	.65	.65
DATE	[illegible]	20	[illegible]	20	[illegible]	20	20	[illegible]	20	[illegible]	20	[illegible]
TIME	1220	[illegible]	0100	0100	[illegible]	0100	0100	0100	0100	0100	0100	[illegible]
OCT	.10	[illegible]	.16	.19	.25	[illegible]	[illegible]	.45	[illegible]	[illegible]	.65	.71
DATE	29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28	[illegible]	28	[illegible]
TIME	0510	0125	0125	0130	[illegible]	[illegible]	[illegible]	0230	0230	0250	0320	[illegible]
NOV	.13	[illegible]	.27	[illegible]	[illegible]	.60	[illegible]	[illegible]	[illegible]	[illegible]	1.31	1.49
DATE	20	08	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	08	[illegible]
TIME	1202	[illegible]	[illegible]	[illegible]	[illegible]	2320	[illegible]	[illegible]	[illegible]	[illegible]	2358	[illegible]
DEC	[illegible]	[illegible]	.17	.18	.19	.22	.33	[illegible]	[illegible]	[illegible]	.76	[illegible]
DATE	03	03	03	[illegible]	[illegible]	26	26	26	[illegible]	26	26	[illegible]
TIME	0040	0040	0040	0040	0040	2225	2225	2225	2225	[illegible]	2225	2225
YEAR	.15	.17	[illegible]	.30	[illegible]	[illegible]	.72	.85	1.01	1.15	[illegible]	[illegible]
MONTH	12	11	[illegible]	11	[illegible]	11	11	11	[illegible]	11	[illegible]	11

[illegible]

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.14	.15
DATE	15	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	16	[illegible]	16	[illegible]
TIME	[illegible]	[illegible]	2130	[illegible]	[illegible]	[illegible]	[illegible]	0015	[illegible]	[illegible]	0025	0030
FEB	.01	[illegible]	.03	.04	[illegible]	[illegible]	[illegible]	.12	[illegible]	.14	.16	[illegible]
DATE	[illegible]	10	[illegible]	10	[illegible]	10	[illegible]	[illegible]	[illegible]	10	10	[illegible]
TIME	0105	[illegible]	0115	0120	0130	0140	0200	[illegible]	[illegible]	0300	[illegible]	[illegible]
MAR	[illegible]	[illegible]	.03	[illegible]	.04	.04	.06	.06	.07	.11	[illegible]	.12
DATE	[illegible]	[illegible]	10	10	10	[illegible]	03	[illegible]	03	03	03	03
TIME	[illegible]	1105	1105	1105	1105	[illegible]	1700	1700	[illegible]	1730	1800	1830
APR	.01	[illegible]	.03	.04	.05	.05	.05	.06	.07	.07	.07	.07
DATE	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]	18	18	[illegible]	[illegible]	[illegible]	18
TIME	1815	[illegible]	1818	1821	1830	[illegible]	1830	1830	1830	[illegible]	[illegible]	1830
MAY	.05	.09	.09	.09	[illegible]	[illegible]	[illegible]	.23	[illegible]	[illegible]	[illegible]	[illegible]
DATE	03	03	[illegible]	03	[illegible]	[illegible]	[illegible]	04	[illegible]	04	04	[illegible]
TIME	[illegible]	[illegible]	1210	1210	1210	0715	0715	0715	0715	0715	0715	0830
JUN	.01	.02	.03	.04	[illegible]	[illegible]	.04	.04	[illegible]	.04	[illegible]	.04
DATE	17	17	17	[illegible]	17	[illegible]	17	[illegible]	[illegible]	17	[illegible]	17
TIME	1415	1415	1415	1415	[illegible]	1415	1415	1415	[illegible]	[illegible]	[illegible]	1415
JUL	T	T	T	T	T	T	T	T	T	T	[illegible]	[illegible]
DATE												
TIME												
AUG	[illegible]	.01	.02	.02	[illegible]	.06	[illegible]	.09	.11	[illegible]	.16	[illegible]
DATE	[illegible]	[illegible]	25	25	25	25	[illegible]	25	25	25	25	25
TIME	[illegible]	[illegible]	[illegible]	1105	[illegible]	1105	1105	1105	[illegible]	[illegible]	[illegible]	[illegible]
SEP	[illegible]	[illegible]	.06	.08	[illegible]	.12	[illegible]	.15	.18	.21	.21	[illegible]
DATE	24	[illegible]	[illegible]	24	[illegible]	24	[illegible]	24	24	[illegible]	24	[illegible]
TIME	[illegible]	0530	0530	[illegible]	0530	0545	0547	0547	0640	0645	[illegible]	[illegible]
OCT	.02	.04	.06	.07	.11	[illegible]	[illegible]	.20	.21	.21	.21	.22
DATE	23	20	20	20	20	[illegible]	20	20	20	20	20	20
TIME	[illegible]	0630	0630	0630	0630	0630	0630	0630	0630	0630	0630	0630
NOV	[illegible]	.02	.03	[illegible]	.05	.07	.09	[illegible]	.13	.15	[illegible]	.20
DATE	[illegible]	[illegible]	05	[illegible]	[illegible]	05	05	05	[illegible]	05	[illegible]	[illegible]
TIME	0820	0820	[illegible]	[illegible]	[illegible]	0820	[illegible]	[illegible]	0820	0820	0820	0820
DEC	.02	.04	.05	.06	.06	.06	[illegible]	.08	.12	.20	.20	.27
DATE	[illegible]	17	17	[illegible]	[illegible]	[illegible]	17	17	17	29	[illegible]	29
TIME	[illegible]	0908	0908	[illegible]	0908	[illegible]	0908	[illegible]	0908	[illegible]	[illegible]	0835
YEAR	.05	[illegible]	.09	.09	.11	.14	.18	[illegible]	.28	.33	.41	[illegible]
MONTH	05	05	05	05	[illegible]	10	10	05	05	05	[illegible]	05

EUGENE, OREGON

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	.04	.08	[illegible]	[illegible]	.12	[illegible]	.25	.30	.31	[illegible]	.34	[illegible]
DATE	11	11	[illegible]	[illegible]	[illegible]	13	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1520	[illegible]	0445	0450	[illegible]	0530	0545	[illegible]	0645
FEB	[illegible]	[illegible]	[illegible]	.08	[illegible]	[illegible]	.21	.26	.28	[illegible]	.38	.45
DATE	[illegible]	24	24	24	25	[illegible]	[illegible]	25	25	25	25	25
TIME	[illegible]	2155	[illegible]	[illegible]	[illegible]	0110	[illegible]	0115	0110	0130	0145	0200
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.27	.27	[illegible]	[illegible]	.33	.39	[illegible]
DATE	[illegible]	03	[illegible]	03	[illegible]	03	[illegible]	[illegible]	19	19	19	[illegible]
TIME	1620	1643	[illegible]	1646	1646	1646	1646	[illegible]	[illegible]	[illegible]	[illegible]	0415
APR	[illegible]	[illegible]	.12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.22
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	18	18*	17	17	17	[illegible]
TIME	[illegible]	1049	1054	[illegible]	[illegible]	1115	1243	1259	2300	2300	[illegible]	2300
MAY	.04	[illegible]	.10	.12	.14	[illegible]	.19	.21	[illegible]	.26	.26	[illegible]
DATE	04	[illegible]	[illegible]	04	[illegible]	[illegible]	04	[illegible]	[illegible]	04	[illegible]	04
TIME	[illegible]	[illegible]	0109	0114	[illegible]	[illegible]	0131	[illegible]	0205	0220	0245	0245
JUN	[illegible]	.06	[illegible]	.08	.10	[illegible]	.14	.15	.17	.19	.22	.23
DATE	[illegible]	16	[illegible]	[illegible]	[illegible]	25	25	25	[illegible]	25	25	[illegible]
TIME	[illegible]	[illegible]	2328	2332	[illegible]	[illegible]	0650	0710	0730	0750	0820	0850
JUL	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
AUG	.06	[illegible]	[illegible]	.17	.18	.26	[illegible]	.32	.37	.38	.38	.38
DATE	24	24	[illegible]	24	[illegible]	24	24	[illegible]	[illegible]	24	24	24
TIME	[illegible]	1440	1435	[illegible]	[illegible]	1455	1455	0725	[illegible]	0750	0750	0750
SEP	.07	[illegible]	.20	.24	[illegible]	.35	.45	.49	[illegible]	.57	[illegible]	.62
DATE	[illegible]	06	[illegible]	[illegible]	[illegible]	06	06	[illegible]	06	[illegible]	[illegible]	06
TIME	[illegible]	[illegible]	[illegible]	2049	[illegible]	2109	[illegible]	2145	[illegible]	2225	2255	[illegible]
OCT	[illegible]	.07	[illegible]	.11	[illegible]	.20	[illegible]	.36	.38	.49	.55	.65
DATE	[illegible]	31	31	31	[illegible]	31	[illegible]	31	31	31	31	31
TIME	[illegible]	1300	1300	1300	[illegible]	1315	1345	1330	1330	1345	1345	1400
NOV	[illegible]	[illegible]	.31	.31	.31	[illegible]	.45	[illegible]	.52	.53	[illegible]	.56
DATE	11	11	[illegible]	[illegible]	11	20	20	20	20	[illegible]	20	20
TIME	[illegible]	[illegible]	0505	[illegible]	[illegible]	1345	[illegible]	[illegible]	1440	1510	1540	1610
DEC	.11	[illegible]	.15	[illegible]	.20	[illegible]	.36	[illegible]	.58	[illegible]	.75	.82
DATE	07	[illegible]	13	[illegible]	13	[illegible]	12	[illegible]	12	[illegible]	12	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1940	[illegible]	[illegible]	2029	[illegible]	1452	1553	[illegible]
YEAR	.20	[illegible]	.31	.31	.31	[illegible]	.45	[illegible]	.58	[illegible]	.75	.82
MONTH	[illegible]	[illegible]	11	[illegible]	11	09	11+	11	[illegible]	[illegible]	12	[illegible]

[illegible]

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	.05	[illegible]	.07	.09	.11	.12	.15	[illegible]	[illegible]	[illegible]
DATE	30	[illegible]	30	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30
TIME	2305	[illegible]	2315	2320	2330	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2350
FEB	[illegible]	[illegible]	.03	[illegible]	[illegible]	[illegible]	.14	.14	.17	[illegible]	.20	.22
DATE	[illegible]	04	[illegible]	[illegible]	04	04	[illegible]	04	04	04	04	04
TIME	0645	0650	[illegible]	[illegible]	[illegible]	[illegible]	0700	0700	[illegible]	0740	0755	[illegible]
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.11	[illegible]	.18	.22	[illegible]	.25	.27
DATE	[illegible]	[illegible]	30	[illegible]	[illegible]	30	30	[illegible]	[illegible]	[illegible]	30	[illegible]
TIME	[illegible]	[illegible]	0945	0945	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0945	0945
APR	.04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.20	.23	.26	.27
DATE	22	[illegible]	[illegible]	[illegible]	22	[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	16
TIME	1417	[illegible]	1418	[illegible]	[illegible]	1830	1830	1830	[illegible]	[illegible]	[illegible]	[illegible]
MAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	M	.19	[illegible]	[illegible]	[illegible]	[illegible]	.30
DATE							03		24	24	[illegible]	24
TIME							1700		1540	1530	[illegible]	[illegible]
JUN	[illegible]	[illegible]	.13	.13	[illegible]	[illegible]	[illegible]	.14	[illegible]	.14	.18	[illegible]
DATE	16	[illegible]	[illegible]	[illegible]	16	16	[illegible]	16	15	16	[illegible]	[illegible]
TIME	[illegible]	2030	2030	2030	[illegible]	[illegible]	2030	2030	2030	[illegible]	2030	[illegible]
JUL	.01	.01	.01	[illegible]	[illegible]	.01	[illegible]	.01	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	20	20	[illegible]	20	20	20	20	[illegible]	[illegible]	19	[illegible]
TIME	0145	0145	0145	[illegible]	0145	0145	[illegible]	0145	0145	[illegible]	2230	2230
AUG	.01	.02	.02	[illegible]	[illegible]	[illegible]	.05	.06	[illegible]	.09	.09	.11
DATE	24	24	24	24	24	[illegible]	24	24	[illegible]	24	24	24
TIME	[illegible]	0135	0135	0135	0135	0135	0135	0135	[illegible]	[illegible]	0135	0135
SEP	.09	.11	.12	[illegible]	.14	[illegible]	.27	.27	[illegible]	[illegible]	.29	[illegible]
DATE	20	20	20	[illegible]	20	[illegible]	[illegible]	[illegible]	[illegible]	20	20	20
TIME	0350	0350	[illegible]	0350	0350	[illegible]	0350	0350	[illegible]	[illegible]	0350	0350
OCT	[illegible]	.04	.06	.07	[illegible]	[illegible]	.18	[illegible]	[illegible]	[illegible]	.25	[illegible]
DATE	[illegible]	[illegible]	31	[illegible]	[illegible]	31	31	[illegible]	[illegible]	[illegible]	[illegible]	31
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1130	1130	1130	1130	1130	[illegible]
NOV	.07	[illegible]	.13	.15	.21	.24	.31	[illegible]	[illegible]	.41	[illegible]	.60
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1930	[illegible]	1930	1930	[illegible]	1930	1930	1930	1930	2000
DEC	M	M	M	M	[illegible]	[illegible]	M	M	M	M	[illegible]	[illegible]
DATE												
TIME												
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MONTH												

MEDFORD, OREGON

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	.01	.02	[illegible]	.03	.05	[illegible]	[illegible]	[illegible]	.13	.15	.16	.18
DATE	12	[illegible]	12	12	12	12	12	12	12	12	12	[illegible]
TIME	[illegible]	[illegible]	0245	[illegible]	[illegible]	[illegible]	0300	0345	0345	0400	0730	0730
FEB	.01	[illegible]	[illegible]	.05	.05	.06	[illegible]	.08	.10	.11	.12	.12
DATE	05	[illegible]	[illegible]	05	05	05	[illegible]	26	26	26	26	26
TIME	0350	[illegible]	[illegible]	0400	0410	0420	1400	1405	1405	[illegible]	1415	1445
MAR	.03	.06	.08	[illegible]	.12	[illegible]	.19	.23	.23	.23	.23	[illegible]
DATE	[illegible]	21	21	[illegible]	21	21	[illegible]	21	[illegible]	21	21	[illegible]
TIME	[illegible]	1245	[illegible]	[illegible]	1245	[illegible]	[illegible]	1322	1328	[illegible]	[illegible]	1328
APR	[illegible]	[illegible]	.03	.04	.06	[illegible]	.10	.12	.15	.17	.22	.27
DATE	[illegible]	12	[illegible]	12	13	[illegible]	[illegible]	[illegible]	13	13	13	13
TIME	2335	[illegible]	[illegible]	2150	0000	0000	0000	0000	[illegible]	[illegible]	[illegible]	0000
MAY	[illegible]	.06	.08	.09	[illegible]	.09	[illegible]	.15	.17	.17	.17	[illegible]
DATE	[illegible]	24	[illegible]	24	[illegible]	[illegible]	24	24	24	[illegible]	24	[illegible]
TIME	[illegible]	1120	1125	1125	1125	[illegible]	1207	1228	1230	1230	1230	1230
JUN	.01	[illegible]	.02	.02	.02	.02	.02	.02	.03	.03	.03	.03
DATE	16	16	[illegible]	[illegible]	16	16	[illegible]	16	16	[illegible]	16	16
TIME	1119	1124	[illegible]	[illegible]	1144	1159	[illegible]	1234	1254	1314	1344	1414
JUL	.01	.01	[illegible]	[illegible]	.02	.02	.02	[illegible]	[illegible]	.04	.04	.04
DATE	19	19	[illegible]	19	[illegible]	[illegible]	19	19	19	19	19	19
TIME	1130	[illegible]	[illegible]	[illegible]	1201	1201	1201	1201	1201	[illegible]	1201	1201
AUG	.01	[illegible]	.02	.03	.03	.03	.03	.03	[illegible]	[illegible]	[illegible]	.03
DATE	24	[illegible]	[illegible]	[illegible]	24	24	24	[illegible]	24	[illegible]	24	24
TIME	1200	[illegible]	[illegible]	1200	1200	1200	1208	1228	1347	1407	1437	1507
SEP	.02	.04	[illegible]	.08	[illegible]	.16	.17	.22	.25	.26	.27	.28
DATE	20	20	[illegible]	20	[illegible]	20	20	20	[illegible]	[illegible]	20	20
TIME	[illegible]	0830	[illegible]	0830	0845	[illegible]	0845	0845	0845	0845	0845	[illegible]
OCT	[illegible]	[illegible]	[illegible]	[illegible]	.16	.20	.24	.28	[illegible]	[illegible]	.42	.48
DATE	[illegible]	[illegible]	[illegible]	[illegible]	21	21	21	21	21	22+	21	21
TIME	0840	0850	[illegible]	0825	0825	0825	0825	0825	0825	0512	1030	1030
NOV	[illegible]	[illegible]	.08	.11	.14	.16	.18	.24	[illegible]	.34	[illegible]	.50
DATE	12	12	12	[illegible]	12	12	30	30	05	30	05	[illegible]
TIME	[illegible]	0145	0150	0512	0207	[illegible]	0522	0607	1602	0650	1530	1600
DEC	.04	.09	.11	[illegible]	.16	.21	.28	.35	.42	.43	.46	.50
DATE	12	12	12	12	12	12	12	12	12	12	[illegible]	[illegible]
TIME	[illegible]	1844	1845	[illegible]	[illegible]	1915	[illegible]	[illegible]	2032	1830	1830	[illegible]
YEAR	.04	.09	.11	.14	.16	.21	[illegible]	.35	.42	[illegible]	.46	.50
MONTH	12+	12	[illegible]	12	12+	12	12	[illegible]	12	12	12	[illegible]

PENDLETON, OREGON

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	.02	[illegible]	.03	.03	.05	.05	.05	.06	[illegible]	.07	.08
DATE	[illegible]	10	[illegible]	[illegible]	30	[illegible]	[illegible]	30	[illegible]	30	05	05
TIME	[illegible]	[illegible]	2220	[illegible]	[illegible]	[illegible]	[illegible]	2240	2250	2255	0945	1010
FEB	[illegible]	.09	[illegible]	.13	[illegible]	[illegible]	[illegible]	.20	[illegible]	.23	.27	.28
DATE	[illegible]	[illegible]	28	28	[illegible]	28	28	28	[illegible]	[illegible]	28	[illegible]
TIME	[illegible]	1950	[illegible]	2000	2000	[illegible]	[illegible]	2049	2110	2120	2200	[illegible]
MAR	[illegible]	.05	[illegible]	.09	.09	.11	[illegible]	.14	.14	[illegible]	[illegible]	.18
DATE	[illegible]	30	[illegible]	30	[illegible]	30	30	[illegible]	[illegible]	30	[illegible]	[illegible]
TIME	2150	[illegible]	[illegible]	2150	2150	[illegible]	2200	2220	2240	2300	2330	[illegible]
APR	[illegible]	[illegible]	[illegible]	.04	[illegible]	.06	[illegible]	.07	.07	.08	.08	[illegible]
DATE	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]	[illegible]	18	18	[illegible]	18	[illegible]
TIME	[illegible]	1815	[illegible]	[illegible]	1815	[illegible]	1815	1815	1815	1815	1815	[illegible]
MAY	[illegible]	.04	[illegible]	.05	.09	.11	[illegible]	.14	[illegible]	.16	.20	[illegible]
DATE	24	[illegible]	24	24	[illegible]	24	[illegible]	24	07	07	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1459	[illegible]	1500	1500	1500	[illegible]	[illegible]	[illegible]	[illegible]
JUN	.03	[illegible]	[illegible]	.04	.04	[illegible]	[illegible]	.06	.06	.07	.07	.07
DATE	[illegible]	22	22	[illegible]	22	22	22	22	22	22	22	[illegible]
TIME	1725	[illegible]	1725	[illegible]	1725	[illegible]	1725	[illegible]	1725	1725	1725	[illegible]
JUL	[illegible]	.01	[illegible]	.01	.01	.01	[illegible]	.01	.01	.01	.01	.01
DATE	20	[illegible]	20	20	20	20	20	20	[illegible]	[illegible]	20	[illegible]
TIME	[illegible]	2340	[illegible]	[illegible]	[illegible]	[illegible]	2340	[illegible]	2340	2340	2340	[illegible]
AUG	.02	.02	[illegible]	.03	[illegible]	.05	.05	[illegible]	.06	.06	.06	[illegible]
DATE	[illegible]	[illegible]	24	[illegible]	24	24	24	[illegible]	24	24	24	[illegible]
TIME	[illegible]	[illegible]	0849	0849	0849	[illegible]	0849	[illegible]	0849	[illegible]	[illegible]	[illegible]
SEP	[illegible]	[illegible]	.14	[illegible]	[illegible]	.24	.29	.31	.32	.32	.32	[illegible]
DATE	20	20	[illegible]	20	[illegible]	20	20	[illegible]	20	[illegible]	20	[illegible]
TIME	[illegible]	0050	0055	0100	0110	[illegible]	0140	0200	0220	0240	[illegible]	0340
OCT	[illegible]	.04	[illegible]	[illegible]	[illegible]	.11	.13	.15	[illegible]	.21	.26	[illegible]
DATE	[illegible]	31	[illegible]	[illegible]	[illegible]	31	31	[illegible]	31	31	31	31
TIME	1506	1509	1514	[illegible]	[illegible]	1544	1559	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NOV	[illegible]	[illegible]	.05	.08	.10	.12	[illegible]	[illegible]	.21	.22	.22	[illegible]
DATE	[illegible]	[illegible]	11	11	[illegible]	[illegible]	[illegible]	11	[illegible]	11	11	11
TIME	[illegible]	[illegible]	[illegible]	1628	1628	1640	1715	[illegible]	[illegible]	1715	[illegible]	1715
DEC	[illegible]	[illegible]	.05	.06	.08	[illegible]	.15	[illegible]	[illegible]	.27	.32	[illegible]
DATE	[illegible]	[illegible]	[illegible]	07	07	07	07	07	[illegible]	07	[illegible]	[illegible]
TIME	[illegible]	1519	1502	[illegible]	1500	[illegible]	1509	1500	1500	[illegible]	[illegible]	1700
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.24	.29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	12	09	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PORTLAND, OREGON

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	[illegible]	.07	.11	.15	.20	.26	.32	.35	.39	.48
DATE	12	12	12	12	28	28	12	12	12	12	12	12
TIME	1635	1640	1500	1535	1530	1545	[illegible]	1600	1600	1600	1625	[illegible]
FEB	.02	[illegible]	[illegible]	.06	[illegible]	[illegible]	.12	[illegible]	.20	.22	.26	.27
DATE	[illegible]	28	[illegible]	[illegible]	28	10	[illegible]	10	10	10	10	[illegible]
TIME	[illegible]	2155	[illegible]	[illegible]	2205	0645	[illegible]	0655	0655	[illegible]	0700	0720
MAR	.05	.09	.11	.14	[illegible]	.22	.25	.31	[illegible]	.34	.36	.36
DATE	[illegible]	[illegible]	[illegible]	10	[illegible]	[illegible]	01	[illegible]	01	[illegible]	01	[illegible]
TIME	[illegible]	[illegible]	1137	1140	1150	[illegible]	0900	0905	0905	0918	0952	1022
APR	.05	.07	[illegible]	.10	[illegible]	[illegible]	.18	.18	.20	.20	.20	.20
DATE	18	18	[illegible]	18	[illegible]	17	[illegible]	[illegible]	17	17	17	[illegible]
TIME	1835	1835	[illegible]	1835	1545	1545	[illegible]	1545	[illegible]	1645	1645	1645
MAY	.12	.20	.22	.26	[illegible]	.27	.29	[illegible]	[illegible]	.29	.29	[illegible]
DATE	[illegible]	24	24	24	24	24	24	24	24	24	24	24
TIME	1300	1300	1300	[illegible]	1300	1300	1300	1300	1300	1300	[illegible]	[illegible]
JUN	.11	[illegible]	[illegible]	.15	[illegible]	.15	[illegible]	.16	.19	[illegible]	.25	[illegible]
DATE	16	16	16	16	[illegible]	16	16	[illegible]	24	16	16	[illegible]
TIME	1415	1415	1415	[illegible]	[illegible]	1415	1415	[illegible]	1819	1415	1315	1315
JUL	.01	[illegible]	.02	.02	[illegible]	.04	[illegible]	[illegible]	.06	[illegible]	.06	.06
DATE	20	20	20	20	[illegible]	[illegible]	20	20	20	[illegible]	20	20
TIME	0150	0150	0150	0150	[illegible]	[illegible]	0150	0150	0150	0150	0150	0150
AUG	[illegible]	[illegible]	[illegible]	[illegible]	.38	.42	[illegible]	.50	.50	[illegible]	.52	[illegible]
DATE	24	24	[illegible]	[illegible]	24	24	24	[illegible]	24	24	24	24
TIME	1610	1620	1625	[illegible]	1630	1620	1625	1640	[illegible]	[illegible]	1700	[illegible]
SEP	.08	[illegible]	[illegible]	[illegible]	[illegible]	.30	[illegible]	.36	.36	[illegible]	.38	.40
DATE	06	06	[illegible]	06	06	06	06	[illegible]	06	06	06	[illegible]
TIME	2150	[illegible]	2150	2150	2150	2150	2150	2150	2150	2150	2150	2150
OCT	.08	[illegible]	.12	.16	[illegible]	[illegible]	.18	.20	[illegible]	[illegible]	.27	[illegible]
DATE	31	31	[illegible]	31	[illegible]	31	31	20	20	20	[illegible]	[illegible]
TIME	[illegible]	1314	1314	[illegible]	1314	1314	1314	1840	1840	1840	[illegible]	[illegible]
NOV	.09	.18	[illegible]	[illegible]	[illegible]	.26	[illegible]	[illegible]	.55	[illegible]	[illegible]	.83
DATE	11	11	11	11	[illegible]	28	[illegible]	15	15	[illegible]	15	[illegible]
TIME	[illegible]	1835	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DEC	.05	[illegible]	[illegible]	.12	[illegible]	[illegible]	.24	[illegible]	.34	[illegible]	.40	[illegible]
DATE	07	07	07	[illegible]	12	12	12	[illegible]	12	12	12	[illegible]
TIME	[illegible]	[illegible]	0930	[illegible]	[illegible]	1430	[illegible]	[illegible]	1430	[illegible]	[illegible]	1430
YEAR	[illegible]	.34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.50	[illegible]	.59	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PORTLAND, OREGON

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	.03	.05	[illegible]	.08	.12	.16	[illegible]	[illegible]	.24	.29	[illegible]	.40
DATE	12	12	[illegible]	12	12	12	[illegible]	12	12	[illegible]	12	12
TIME	1505	1510	1515	1515	1515	[illegible]	1530	1540	1550	1600	1630	1700
FEB	[illegible]	[illegible]	[illegible]	[illegible]	.12	.15	.19	.21	[illegible]	.28	[illegible]	.35
DATE	[illegible]	[illegible]	[illegible]	28	28	28	[illegible]	28	[illegible]	[illegible]	28	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2145	[illegible]	2145	[illegible]	2145	2145	2145	2250	2250
MAR	[illegible]	.09	[illegible]	.15	[illegible]	.24	[illegible]	.36	.37	[illegible]	.40	.44
DATE	[illegible]	01	[illegible]	01	[illegible]	[illegible]	01	01	01	[illegible]	[illegible]	[illegible]
TIME	0845	0850	[illegible]	[illegible]	0855	[illegible]	0910	0930	[illegible]	0950	[illegible]	1110
APR	.05	[illegible]	.08	.10	.12	.13	[illegible]	.19	.21	.21	.21	.21
DATE	[illegible]	[illegible]	16	[illegible]	16	16	[illegible]	18	[illegible]	[illegible]	[illegible]	18
TIME	0530	[illegible]	0530	[illegible]	0530	[illegible]	1132	[illegible]	1210	[illegible]	1210	[illegible]
MAY	.05	.06	[illegible]	[illegible]	[illegible]	.12	.12	.15	[illegible]	[illegible]	.19	.20
DATE	09	09	[illegible]	24+	24	24	[illegible]	24	24	24	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0525	0525	0526	[illegible]	0600	0605	0600	0610	0615
JUN	.08	[illegible]	.12	.13	.14	.14	.15	.15	[illegible]	.22	.26	.29
DATE	17	[illegible]	[illegible]	17	17	17	[illegible]	24+	24	24	24	24
TIME	[illegible]	[illegible]	1253	1258	1710	[illegible]	1725	1800	1800	1800	1830	1900
JUL	-	-	-	-	-	-	-	-	-	-	-	-
DATE												
TIME												
AUG	-	-	-	-	-	-	-	-	-	-	-	-
DATE												
TIME												
SEP	-	-	-	-	-	-	-	-	-	-	-	-
DATE												
TIME												
OCT	-	-	-	-	-	-	-	-	-	-	-	-
DATE												
TIME												
NOV	-	-	-	-	-	-	-	-	-	-	-	-
DATE												
TIME												
DEC	-	-	-	-	-	-	-	-	-	-	-	-
DATE												
TIME												
YEAR												
MONTH												

MAXIMUM SHORT DURATION PRECIPITATION

YEAR 197[illegible]

Maximum precipitation in inches (5 to 180 minutes)

SALEM, OREGON

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.04	[illegible]	.06	.08	[illegible]	[illegible]	.19	.23	[illegible]	.35	.40	.44
DATE	[illegible]	12	12	12	12	[illegible]	12	12	12	12	12	12
TIME	[illegible]	[illegible]	1415	[illegible]	[illegible]	[illegible]	1300	1320	1415	[illegible]	1450	1500
FEB	[illegible]	[illegible]	.11	[illegible]	.11	[illegible]	.14	.14	.15	.19	[illegible]	.19
DATE	[illegible]	28	28	[illegible]	[illegible]	[illegible]	28	[illegible]	[illegible]	28	28	28
TIME	[illegible]	2100	2105	2110	[illegible]	2125	2150	2150	[illegible]	2100	2100	2100
MAR	.05	[illegible]	[illegible]	.08	[illegible]	.09	.15	.18	.19	.20	.22	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]	18	18	[illegible]	18	18
TIME	[illegible]	[illegible]	1525	[illegible]	1440	2145	[illegible]	2205	[illegible]	2245	[illegible]	2345
APR	[illegible]	[illegible]	[illegible]	.10	[illegible]	[illegible]	.17	.22	.24	.28	.33	.36
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0525	0535	[illegible]	1200	[illegible]	0645	0705	0735	[illegible]
MAY	[illegible]	[illegible]	[illegible]	.08	[illegible]	[illegible]	[illegible]	.12	.13	.15	.18	[illegible]
DATE	[illegible]	[illegible]	24	[illegible]	24	24	24	23	23	23	23	[illegible]
TIME	[illegible]	1450	1455	[illegible]	1510	1525	[illegible]	1110	1130	[illegible]	1220	1250
JUN	.08	[illegible]	[illegible]	.14	.16	[illegible]	[illegible]	[illegible]	.21	.23	.26	[illegible]
DATE	[illegible]	[illegible]	17	17	17	[illegible]	[illegible]	17	17	17	[illegible]	17
TIME	[illegible]	[illegible]	1300	1305	1315	1315	1300	1740	[illegible]	[illegible]	1740	[illegible]
JUL	[illegible]	T	[illegible]	T	[illegible]	[illegible]	[illegible]	T	T	T	T	T
DATE												
TIME												
AUG	.04	.06	[illegible]	[illegible]	.13	.15	.19	[illegible]	.30	.35	.39	.41
DATE	[illegible]	[illegible]	24	24	24	24	[illegible]	[illegible]	24	[illegible]	24	24
TIME	[illegible]	[illegible]	[illegible]	0755	0805	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0805	0835
SEP	.12	.19	.20	.21	[illegible]	.24	[illegible]	.27	[illegible]	.27	[illegible]	.35
DATE	[illegible]	[illegible]	23	[illegible]	[illegible]	23	23	23	[illegible]	23	[illegible]	06
TIME	[illegible]	1145	[illegible]	1153	[illegible]	1210	1233	1250	1250	1250	2112	2110
OCT	[illegible]	.08	[illegible]	.12	[illegible]	.19	[illegible]	[illegible]	.33	[illegible]	.39	.39
DATE	[illegible]	[illegible]	23	23	[illegible]	23	23	23	23	[illegible]	23	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0300	0300	[illegible]	0300	0320	[illegible]	0340	0345	0345
NOV	[illegible]	[illegible]	.20	.23	[illegible]	.35	.37	.38	.40	.42	.48	.50
DATE	[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15	[illegible]	15
TIME	[illegible]	[illegible]	0015	0015	[illegible]	0010	[illegible]	2350	[illegible]	[illegible]	[illegible]	1620
DEC	[illegible]	.08	.10	.13	.19	.22	.30	.35	.43	.47	.52	.56
DATE	[illegible]	13	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	12	12	12
TIME	[illegible]	[illegible]	0350	0350	[illegible]	[illegible]	1615	[illegible]	[illegible]	1615	[illegible]	1700
YEAR	.12	.19	[illegible]	[illegible]	.28	[illegible]	.37	.38	.43	[illegible]	.52	.56
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	11	11	11	11	[illegible]	12	12	[illegible]

SEXTON SUMMIT, OREGON

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.05	.06	.09	.10	.13	[illegible]	.19	.22	.26	.33	.37	.39
DATE	12	12	[illegible]	12	12	[illegible]	[illegible]	12	12	[illegible]	12	[illegible]
TIME	[illegible]	1120	1130	1135	1140	[illegible]	1155	1130	1130	1130	1130	1120
FEB	.01	.02	[illegible]	.04	.07	.08	.09	.11	.14	.16	.19	.21
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	1820	1825	[illegible]	1835	1845	1900	1900	1930	1955	[illegible]	2045	2115
MAR	.04	[illegible]	.08	.10	.13	.17	.21	.24	.27	.29	.33	.43
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	0543	0548	0554	0600	0557	0602	0606	0602	0605	0600	0630	0755
APR	.02	.03	.05	.06	.10	.13	.16	.19	.22	[illegible]	.23	.23
DATE	12	12	12	12	12	12	12	12	12	13	13	13
TIME	[illegible]	[illegible]	2222	2227	2237	2250	2305	2325	2345	0005	0035	0105
MAY	.02	.03	.03	.04	.04	.07	.08	.09	.11	.11	.12	.13
DATE	24	24	24	04	04	24	24	24	24	24	24	04
TIME	1159	1204	1209	0105	0105	1209	1225	1240	1240	1240	1240	0347
JUN	.05	.05	.05	.05	.05	.06	.07	.07	.09	.09	.09	.10
DATE	16	16	16	16	16	17	17	17	17	17	17	17
TIME	1215	1215	1215	1215	1215	1345	1345	1345	1433	1433	1433	1433
JUL	.05	.06	.07	.07	.07	.07	.07	.07	.07	.08	.12	.12
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	0940	0945	0950	0950	0950	0950	0950	0950	0950	0950	0950	0950
AUG	.02	.03	.05	.05	.06	.06	.09	.10	[illegible]	.10	.10	.10
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	1147	1108	1108	1108	1108	1108	1147	1147	1147	1147	1147	1147
SEP	.05	.08	[illegible]	[illegible]	[illegible]	.20	[illegible]	.32	.36	.41	.50	.59
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME	1558	1747	1838	1834	1832	1829	1838	1838	1845	1845	1845	1855
OCT	.12	.19	.22	.27	.30	.45	.56	.65	.74	.80	.92	1.05
DATE	31	31	22	22	22	21	21	21	21	21	21	21
TIME	1933	1933	[illegible]	[illegible]	2145	0452	[illegible]	0530	0549	0612	0645	0713
NOV	.12	[illegible]	.20	.22	.28	.40	.49	.58	.68	.76	.88	.99
DATE	09	09	09	09	12	12	12	12	05	05	12	06
TIME	1438	1438	1438	1438	[illegible]	0115	0115	0043	[illegible]	1046	2345	0217
DEC	.07	.11	.14	.16	.20	.27	.35	.40	.44	.55	.63	.67
DATE	07	07	07	07	07	07	07	07	07	12	07	07
TIME	0522	0552	0545	0545	0545	0527	0510	0450	0435	1638	0330	0315
YEAR	.12	.19	.22	.27	.30	.45	.56	.65	.74	.80	.92	1.05
MONTH	11+	[illegible]	10	10	10	10	10	10	10	10	10	10

ALLENTOWN, PENNSYLVANIA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.15	.25	.27	.28	.32	.33	.35	.40	.45	.46	.47	.47
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	1718	1720	1725	1730	1740	1755	1810	1830	1850	1910	1940	2010
FEB	.03	.05	.07	.09	.14	.20	.26	.30	.35	.40	.45	.49
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	0035	[illegible]	0040	0040	0040	0045	0100	0100	0100	0055	0055	0055
MAR	.04	.07	.08	.09	.13	.16	.23	.25	.30	.35	.40	.45
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0130	0200
APR	.11	.14	.17	.20	.24	.29	.39	.47	.52	.59	.68	.79
DATE	10	10	10	10	10	10	10	10	04	04	04	04
TIME	0400	0405	0405	0405	0405	0405	0405	0405	1440	1455	1430	1500
MAY	.30	.55	.60	.68	.88	.97	1.00	1.01	1.01	1.01	1.01	1.01
DATE	28	28	28	28	28	28	28	28	28	28	28	28
TIME	1910	1910	1915	1920	1930	1930	1950	1950	1950	2000	2000	2000
JUN	.30	.45	.60	.75	.93	1.14	1.33	1.53	1.79	1.82	1.85	1.86
DATE	30	30	30	30	30	30	30	30	30	30	30	30
TIME	1138	[illegible]	1135	1140	1150	1148	1159	1151	1209	1207	1230	1243
JUL	.21	.32	.34	.35	.43	.45	.46	.49	.49	.54	.55	.55
DATE	03	03	03	03	03	03	03	21	21	03	03	03
TIME	0638	0640	0645	0650	0700	0715	0730	1252	1252	0830	0845	0845
AUG	.17	.29	.30	.33	.33	.39	.45	.55	.60	.61	.61	.79
DATE	11	11	11	01	01	01	01	01	01	01	01	01
TIME	1657	1702	1707	1525	1535	1247	1316	1316	1316	1316	1316	1525
SEP	.25	.34	.35	.40	.58	.82	.91	.92	1.02	1.14	1.39	1.57
DATE	03	03	03	03	01	01	01	14	14	14	14	14
TIME	1800	1805	1810	1810	1540	1540	1552	1618	1638	1658	1728	1758
OCT	.10	.12	.13	.14	.18	.23	.25	.29	.33	.36	.43	.50
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	1950	1955	1821	1826	1830	1830	1851	1531	1235	1231	1336	1336
NOV	.09	.14	.17	.22	.23	.26	.27	.28	.31	.32	.33	.34
DATE	28	28	28	28	18	28	28	28	28	28	28	28
TIME	1831	1835	1635	1635	1638	1645	1700	1720	1645	1705	1730	1738
DEC	.09	.12	.15	.21	.25	.37	.49	.57	.63	.68	.77	.94
DATE	20	20	20	20	20	20	20	20	20	20	20	21
TIME	2122	2125	2130	2135	2145	2200	2215	2235	2255	2315	2345	0015
YEAR	.30	.55	.60	.75	.93	1.14	1.33	1.53	1.79	1.82	1.85	1.86
MONTH	04+	05	04+	06	06	06	06	06	06	06	06	06

ERIE, PENNSYLVANIA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.12	[illegible]	.20	.21	.22	.24	.26
DATE	[illegible]	[illegible]	[illegible]	22+	[illegible]	[illegible]	03	[illegible]	[illegible]	03	03	03
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2245	[illegible]	2245	[illegible]
FEB	[illegible]	.25	.30	.39	[illegible]	.49	[illegible]	.54	[illegible]	.54	.54	[illegible]
DATE	02	02	[illegible]	02	[illegible]	02	[illegible]	02	[illegible]	02	02	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1550	[illegible]	1550	1550	[illegible]
MAR	.12	.18	.19	.21	[illegible]	.22	.22	.26	.31	.32	[illegible]	[illegible]
DATE	[illegible]	14	14	[illegible]	14	[illegible]	[illegible]	14	14	14	[illegible]	[illegible]
TIME	[illegible]	2015	2020	2030	[illegible]	[illegible]	2030	1430	1448	1510	1540	[illegible]
APR	[illegible]	[illegible]	[illegible]	[illegible]	.08	[illegible]	[illegible]	[illegible]	[illegible]	.23	.27	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2045	[illegible]	[illegible]	2135	2155	1600	1600	[illegible]	[illegible]
MAY	[illegible]	.15	.17	[illegible]	[illegible]	[illegible]	[illegible]	.46	.57	.61	.66	[illegible]
DATE	[illegible]	[illegible]	[illegible]	30	30	30	30	30	30	[illegible]	30	30
TIME	2025	[illegible]	[illegible]	1805	1822	1802	1822	[illegible]	1857	1914	1945	[illegible]
JUN	.35	.69	.84	.99	1.29	[illegible]	1.35	1.37	1.37	[illegible]	1.37	[illegible]
DATE	[illegible]	12	[illegible]	12	[illegible]	[illegible]	12	12	12	12	12	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1958	2014	[illegible]	2025	2025	2025	2025
JUL	[illegible]	.27	.28	[illegible]	.33	[illegible]	[illegible]	.49	.49	.49	.49	.49
DATE	26	26	[illegible]	[illegible]	26	[illegible]	26	[illegible]	[illegible]	26	26	26
TIME	[illegible]	[illegible]	1715	1720	1730	1715	[illegible]	[illegible]	1840	1900	[illegible]	2000
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.61	.65	.73	.76	.80	.89	.93
DATE	09	[illegible]	[illegible]	09	[illegible]	[illegible]	[illegible]	20	20	20	20	20
TIME	[illegible]	[illegible]	1642	[illegible]	1657	[illegible]	1800	1820	1735	1755	1825	1855
SEP	.21	.24	.28	.34	.39	[illegible]	[illegible]	.54	.55	.55	.55	[illegible]
DATE	[illegible]	[illegible]	22	22	22	[illegible]	[illegible]	22	22	[illegible]	22	22
TIME	[illegible]	[illegible]	1747	1753	1806	1816	1831	1852	1915	1920	1920	1828
OCT	.16	[illegible]	[illegible]	[illegible]	[illegible]	.42	.48	.55	.61	[illegible]	[illegible]	[illegible]
DATE	[illegible]	04	04	04	[illegible]	[illegible]	05	05	05	05	05	05
TIME	[illegible]	2200	[illegible]	[illegible]	[illegible]	0104	0120	0140	0200	0200	0200	0200
NOV	[illegible]	[illegible]	.23	.27	.34	.38	[illegible]	[illegible]	.38	.38	.38	.38
DATE	15	15	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1417	1417	1425	1425	1425	1425	[illegible]	1425	1425
DEC	[illegible]	.05	[illegible]	.05	.07	[illegible]	.12	.16	.20	[illegible]	.23	.26
DATE	[illegible]	[illegible]	13	13	[illegible]	[illegible]	13	13	[illegible]	27	20	[illegible]
TIME	[illegible]	[illegible]	1210	[illegible]	1210	[illegible]	1210	1210	2215	[illegible]	945	1014
YEAR	[illegible]	[illegible]	[illegible]	.99	1.29	1.31	1.35	1.37	[illegible]	[illegible]	1.37	1.37
MONTH	[illegible]	[illegible]	[illegible]	06	06	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]

HARRISBURG, PENNSYLVANIA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.11	.12	.13	.13	.16	.20	.24	.28	.32	.39	.43
DATE	22	22	22	22	22	22	04	04	04	04	04	04
TIME	[illegible]	[illegible]	1505	1505	1505	1515	0100	0120	0105	[illegible]	0150	[illegible]
FEB	.03	[illegible]	.08	[illegible]	.12	.14	.16	.22	.28	.30	.38	[illegible]
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	[illegible]	2248	2253	2258	2300	2300	2300	2300	2300	2305	2250	2330
MAR	.10	.18	.22	.23	.23	.25	.29	.29	.29	.29	.29	.29
DATE	17	17	17	17	17	17	17	17	17	17	17	17
TIME	0952	0957	1002	1005	[illegible]	1005	1005	1005	[illegible]	1005	1005	1005
APR	.06	.17	.20	.26	.35	.38	.41	.47	.52	.53	.64	.67
DATE	[illegible]	23	23	23	23	23	23	23	23	23	04	04
TIME	1314	1314	1314	1314	1314	1315	1315	1315	1316	1316	1114	[illegible]
MAY	.30	.42	.46	.52	.60	.76	1.01	1.34	1.54	1.56	1.56	1.58
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	1657	1659	[illegible]	1702	[illegible]	[illegible]	1817	1802	1822	1840	1910	1940
JUN	.14	.17	.22	.24	.30	.36	.42	.46	.49	.53	.56	.62
DATE	12	12	12	12	12	16	16	16	16	16	29	29
TIME	1850	1855	1900	1905	1910	1440	1440	1440	1440	1440	0004	0030
JUL	.26	.48	.76	.82	.92	.95	.96	.97	.97	.97	.97	.97
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	1335	1340	1345	1347	1347	1345	1348	1350	1355	1355	1355	1355
AUG	.29	.31	.32	.33	.35	.36	.36	.36	.36	.36	.36	.36
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	1605	1610	1615	1620	1630	1640	1645	1645	1645	1645	1645	1645
SEP	.19	.24	.28	[illegible]	[illegible]	.51	.63	.78	.94	1.10	1.39	1.63
DATE	18	18	18	18	18	14	14	14	14	14	14	14
TIME	0558	0558	0558	0558	0558	1440	1426	1407	1347	1326	1257	1233
OCT	[illegible]	.20	.22	.26	[illegible]	.32	.36	.40	.50	.50	.60	.67
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	1502	1503	1503	1505	1505	1505	1504	1504	1504	1504	1515	1515
NOV	.10	[illegible]	.14	.14	.14	.16	.21	.21	.22	.23	.24	.25
DATE	28	28	28	28	28	28	24	24	24	24	24	24
TIME	1400	1400	1400	1400	1400	1400	1153	1153	1153	1153	1025	1005
DEC	.06	.09	[illegible]	[illegible]	.16	.21	[illegible]	.35	.44	.52	.67	.73
DATE	20	20	20	20	20	20	09	09	09	09	09	09
TIME	1545	1545	1545	1545	1545	1543	0705	0650	0630	0537	0537	0507
YEAR	.30	.48	.76	.82	.92	.95	1.01	1.34	1.54	1.56	1.56	1.63
MONTH	05	[illegible]	07	07	07	07	05	05	05	05	05	09

PHILADELPHIA, PENNSYLVANIA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.04	.07	.09	.12	.15	.19	.23	.28	.34	.40	.43	.51
DATE	19	19	19	19	19	19	19	19	19	19	19	27
TIME	1707	1710	1712	1715	1735	1740	1755	1815	1835	1850	1920	1710
FEB	.08	.11	.16	.18	.21	.25	.31	.37	.43	.49	.55	.60
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	2034	2039	2045	2050	2100	2110	1220	1220	1240	1245	1315	1345
MAR	.06	.10	.13	.14	.19	.25	.38	.41	.46	.59	.67	.79
DATE	17	26	26	26	26	26	26	26	26	26	26	26
TIME	[illegible]	0100	0100	0100	0100	0100	0115	[illegible]	0145	0200	0230	0300
APR	.13	.16	.18	.24	.32	.38	.48	.60	.68	.79	.82	.92
DATE	27	27	27	04	27	04	04	04	04	04	04	26
TIME	1814	1910	1910	1325	1910	1345	1330	1345	1410	1420	1420	0400
MAY	.18	.34	.38	.42	.46	.50	.54	.57	.58	.58	.58	.58
DATE	30	30	30	30	30	30	30	30	30	30	30	30
TIME	2040	2045	2050	2052	2055	2115	2130	2140	2205	2207	2207	2207
JUN	.41	.81	.83	.84	.92	1.12	1.46	1.64	2.04	2.33	2.49	2.54
DATE	16	16	16	16	29	29	29	29	29	29	29	29
TIME	1500	1500	1500	1505	1600	1625	1625	1625	1625	1620	1640	1706
JUL	.11	.21	.23	.27	.38	.42	.45	.47	.48	.48	.53	.62
DATE	15	15	03	11	15	15	15	15	11	11	03	03
TIME	1439	1435	2120	1455	1450	1505	1520	1540	1600	1620	2210	2210
AUG	.26	.44	.47	.53	.59	.59	.59	.59	.59	.59	.59	.59
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	1510	1517	1522	1522	1522	1537	1552	1612	1632	1652	1722	1752
SEP	.12	.22	.27	.39	.45	.46	.46	.48	.64	.76	.95	1.06
DATE	18	18	18	18	18	18	18	14	14	14	14	14
TIME	0855	0900	0905	0910	0920	0935	0950	1735	1735	1740	1810	1830
OCT	.08	.17	.18	.20	.24	.28	.32	.36	.44	.54	.68	.70
DATE	02	02	02	02	02	02	29	29	29	29	29	29
TIME	1550	1555	1600	1605	1615	1630	0925	0945	1005	1025	1055	1125
NOV	.08	.11	.11	.12	.12	.13	.19	.20	.20	.21	.21	.21
DATE	28	28	28	28	28	28	28	28	28	28	28	28
TIME	1725	1730	1730	1740	1750	1805	1820	1835	1835	1835	1835	1835
DEC	.08	.15	.18	.22	.35	.42	.47	.53	.54	.57	.59	.62
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	0925	0930	0935	0940	0950	1005	1025	1045	1100	1120	1150	1220
YEAR	.41	.81	.83	.84	.92	1.12	1.46	1.64	2.04	2.33	2.49	2.54
MONTH	06	06	06	06	06	06	06	06	06	06	06	06

PITTSBURGH, PENNSYLVANIA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	.11	.13	.17	.22	.29	[illegible]	.45	[illegible]	.60	.63
DATE	[illegible]	[illegible]	03	03	03	[illegible]	03	[illegible]	[illegible]	03	03	03
TIME	2010	[illegible]	2015	2015	2150	2145	[illegible]	[illegible]	2140	[illegible]	2155	[illegible]
FEB	[illegible]	.04	[illegible]	[illegible]	[illegible]	.11	[illegible]	[illegible]	.20	[illegible]	.23	.26
DATE	[illegible]	14	14	14	[illegible]	14	[illegible]	[illegible]	[illegible]	14	14	[illegible]
TIME	[illegible]	[illegible]	1550	[illegible]	[illegible]	1600	[illegible]	1620	1620	1645	1715	1745
MAR	.10	.22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.59	.63	[illegible]	.64	[illegible]
DATE	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	14	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0930	[illegible]	[illegible]	1000	[illegible]	1010	[illegible]	1010	1010
APR	.15	.20	.21	[illegible]	[illegible]	[illegible]	.26	.29	[illegible]	[illegible]	.35	.37
DATE	01	01	[illegible]	01	[illegible]	[illegible]	23	23	23	[illegible]	23	27
TIME	[illegible]	[illegible]	1524	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0915	[illegible]	1005	1218
MAY	.20	[illegible]	[illegible]	[illegible]	[illegible]	.62	.81	.90	1.18	1.20	1.36	1.36
DATE	24	24	24	24	[illegible]	24	24	[illegible]	24	[illegible]	[illegible]	[illegible]
TIME	1350	[illegible]	1400	[illegible]	1358	1350	1355	1420	1458	1500	[illegible]	[illegible]
JUN	.32	.33	[illegible]	[illegible]	[illegible]	[illegible]	.81	.91	1.01	1.03	1.07	1.07
DATE	[illegible]	[illegible]	[illegible]	[illegible]	17	17	[illegible]	17	[illegible]	[illegible]	17	17
TIME	[illegible]	[illegible]	[illegible]	1817	[illegible]	2014	2030	2025	2045	2057	2134	2200
JUL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.53	.58	.60	.62	[illegible]
DATE	[illegible]	[illegible]	31	31	[illegible]	31	31	[illegible]	25	[illegible]	25	[illegible]
TIME	1605	1605	[illegible]	1605	1605	[illegible]	1605	1010	1028	1017	1015	1029
AUG	.53	[illegible]	[illegible]	1.19	[illegible]	1.41	[illegible]	1.46	[illegible]	1.46	1.46	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	13	13	13	13	13	[illegible]
TIME	[illegible]	1753	1758	1803	[illegible]	1827	[illegible]	[illegible]	[illegible]	1846	1846	1846
SEP	[illegible]	.50	[illegible]	.66	[illegible]	[illegible]	1.42	1.75	[illegible]	1.79	1.84	1.85
DATE	[illegible]	22	22	[illegible]	[illegible]	22	[illegible]	[illegible]	[illegible]	22	22	22
TIME	[illegible]	[illegible]	2043	[illegible]	2058	2113	2128	[illegible]	2208	2228	2258	[illegible]
OCT	[illegible]	[illegible]	[illegible]	.58	[illegible]	.72	.72	[illegible]	[illegible]	.89	.94	.94
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	04	[illegible]	[illegible]	[illegible]	04
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1905	[illegible]	1942	[illegible]	2018	2055	2115
NOV	.09	[illegible]	.13	.16	.19	.26	.34	.40	[illegible]	[illegible]	[illegible]	.43
DATE	[illegible]	25	[illegible]	25	25	[illegible]	[illegible]	25	[illegible]	[illegible]	25	25
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0915	[illegible]	0915	0915
DEC	[illegible]	[illegible]	.07	[illegible]	.11	[illegible]	[illegible]	.19	.23	.26	.28	.29
DATE	[illegible]	[illegible]	13	13	[illegible]	[illegible]	13	13	13	[illegible]	13	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1000	1015	[illegible]	[illegible]	1030	1100	[illegible]
YEAR	.53	[illegible]	.97	[illegible]	1.27	[illegible]	1.45	1.75	1.75	1.79	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	08	[illegible]	08	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PITTSBURGH, PENNSYLVANIA C.O.

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	.10	.12	[illegible]	.20	.23	.26	.29	.36	.37	.38
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME	0330	0335	0335	[illegible]	0345	0400	0415	0435	[illegible]	0500	0530	0600
FEB	.01	.02	.03	.04	.06	.09	.13	.16	[illegible]	.19	.19	.19
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	[illegible]	1515	[illegible]	1520	1530	1545	1545	1545	1545	1605	1645	1700
MAR	[illegible]	.09	[illegible]	.17	[illegible]	.32	.40	.46	.48	.49	.50	.51
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	[illegible]	[illegible]	2145	2150	2200	2215	2215	2215	2215	2215	2215	[illegible]
APR	.11	.19	.25	.28	.33	.36	.39	.40	.43	.46	.47	.47
DATE	01	01	01	01	23	23	23	23	23	23	23	23
TIME	1458	1500	1500	[illegible]	0645	0900	[illegible]	0930	0950	1010	1040	1100
MAY	.07	.10	.13	[illegible]	.24	.29	.40	.45	.55	.63	.68	.74
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	1300	1400	[illegible]	1405	[illegible]	1514	1500	1520	1515	1530	1600	1600
JUN	.30	.40	.40	.50	.60	.70	.78	.85	.90	.95	.98	.98
DATE	17	17	17	17	17	17	17	17	17	17	17	17
TIME	1947	1949	1949	1949	2000	2015	2030	2045	[illegible]	2130	2200	2200
JUL	.09	.12	.23	.25	.26	.26	.26	.26	.26	.26	.26	.26
DATE	20	20+	14	14	14	14	14	14	14	14	14	14
TIME	0514	0515	2230	2235	2240	2245	[illegible]	2300	2300	2330	2330	2330
AUG	.11	.15	.18	.20	.25	.30	.35	.37	.37	.37	.37	.37
DATE	17	17	17	17	17	17	17	17	17	17	17	17
TIME	1840	1845	1845	1840	1845	1845	1915	1915	1915	1915	1915	1915
SEP	.27	.50	.65	.73	.80	1.10	1.28	1.28	1.28	1.35	1.36	1.37
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME	[illegible]	2105	2110	[illegible]	2120	2135	2150	2200	2220	2240	2310	2340
OCT	.48	.73	.82	.82	.83	.88	.88	.88	.88	.88	.88	.88
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	1915	1915	1915	1920	1945	2005	2005	2015	2025	2105	2135	2205
NOV	.16	.18	.20	.22	.25	.33	.45	.49	.54	.58	.70	.82
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	1500	1505	1510	1515	1525	1715	1715	1715	1715	1715	1720	1750
DEC	.03	.04	.05	.06	.09	.13	.17	.20	.24	.25	.27	.27
DATE	13	13	13	13	13	13	13	15	15	15	15	15
TIME	0930	[illegible]	0930	0930	0930	0930	0915	0840	0840	0840	0840	0840
YEAR	.48	.73	.82	.82	.83	[illegible]	1.28	1.28	1.28	1.35	1.36	1.37
MONTH	10	10	10	10	10	9	09	09	09	09	09	09

WILKES-BARRE-SCRANTON, PA.

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.03	.06	.08	[illegible]	.14	.18	.21	.26	.30	.32	.33	.35
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME	1615	1615	1620	1620	1630	1630	1645	1700	1715	1725	1725	1725
FEB	.03	.06	.09	.10	.14	.18	.21	.21	.25	.28	.29	.32
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	0030	0030	0035	0035	0035	0035	0045	0055	0035	0100	0050	0100
MAR	.19	[illegible]	.22	.22	[illegible]	.24	.24	.28	.29	.30	.31	.33
DATE	17	17	17	17	17	17	17	17	17	17	17	17
TIME	1150	1150	1150	1150	1200	1200	1200	1200	1150	1150	1200	1150
APR	.05	.07	.10	.12	[illegible]	.24	.32	.38	.46	.56	.61	.62
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	0347	0349	0400	0316	0330	0345	0345	0345	0400	0415	0440	0510
MAY	.16	.26	.27	.29	.32	.39	.47	.47	.49	.51	.56	.83
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	1605	1610	1615	1618	1628	1645	1657	1712	1737	1757	1827	1857
JUN	.22	.40	.58	.61	.73	.75	.83	.90	1.05	1.20	1.34	1.43
DATE	28	28	28	28	28	28	28	28	28	28	29	29
TIME	1335	1338	1338	1338	1343	1359	2252	2312	2332	2352	0000	0052
JUL	[illegible]	.73	.79	.85	.87	.87	.87	.87	.87	.87	.88	.88
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1120	1125	1130	1130	1135	1147	1147	1147	1147	1147	335	1405
AUG	.20	.26	.26	.31	.35	.41	.45	.45	.46	.50	.53	.54
DATE	10	10	01	01	01	01	01	01	01	01	01	01
TIME	1855	1900	1935	1935	1946	2000	2015	2035	2015	2005	2030	2020
SEP	.23	.42	.45	[illegible]	.54	.59	.64	.69	.76	.86	.91	[illegible]
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	0530	0533	0535	0540	0550	0600	0607	0630	0650	0713	0730	0800
OCT	.12	.17	.17	.17	.19	.25	.33	.40	.46	.55	.58	.59
DATE	04	04	04	04	29	29	29	29	29	29	29	29
TIME	2329	2329	2329	2329	2015	2015	2030	2045	2045	2045	[illegible]	[illegible]
NOV	.04	.08	.10	.11	.12	.14	.16	.17	.18	.19	.22	.29
DATE	25	25	25	25	25	25	25	25	25	25	25	25
TIME	1322	1322	1322	1322	1300	1322	1330	1345	1410	1430	1500	1530
DEC	.08	.11	.14	.18	.22	.27	.30	.37	.45	.52	.58	.64
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	2032	2037	2042	2047	2055	[illegible]	2100	2100	2100	2100	2100	2100
YEAR	.40	.73	.79	.85	.87	.87	.87	[illegible]	1.05	1.20	1.34	1.43
MONTH	07	07	07	07	07	07	07	06	06	06	06	06

MAXIMUM SHORT DURATION PRECIPITATION

[illegible] (5 to 180 minutes)

BLOCK ISLAND, RHODE ISLAND

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	.23	[illegible]	.33	.41	[illegible]	.48	[illegible]	.61	.63	.66
DATE	[illegible]	[illegible]	[illegible]	29	[illegible]	29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29
TIME	[illegible]	[illegible]	[illegible]	0415	0445	0445	[illegible]	0500	0500	0500	0500	0500
FEB	[illegible]	.20	.20	[illegible]	.30	.35	[illegible]	.43	.50	[illegible]	.61	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	03	03	03	03	03	03	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1945	1750	[illegible]	[illegible]	[illegible]	1945	1945	[illegible]	1945	1945
MAR	[illegible]	.10	[illegible]	.23	[illegible]	.30	.37	.45	[illegible]	[illegible]	.75	.83
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26	26	[illegible]	26	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0740	[illegible]	[illegible]	[illegible]	[illegible]	0828	0817	0900	0900
APR												
DATE												
TIME												
MAY	[illegible]	[illegible]	.25	.35	.50	.55	.55	[illegible]	[illegible]	.80	.85	.90
DATE	20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	[illegible]	[illegible]	[illegible]	20	[illegible]
TIME	0850	[illegible]	[illegible]	0905	[illegible]	[illegible]	[illegible]	0930	[illegible]	0930	[illegible]	0930
JUN	[illegible]	[illegible]	.20	.25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.59	[illegible]
DATE	[illegible]	[illegible]	[illegible]	30	[illegible]	[illegible]	30	[illegible]	[illegible]	30	30	[illegible]
TIME	[illegible]	[illegible]	1655	[illegible]	[illegible]	[illegible]	1707	1800	1235	1250	1240	1240
JUL	[illegible]	.24	[illegible]	.28	.37	.45	.54	.74	.84	.97	[illegible]	1.41
DATE	[illegible]	21	[illegible]	[illegible]	[illegible]	21	[illegible]	21	[illegible]	21	21	[illegible]
TIME	[illegible]	0603	0603	0605	0605	0605	0600	0605	0610	[illegible]	[illegible]	[illegible]
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.25	[illegible]	1.40	1.53	[illegible]
DATE	15	15	[illegible]	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0905	[illegible]	[illegible]	[illegible]	0920	0940	1010	0730	0745
SEP	.30	[illegible]	.36	[illegible]	.45	[illegible]	.55	.59	.64	.72	.85	1.00
DATE	[illegible]	[illegible]	[illegible]	18	[illegible]	18	18	[illegible]	[illegible]	14	[illegible]	[illegible]
TIME	1019	[illegible]	1019	1019	[illegible]	1015	0959	[illegible]	2315	2300	[illegible]	2300
OCT	.15	.20	.24	[illegible]	[illegible]	[illegible]	.41	.49	.65	.71	[illegible]	.85
DATE	[illegible]	[illegible]	[illegible]	03	[illegible]	[illegible]	[illegible]	03	[illegible]	03	03	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0245	[illegible]	[illegible]	0244	[illegible]	[illegible]	0244	[illegible]	[illegible]
NOV	[illegible]	.10	[illegible]	[illegible]	[illegible]	.21	[illegible]	.30	.35	.41	.44	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	28	[illegible]	[illegible]	28	28	28	28	28
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1945	[illegible]	[illegible]	1944	[illegible]	[illegible]
DEC	[illegible]	[illegible]	[illegible]	.28	.30	[illegible]	[illegible]	.83	[illegible]	[illegible]	1.15	[illegible]
DATE	[illegible]	17	17	[illegible]	17	[illegible]	17	17	17	[illegible]	17	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0530	[illegible]	0545	[illegible]	0500	0458	0458
YEAR												
MONTH												

PROVIDENCE, RHODE ISLAND

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.13	.14	.23	.25	.29	.38	[illegible]	.39	.40	[illegible]	.55	[illegible]
DATE	23	[illegible]	23	[illegible]	[illegible]	23	23	[illegible]	23	[illegible]	[illegible]	23
TIME	0100	[illegible]	0105	0105	0115	0115	0115	0115	0115	0115	0115	[illegible]
FEB	.07	.11	.22	.24	[illegible]	.38	[illegible]	.62	[illegible]	.88	.92	1.04
DATE	15	[illegible]	03	03	[illegible]	03	[illegible]	03	03	03	03	03
TIME	0600	0600	2015	2025	2030	2030	2100	2115	[illegible]	2115	2030	2100
MAR	[illegible]	.07	.09	.10	.15	.20	[illegible]	[illegible]	.29	[illegible]	.44	[illegible]
DATE	17	17	[illegible]	04	[illegible]	04	[illegible]	[illegible]	04	04	04	04
TIME	1057	1059	0813	0813	0813	0815	[illegible]	[illegible]	[illegible]	0925	0955	1025
APR	.11	[illegible]	.18	.20	.29	.41	[illegible]	[illegible]	.70	.78	.84	[illegible]
DATE	10	[illegible]	10	[illegible]	[illegible]	01	01	01	[illegible]	01	01	[illegible]
TIME	[illegible]	1035	1035	2255	[illegible]	2255	[illegible]	2315	[illegible]	2330	2330	2330
MAY	.09	[illegible]	.20	.24	[illegible]	[illegible]	.53	.66	.76	.83	.94	1.02
DATE	11	11	11	20	[illegible]	[illegible]	[illegible]	20	[illegible]	20	20	20
TIME	1050	[illegible]	1055	2250	2250	[illegible]	[illegible]	2315	2315	2320	2325	2325
JUN	.21	.31	.46	.50	[illegible]	[illegible]	.65	[illegible]	.68	[illegible]	.68	[illegible]
DATE	13	13	13	13	13	[illegible]	13	[illegible]	13	13	13	30
TIME	[illegible]	1455	1458	[illegible]	1500	1515	[illegible]	1550	1610	1630	1630	0410
JUL	.11	.18	.20	.21	[illegible]	.24	[illegible]	.39	.45	[illegible]	.56	.61
DATE	[illegible]	15	[illegible]	15	[illegible]	15	[illegible]	15	[illegible]	[illegible]	15	15
TIME	[illegible]	[illegible]	0515	0520	0530	0545	[illegible]	[illegible]	[illegible]	0700	[illegible]	[illegible]
AUG	[illegible]	[illegible]	.31	.36	[illegible]	[illegible]	[illegible]	.88	1.00	1.22	1.51	[illegible]
DATE	31	31	[illegible]	[illegible]	15	15	[illegible]	15	[illegible]	15	[illegible]	[illegible]
TIME	[illegible]	[illegible]	2052	2057	0752	0752	0815	0455	[illegible]	0907	0907	0907
SEP	.16	.24	[illegible]	.27	[illegible]	.43	[illegible]	.53	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	06	06	23	23	23	18	[illegible]	[illegible]	18	[illegible]	18
TIME	[illegible]	1405	1405	0100	0113	0113	1310	1250	1308	1308	1308	1308
OCT	[illegible]	[illegible]	.27	.29	.32	.32	.32	.32	.33	.42	.51	[illegible]
DATE	[illegible]	29	[illegible]	29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30	30	[illegible]
TIME	2038	2038	[illegible]	2040	2045	2100	2115	2115	[illegible]	0404	0434	0450
NOV	.05	[illegible]	.12	[illegible]	.16	.18	[illegible]	.23	.26	.31	.35	[illegible]
DATE	[illegible]	[illegible]	27	27	27	28	[illegible]	[illegible]	[illegible]	[illegible]	28	[illegible]
TIME	[illegible]	[illegible]	2255	[illegible]	2310	0243	0238	[illegible]	[illegible]	0350	[illegible]	[illegible]
DEC	.11	[illegible]	[illegible]	.30	[illegible]	.51	[illegible]	.87	.98	[illegible]	1.22	1.44
DATE	21	17	[illegible]	17	[illegible]	17	17	17	[illegible]	[illegible]	17	[illegible]
TIME	[illegible]	[illegible]	0659	0659	[illegible]	[illegible]	0659	[illegible]	0707	[illegible]	[illegible]	[illegible]
YEAR	.21	[illegible]	.46	.50	.56	.60	.77	.88	1.00	1.22	1.51	1.76
MONTH	[illegible]	06	[illegible]	[illegible]	06	08	08	08	08	08	[illegible]	[illegible]

[illegible], SOUTH CAROLINA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.25	[illegible]	.30	[illegible]	.45	.50	[illegible]	.64	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	22	22	[illegible]	22	22	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	0850	[illegible]	0855	0855	[illegible]	0900	[illegible]	0855	0855	[illegible]	[illegible]	[illegible]
FEB	.20	[illegible]	.31	.32	[illegible]	.41	[illegible]	[illegible]	.46	.55	.57	[illegible]
DATE	02	02	02	[illegible]	26	[illegible]	26	[illegible]	26	[illegible]	[illegible]	[illegible]
TIME	0548	[illegible]	0555	0555	2010	2025	[illegible]	2050	2110	[illegible]	[illegible]	[illegible]
MAR	[illegible]	[illegible]	.40	.45	.57	.63	[illegible]	.75	.83	[illegible]	[illegible]	1.18
DATE	[illegible]	06	[illegible]	06	[illegible]	06	06	06	[illegible]	[illegible]	[illegible]	06
TIME	[illegible]	0420	0420	0420	0420	0420	0420	0420	0420	0420	0352	[illegible]
APR	.15	.30	[illegible]	[illegible]	.44	.48	[illegible]	.58	[illegible]	.65	.68	[illegible]
DATE	01	[illegible]	01	[illegible]	01	01	01	01	[illegible]	01	01	01
TIME	0217	0216	0223	0226	0236	0251	[illegible]	0310	0332	[illegible]	[illegible]	0422
MAY	.33	[illegible]	[illegible]	.47	[illegible]	.49	.52	.56	[illegible]	[illegible]	[illegible]	[illegible]
DATE	29	29	[illegible]	29	[illegible]	29	[illegible]	29	[illegible]	[illegible]	[illegible]	29
TIME	1330	1330	[illegible]	1330	1330	1330	1330	1330	[illegible]	[illegible]	[illegible]	1625
JUN	.48	[illegible]*	1.35	1.70*	[illegible]	3.42*	3.89	3.95	[illegible]	[illegible]	[illegible]*	4.57
DATE	19	[illegible]	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19
TIME	1523	[illegible]	[illegible]	1527	[illegible]	1548	1802	1802	1802	1802	1802	1802
JUL	.30	[illegible]	[illegible]	1.17	[illegible]	[illegible]	1.84	[illegible]	[illegible]	[illegible]	[illegible]	1.90
DATE	[illegible]	[illegible]	31	31	[illegible]	31	[illegible]	31	31	31	31	31
TIME	1210	[illegible]	1215	[illegible]	1225	1231	[illegible]	1250	[illegible]	1250	1250	1250
AUG	.40	[illegible]	.73	.83	1.30	[illegible]	2.28	2.63	2.69	2.71	2.73	2.75
DATE	[illegible]	[illegible]	06	06	[illegible]	06	06	[illegible]	[illegible]	06	06	06
TIME	1344	[illegible]	1411	1442	1405	1441	1437	1449	1514	1535	1605	1635
SEP	.35	[illegible]	.70	.75	1.05	1.32	[illegible]	1.97	2.13	2.27	2.37	2.47
DATE	[illegible]	[illegible]	[illegible]	14	09	[illegible]	[illegible]	[illegible]	09	[illegible]	[illegible]	[illegible]
TIME	0408	0410	0410	0410	[illegible]	2055	2112	2132	2152	2213	2243	[illegible]
OCT	.04	[illegible]	.05	[illegible]	.08	.11	.14	.16	.18	[illegible]	[illegible]	.27
DATE	04	04	[illegible]	22	22	22	22	[illegible]	[illegible]	[illegible]	[illegible]	22
TIME	[illegible]	1439	[illegible]	[illegible]	1200	1200	1230	1233	[illegible]	1245	1317	1345
NOV	.13	.15	.16	.17	.17	.19	.23	[illegible]	.26	[illegible]	[illegible]	.42
DATE	21	21	[illegible]	21	21	21	21	21	21	[illegible]	[illegible]	21
TIME	1458	[illegible]	[illegible]	[illegible]	1520	1650	1704	[illegible]	1725	1650	1727	1755
DEC	.22	.25	.27	.27	.28	[illegible]	.45	[illegible]	.50	[illegible]	[illegible]	.51
DATE	13	13	13	13	[illegible]	[illegible]	20	[illegible]	20	20	20	20
TIME	2342	2347	[illegible]	[illegible]	2353	2359	0850	0855	0930	1020	1020	[illegible]
YEAR	.48	.83*	1.35	1.70*	2.47	3.42*	[illegible]	[illegible]	4.26*	4.48	4.53*	4.57
MONTH	[illegible]	06	06	06	[illegible]	[illegible]	[illegible]	06	06	06	06	[illegible]

CHARLESTON, SOUTH CAROLINA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.67	.82	.98	[illegible]	1.37	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	[illegible]	22	22	22	22	[illegible]
TIME	[illegible]	[illegible]	0757	0802	[illegible]	[illegible]	0828	0848	0908	0928	0947	1017
FEB	M	M	M	M	M	M	.30	M	M	.55	M	.60
DATE							10			10		10
TIME							[illegible]			0900		1000
MAR	[illegible]	[illegible]	.51	[illegible]	.79	[illegible]	1.00	1.00	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	05	[illegible]	05	[illegible]	[illegible]	25	25	25	25
TIME	[illegible]	[illegible]	[illegible]	0652	0658	0708	0708	0708	[illegible]	1632	[illegible]	[illegible]
APR	.10	.13	.15	[illegible]	[illegible]	.31	.41	.46	.47	.48	.49	.52
DATE	[illegible]	04	[illegible]	[illegible]	[illegible]	26	26	26	[illegible]	26	26	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2212	2212	[illegible]	[illegible]	2212	[illegible]	[illegible]
MAY	.10	.15	.20	.22	[illegible]	.36	.42	.50	[illegible]	.50	.50	.50
DATE	[illegible]	[illegible]	14	14	[illegible]	[illegible]	14	14	14	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1336	[illegible]	1343	[illegible]	[illegible]	1406	1412	[illegible]	1412	1412	1412
JUN	[illegible]	[illegible]	1.05	[illegible]	[illegible]	2.20	[illegible]	3.73	4.42	4.70	5.38	[illegible]
DATE	[illegible]	[illegible]	[illegible]	11	11	11	[illegible]	[illegible]	[illegible]	11	[illegible]	11
TIME	[illegible]	[illegible]	[illegible]	0353	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0450	[illegible]
JUL	[illegible]	[illegible]	.26	[illegible]	[illegible]	.53	.56	.61	[illegible]	[illegible]	.69	.70
DATE	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1423	[illegible]	1432	[illegible]	1500	1520	1542	1602	[illegible]	1702
AUG	.24	[illegible]	.41	.56	[illegible]	.84	.86	1.02	[illegible]	1.15	1.22	[illegible]
DATE	[illegible]	21	[illegible]	[illegible]	21	21	21	21	[illegible]	21	21	[illegible]
TIME	[illegible]	1600	1600	[illegible]	[illegible]	1826	[illegible]	1844	1902	1844	1948	[illegible]
SEP	[illegible]	.25	[illegible]	.40	.55	.70	.71	[illegible]	.76	.81	.98	1.16
DATE	[illegible]	[illegible]	13	13	13	[illegible]	13	13	13	[illegible]	[illegible]	09
TIME	2033	[illegible]	2035	2040	[illegible]	[illegible]	2100	2128	[illegible]	2157	[illegible]	2359
OCT	.05	.06	[illegible]	.08	[illegible]	.14	.18	.21	.23	.24	.25	.26
DATE	[illegible]	02	[illegible]	22	[illegible]	22	[illegible]	22	22	22	22	22
TIME	[illegible]	[illegible]	1233	1100	1104	1103	[illegible]	1139	1159	1219	[illegible]	[illegible]
NOV	[illegible]	[illegible]	.18	[illegible]	[illegible]	[illegible]	.22	.23	[illegible]	.23	.23	.25
DATE	[illegible]	[illegible]	21	[illegible]	21	[illegible]	[illegible]	21	[illegible]	21	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1715	[illegible]	[illegible]	1755	1815	[illegible]	1856	1926	1752
DEC	.15	.28	.29	[illegible]	.41	[illegible]	.50	.50	[illegible]	.50	.50	.50
DATE	14	[illegible]	20	20	20	20	20	20	20	20	20	[illegible]
TIME	[illegible]	[illegible]	0855	[illegible]	0858	[illegible]	0858	[illegible]	0858	0858	[illegible]	[illegible]
YEAR						M	[illegible]			4.70		5.61
MONTH							[illegible]			06		06

COLUMBIA, SOUTH CAROLINA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	.13	[illegible]	[illegible]	.37	[illegible]	[illegible]	.63	[illegible]	.71	[illegible]
DATE	26	[illegible]	26	26	[illegible]	22	[illegible]	[illegible]	[illegible]	22	[illegible]	[illegible]
TIME	[illegible]	1745	1745	1750	[illegible]	[illegible]	0600	0555	0600	0600	[illegible]	[illegible]
FEB	[illegible]	[illegible]	.20	.25	[illegible]	.45	.58	[illegible]	.82	[illegible]	1.05	[illegible]
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	02	02	[illegible]	02	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0500	0515	0520	[illegible]	[illegible]	0615	0615
MAR	.32	[illegible]	[illegible]	.83	[illegible]	1.40	[illegible]	1.85	[illegible]	2.04	2.07	2.13
DATE	[illegible]	[illegible]	[illegible]	08	08	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	0505	1053	1058	1058	[illegible]	1110	[illegible]	[illegible]	[illegible]	[illegible]	1255	[illegible]
APR	.15	[illegible]	[illegible]	.58	[illegible]	[illegible]	.80	[illegible]	[illegible]	[illegible]	1.21	[illegible]
DATE	[illegible]	24	24	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1058	[illegible]	1128	[illegible]	[illegible]	1428	1615	1615	[illegible]
MAY	.37	[illegible]	[illegible]	.50	[illegible]	.85	.88	.90	[illegible]	.90	1.00	[illegible]
DATE	[illegible]	[illegible]	24	24	[illegible]	[illegible]	29	[illegible]	[illegible]	[illegible]	08	[illegible]
TIME	[illegible]	1432	[illegible]	[illegible]	[illegible]	0415	0415	[illegible]	[illegible]	[illegible]	1615	[illegible]
JUN	[illegible]	.54	[illegible]	[illegible]	1.50	2.13	2.76	3.18	[illegible]	[illegible]	3.23	[illegible]
DATE	[illegible]	15	15	15	15	[illegible]	15	15	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1644	[illegible]	1654	[illegible]	[illegible]	[illegible]	1748	1814	[illegible]	1901	[illegible]
JUL	.20	[illegible]	.40	.40	[illegible]	[illegible]	[illegible]	.52	.52	[illegible]	.58	[illegible]
DATE	[illegible]	04	[illegible]	04	[illegible]	04	04	04	04	[illegible]	23	23
TIME	[illegible]	[illegible]	1700	[illegible]	[illegible]	1700	1710	[illegible]	1710	1653	1653	[illegible]
AUG	[illegible]	.75	[illegible]	1.10	1.48	1.69	[illegible]	1.86	1.91	[illegible]	1.91	2.40
DATE	[illegible]	01	[illegible]	[illegible]	[illegible]	01	01	01	01	01	01	01
TIME	[illegible]	1553	1553	[illegible]	1538	1531	1531	1500	1500	[illegible]	1500	[illegible]
SEP	.34	[illegible]	.75	[illegible]	.78	.84	.93	[illegible]	1.01	[illegible]	[illegible]	1.35
DATE	[illegible]	[illegible]	09	[illegible]	[illegible]	09	09	[illegible]	09	[illegible]	09	09
TIME	[illegible]	1810	[illegible]	1820	[illegible]	1845	1900	1902	1912	[illegible]	1817	1900
OCT	.18	[illegible]	.35	.37	[illegible]	[illegible]	.45	.45	.48	.50	.52	.52
DATE	[illegible]	28	28	28	28	28	28	28	[illegible]	[illegible]	[illegible]	29
TIME	2149	2154	2159	2204	[illegible]	2229	2244	2304	2324	[illegible]	0014	0014
NOV	.16	.22	[illegible]	.25	[illegible]	.31	.31	.32	.33	.33	.33	.33
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	21	[illegible]	[illegible]	[illegible]	21	21
TIME	1314	1319	[illegible]	[illegible]	[illegible]	1348	1407	[illegible]	[illegible]	1504	1534	1604
DEC	.16	.22	.23	.31	[illegible]	.35	[illegible]	.35	.41	.45	.50	.55
DATE	[illegible]	[illegible]	30	30	[illegible]	[illegible]	30	30	[illegible]	08	08	30
TIME	2031	1750	1755	1600	[illegible]	1820	[illegible]	1855	[illegible]	[illegible]	1030	[illegible]
YEAR	.40	.75	[illegible]	1.10	[illegible]	2.13	2.76	3.18	3.23	3.23	3.23	4.66
MONTH	08	[illegible]	[illegible]	08	06	06	[illegible]	[illegible]	[illegible]	[illegible]	06	06

GREENVILLE SPARTANBURG, S. C.

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.13	[illegible]	.16	[illegible]	.20	.27	[illegible]	[illegible]	[illegible]	.49	.55	[illegible]
DATE	[illegible]	[illegible]	22	22	22	26	26	26	[illegible]	[illegible]	[illegible]	[illegible]
TIME	0415	[illegible]	[illegible]	0430	0440	[illegible]	2040	2040	[illegible]	0420	2040	0445
FEB	[illegible]	[illegible]	.23	.27	[illegible]	[illegible]	[illegible]	.69	.80	.86	1.14	1.22
DATE	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01	01	01	01	[illegible]
TIME	0045	[illegible]	[illegible]	0050	2250	2250	2250	[illegible]	2250	2250	2250	2250
MAR	.28	.35	.36	[illegible]	[illegible]	[illegible]	[illegible]	.86	.96	.96	1.01	1.12
DATE	08	08	[illegible]	08	[illegible]	[illegible]	[illegible]	08	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0728	[illegible]	0728	[illegible]	0728	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2340
APR	.25	[illegible]	.47	.50	[illegible]	.58	.58	[illegible]	[illegible]	[illegible]	[illegible]	1.23
DATE	01	26	26	01	[illegible]	[illegible]	01	01	07	07	07	[illegible]
TIME	[illegible]	[illegible]	1844	0140	0143	0145	0145	0150	[illegible]	[illegible]	[illegible]	[illegible]
MAY	.62	.65	[illegible]	.68	[illegible]	.71	[illegible]	.71	[illegible]	[illegible]	[illegible]	.71
DATE	[illegible]	[illegible]	26	26	[illegible]	26	[illegible]	[illegible]	[illegible]	26	26	[illegible]
TIME	1658	1703	1708	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1838	1858	1928	[illegible]
JUN	[illegible]	.23	[illegible]	.29	[illegible]	[illegible]	.50	.55	.60	[illegible]	[illegible]	[illegible]
DATE	[illegible]	28	08	08	[illegible]	[illegible]	06	06	[illegible]	06	06	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1345	1321	1321	[illegible]	1356	0534	0534
JUL	[illegible]	.34	.40	[illegible]	[illegible]	[illegible]	.70	.75	.82	.83	.84	.84
DATE	24	24	[illegible]	[illegible]	24	24	24	[illegible]	24	[illegible]	[illegible]	[illegible]
TIME	1030	[illegible]	[illegible]	[illegible]	1040	1055	1112	[illegible]	[illegible]	[illegible]	[illegible]	1312
AUG	.35	[illegible]	.95	1.11	[illegible]	[illegible]	1.27	[illegible]	1.27	[illegible]	[illegible]	[illegible]
DATE	01	[illegible]	01	01	[illegible]	01	01	[illegible]	01	[illegible]	[illegible]	01
TIME	1733	[illegible]	1738	1741	1747	1746	[illegible]	[illegible]	1748	1748	1748	[illegible]
SEP	.34	.63	.85	1.06	1.56	2.03	2.54	[illegible]	3.25	[illegible]	[illegible]	[illegible]
DATE	14	14	14	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	14	14	[illegible]
TIME	[illegible]	[illegible]	0343	0353	0402	0408	0431	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OCT	[illegible]	[illegible]	[illegible]	.14	[illegible]	[illegible]	[illegible]	[illegible]	.31	.32	.36	.36
DATE	[illegible]	28	28	31	31	31	31	[illegible]	[illegible]	31	31	31
TIME	[illegible]	[illegible]	1829	[illegible]	[illegible]	[illegible]	1825	1825	[illegible]	1852	1915	[illegible]
NOV	.07	[illegible]	[illegible]	.11	.14	[illegible]	[illegible]	[illegible]	.40	.43	.43	[illegible]
DATE	[illegible]	21	21	21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	21	[illegible]
TIME	[illegible]	0320	0353	0358	0401	0356	0410	0352	0412	0425	0445	0515
DEC	.17	[illegible]	[illegible]	[illegible]	.71	.85	.95	[illegible]	.98	[illegible]	[illegible]	.98
DATE	[illegible]	29	29	29	29	29	29	[illegible]	29	[illegible]	[illegible]	[illegible]
TIME	2103	2108	[illegible]	2115	[illegible]	2140	2155	2215	2233	2233	2233	2233
YEAR	.62	.66	[illegible]	1.11	1.56	[illegible]	[illegible]	[illegible]	3.25	3.74	4.15*	4.24
MONTH	[illegible]	08	[illegible]	08	[illegible]	[illegible]	09	09	09	09	09	09

ABERDEEN, SOUTH DAKOTA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.01	[illegible]	[illegible]	.03	[illegible]	[illegible]	.07	[illegible]	[illegible]	.08	.08
DATE	[illegible]	21	21	[illegible]	21	21	21	[illegible]	21	21	21	21
TIME	[illegible]	1110	[illegible]	[illegible]	1130	[illegible]	1200	[illegible]	[illegible]	[illegible]	1230	[illegible]
FEB	[illegible]	[illegible]	.01	.01	.02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.05	.06
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0815	[illegible]	[illegible]	[illegible]	0700	[illegible]	[illegible]	0700	[illegible]
MAR	[illegible]	[illegible]	.10	.11	[illegible]	.22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	14	14	[illegible]	14	14	[illegible]	[illegible]	14	[illegible]	14	14	14
TIME	[illegible]	0320	0340	0340	0340	0340	[illegible]	[illegible]	0410	0420	0450	0520
APR	[illegible]	[illegible]	.21	.22	.26	.29	.30	.34	.41	.43	.45	.46
DATE	[illegible]	[illegible]	[illegible]	[illegible]	15	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15
TIME	[illegible]	[illegible]	1902	1907	[illegible]	[illegible]	1945	[illegible]	[illegible]	[illegible]	2055	[illegible]
MAY	.03	.05	[illegible]	[illegible]	.11	[illegible]	.21	[illegible]	[illegible]	[illegible]	.41	[illegible]
DATE	24	24	24	[illegible]	24	[illegible]	[illegible]	24	24	[illegible]	24	24
TIME	[illegible]	[illegible]	[illegible]	0535	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0815	[illegible]
JUN	.12	.27	.28	.29	.29	[illegible]	[illegible]	.29	[illegible]	.35	.42	.45
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07	[illegible]	17	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	2248	2255	2255	2255	2255	2255	[illegible]	[illegible]	[illegible]	[illegible]
JUL	[illegible]	.47	.58	.73	[illegible]	1.34	[illegible]	1.36	[illegible]	1.38	1.38	1.38
DATE	[illegible]	01	[illegible]	01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01
TIME	[illegible]	[illegible]	1726	[illegible]	1729	1740	1746	[illegible]	[illegible]	[illegible]	1807	1807
AUG	[illegible]	.13	.16	.21	[illegible]	.21	[illegible]	.21	[illegible]	[illegible]	[illegible]	.38
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31	[illegible]	[illegible]	14	[illegible]	14	[illegible]
TIME	1315	[illegible]	[illegible]	[illegible]	[illegible]	1315	[illegible]	1315	[illegible]	2212	[illegible]	[illegible]
SEP	[illegible]	.72	[illegible]	[illegible]	1.26	1.28	[illegible]	1.35	1.42	1.46	[illegible]	[illegible]
DATE	[illegible]	02	02	[illegible]	[illegible]	02	[illegible]	02	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	2153	[illegible]	[illegible]	2158	2210	2255	2245	[illegible]	[illegible]	[illegible]	[illegible]
OCT	[illegible]	.25	[illegible]	[illegible]	.32	[illegible]	.35	.39	.44	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	09	[illegible]	[illegible]	09	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1455	1512	[illegible]	1552	[illegible]	1552
NOV	[illegible]	.03	[illegible]	[illegible]	[illegible]	.07	.08	[illegible]	[illegible]	[illegible]	.17	.19
DATE	[illegible]	21	[illegible]	21	[illegible]	[illegible]	21	21	21	21	21	21
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DEC	[illegible]	.02	.02	[illegible]	.03	.04	[illegible]	[illegible]	[illegible]	.10	.13	.14
DATE	[illegible]	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	[illegible]
TIME	0445	0447	0447	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	.50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.38	1.42	1.46	1.49	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	09	07	07	07	[illegible]	[illegible]	[illegible]	[illegible]

HURON, SOUTH DAKOTA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.01	.02	[illegible]	.03	.05	.08	.11	.13	.16	.19	.20	.21
DATE	21	[illegible]	21	21	21	21	21	21	[illegible]	21	21	[illegible]
TIME	[illegible]	1240	1245	1250	[illegible]	1250	[illegible]	1250	1250	1300	1330	[illegible]
FEB	T	T	.01	[illegible]	.02	[illegible]	.04	.04	.05	.06	[illegible]	.08
DATE			13	[illegible]	[illegible]	13	[illegible]	13	[illegible]	13	13	13
TIME			1615	[illegible]	1620	[illegible]	1630	1640	1640	1700	1700	1700
MAR	.07	[illegible]	.12	.15	[illegible]	[illegible]	[illegible]	[illegible]	.20	[illegible]	.27	.34
DATE	14	14	[illegible]	14	14	14	14	14	[illegible]	14	[illegible]	14
TIME	0005	0005	0005	0005	[illegible]	0005	0005	0005	0005	0005	[illegible]	0305
APR	.04	[illegible]	.08	.09	.10	[illegible]	[illegible]	.22	.29	.35	[illegible]	[illegible]
DATE	[illegible]	19	[illegible]	[illegible]	19	19	19	[illegible]	19	19	19	[illegible]
TIME	1730	[illegible]	1740	1745	1750	1910	[illegible]	[illegible]	1925	[illegible]	1928	[illegible]
MAY	.03	[illegible]	.05	.05	[illegible]	.09	.14	[illegible]	.21	[illegible]	.25	.30
DATE	26	[illegible]	[illegible]	[illegible]	26	26	26	[illegible]	26	[illegible]	[illegible]	[illegible]
TIME	2015	2008	2015	2015	2015	2015	2015	2015	2015	2100	2107	2107
JUN	.10	.12	.12	.12	[illegible]	[illegible]	[illegible]	[illegible]	.24	.24	.24	.24
DATE	02	02	02	02	[illegible]	02	[illegible]	02	17	[illegible]	17	[illegible]
TIME	0858	0858	0858	[illegible]	2040	2040	2040	2040	2300	2300	2300	2300
JUL	.10	.23	.26	.27	.29	.29	.29	[illegible]	.44	.50	.55	.58
DATE	09	[illegible]	09	09	09	09	09	[illegible]	09	[illegible]	[illegible]	09
TIME	0123	0126	0130	0135	0145	0200	0215	0235	[illegible]	[illegible]	[illegible]	0415
AUG	[illegible]	.18	.33	.58	[illegible]	.68	.75	.77	.78	[illegible]	.78	.78
DATE	[illegible]	14	14	14	14	14	[illegible]	[illegible]	[illegible]	14	14	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2002	2002	2002	2002	2002	2002	[illegible]	2002	2002
SEP	.27	[illegible]	.56	.61	.64	[illegible]	.71	.78	.85	.99	1.03	1.03
DATE	02	02	02	02	02	[illegible]	[illegible]	[illegible]	02	[illegible]	02	[illegible]
TIME	2030	[illegible]	[illegible]	[illegible]	2050	2105	2120	2140	2200	[illegible]	1040	[illegible]
OCT	[illegible]	.23	.32	.41	.65	.68	.96	1.03	1.03	1.22	[illegible]	1.22
DATE	[illegible]	09	[illegible]	09	[illegible]	09	09	09	09	09	[illegible]	09
TIME	[illegible]	[illegible]	1115	1120	[illegible]	1115	1130	1150	[illegible]	1150	[illegible]	1150
NOV	[illegible]	[illegible]	[illegible]	.08	[illegible]	[illegible]	[illegible]	.16	.17	.20	[illegible]	[illegible]
DATE	[illegible]	21	[illegible]	21	21	21	21	[illegible]	21	21	[illegible]	[illegible]
TIME	0000	[illegible]	0000	[illegible]	0000	0000	0000	[illegible]	[illegible]	0030	0030	[illegible]
DEC	[illegible]	.01	.02	.02	.03	.04	[illegible]	[illegible]	.07	.09	[illegible]	[illegible]
DATE	24	24	24	24	24	24	24	24	24	24	[illegible]	24
TIME	2010	[illegible]	[illegible]	[illegible]	2045	2045	[illegible]	2100	2100	[illegible]	[illegible]	2100
YEAR	.27	[illegible]	.56	[illegible]	[illegible]	.68	[illegible]	[illegible]	1.03	1.22	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10	[illegible]	10	[illegible]

RAPID CITY, SOUTH DAKOTA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	T	T	T	T	T	T	.01	.01	.02	[illegible]	[illegible]	.03
DATE							27	[illegible]	[illegible]	27	27	[illegible]
TIME							0030	[illegible]	[illegible]	0130	0130	[illegible]
FEB	T	T	.01	[illegible]	[illegible]	[illegible]	.03	[illegible]	.05	.06	.07	.09
DATE			12	[illegible]	12	12	12	12	12	[illegible]	[illegible]	12
TIME			1830	[illegible]	1835	[illegible]	1900	1940	[illegible]	[illegible]	[illegible]	[illegible]
MAR	.03	[illegible]	[illegible]	[illegible]	[illegible]	.21	.28	[illegible]	.45	[illegible]	[illegible]	.67
DATE	14	14	14	14	[illegible]	14	14	14	14	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0330	0330	0330	[illegible]	0400	[illegible]	0420	0440	[illegible]	[illegible]	[illegible]
APR	.08	[illegible]	.13	.14	[illegible]	.21	.25	.31	.32	.36	.38	.39
DATE	19	19	19	19	[illegible]	[illegible]	19	[illegible]	[illegible]	[illegible]	[illegible]	19
TIME	1008	1015	1025	1030	1030	[illegible]	[illegible]	[illegible]	[illegible]	1030	1030	[illegible]
MAY	[illegible]	[illegible]	.28	.29	[illegible]	[illegible]	.35	.35	.35	.35	.35	.35
DATE	25	25	25	[illegible]	25	25	25	25	25	[illegible]	[illegible]	[illegible]
TIME	0848	0848	0848	0846	0846	0846	[illegible]	0810	0810	0810	0810	[illegible]
JUN	.03	.05	.07	[illegible]	.11	.14	.18	.21	[illegible]	.28	.28	.28
DATE	[illegible]	02	[illegible]	02	02	02	02	02	02	[illegible]	[illegible]	02
TIME	[illegible]	[illegible]	1115	1115	1115	1115	[illegible]	1115	[illegible]	[illegible]	[illegible]	[illegible]
JUL	[illegible]	[illegible]	.15	.19	[illegible]	.25	[illegible]	.30	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	08	08	08	[illegible]	08	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	08
TIME	1450	[illegible]	1450	1450	1450	1445	1415	[illegible]	1415	[illegible]	[illegible]	1415
AUG	[illegible]	[illegible]	.25	.26	.27	[illegible]	[illegible]	.28	[illegible]	.28	.28	.28
DATE	[illegible]	23	23	[illegible]	[illegible]	[illegible]	23	23	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0309	0309	0309	0309	0309	0309	0309	0309	0309
SEP	[illegible]	[illegible]	.15	.19	.24	[illegible]	[illegible]	.29	.30	[illegible]	[illegible]	.33
DATE	[illegible]	02	[illegible]	02	02	[illegible]	[illegible]	02	02	02	02	[illegible]
TIME	[illegible]	0826	[illegible]	0826	0826	0826	0824	0824	[illegible]	0749	0659	0659
OCT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	09	09	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1125	1125	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NOV	.01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	01	01	01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DEC	.01	.02	.03	[illegible]	[illegible]	[illegible]	.10	.12	.12	[illegible]	[illegible]	.16
DATE	12	12	[illegible]	[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1100	[illegible]	[illegible]	1100	1100	[illegible]	[illegible]	[illegible]
YEAR	[illegible]	.69	[illegible]	[illegible]	[illegible]	[illegible]	.80	[illegible]	[illegible]	.80	.89	[illegible]
MONTH	[illegible]	10	[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MAXIMUM SHORT DURATION PRECIPITATION

Maximum precipitation in inches for 5 to 180 minutes

[illegible], SOUTH DAKOTA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	[illegible]	.13	[illegible]	[illegible]	.07	.07	.08	.09	.10	.11
DATE	[illegible]	21	[illegible]	[illegible]	[illegible]	[illegible]	21	21	[illegible]	21	21	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0840	[illegible]	0840	0840	0840	[illegible]	0930	1000
FEB			T	.01	.01	[illegible]	.03	.03	.04	.05	.06	.07
DATE				13	13	13	13	13	13	13	13	13
TIME				[illegible]	1145	1145	[illegible]	1200	[illegible]	[illegible]	1200	1200
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.30	.36	.41	[illegible]	.59	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	13	13	[illegible]	13	13	13
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1832	1830	1820	1913	[illegible]	[illegible]	2015
APR	[illegible]	.14	.15	[illegible]	.24	.31	.33	.40	.43	.45	.52	.57
DATE	[illegible]	30	30	[illegible]	[illegible]	30	[illegible]	[illegible]	30	[illegible]	[illegible]	30
TIME	[illegible]	[illegible]	[illegible]	1745	1745	1745	1756	[illegible]	1830	[illegible]	1830	1830
MAY	[illegible]	[illegible]	.13	.17	[illegible]	.30	.35	.40	.45	[illegible]	.52	.56
DATE	[illegible]	[illegible]	26	26	[illegible]	26	26	26	[illegible]	26	[illegible]	26
TIME	[illegible]	1516	1717	1515	[illegible]	1543	1558	1550	[illegible]	[illegible]	1720	1720
JUN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.57	[illegible]	.88	1.02	1.08	1.10	1.13
DATE	[illegible]	[illegible]	03	[illegible]	03	[illegible]	03	03	[illegible]	04	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2227	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0040	[illegible]
JUL	[illegible]	[illegible]	[illegible]	1.32	[illegible]	[illegible]	1.58	1.58	[illegible]	1.68	1.72	1.73
DATE	[illegible]	[illegible]	09	[illegible]	09	09	09	09	[illegible]	09	09	09
TIME	[illegible]	[illegible]	[illegible]	0245	[illegible]	0317	0332	[illegible]	0412	[illegible]	0532	0532
AUG	.10	[illegible]	[illegible]	[illegible]	.38	[illegible]	.45	.48	.49	.51	.52	[illegible]
DATE	[illegible]	06	06	[illegible]	[illegible]	06	06	[illegible]	06	06	06	07
TIME	[illegible]	2112	2117	2122	[illegible]	[illegible]	2200	2220	[illegible]	2300	[illegible]	0000
SEP	[illegible]	[illegible]	[illegible]	[illegible]	.51	.54	.53	[illegible]	[illegible]	.80	.80	.80
DATE	[illegible]	[illegible]	[illegible]	02	[illegible]	[illegible]	[illegible]	02	02	02	03	03
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0418	2300	2315	2330	0007	0020
OCT	[illegible]	[illegible]	[illegible]	1.26	1.48	1.68	[illegible]	2.72	3.26*	[illegible]	4.01*	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	09	09	09	09	09	[illegible]	09	09
TIME	[illegible]	[illegible]	[illegible]	1752	1802	1817	[illegible]	1847	[illegible]	1932	2002	2015
NOV	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.15	.17	.21	.23	.24	.25	[illegible]
DATE	[illegible]	19	[illegible]	[illegible]	20	20	20	[illegible]	20	20	20	[illegible]
TIME	[illegible]	[illegible]	0413	0212	[illegible]	[illegible]	0252	0312	0332	[illegible]	0353	0423
DEC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.05	[illegible]	[illegible]	.10	.12	.14	.16
DATE	[illegible]	[illegible]	24	24	[illegible]	[illegible]	24	[illegible]	24	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0927	[illegible]	[illegible]	[illegible]	1002	[illegible]	1037	1014	[illegible]	[illegible]	1134
YEAR	[illegible]	[illegible]	1.06	1.32	[illegible]	1.68	2.18	2.72	3.26*	[illegible]	4.01*	[illegible]
MONTH	07	[illegible]	10	07	10	10	10	[illegible]	10	[illegible]	10	10

BRISTOL, TENNESSEE

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.05	.07	.09	.10	.15	.18	.22	.25	.26	.27	.28	.29
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	[illegible]	2225	1420	1425	1435	1450	1505	1525	1545	1600	1630	1700
FEB	.02	.03	.04	.05	.06	[illegible]	.11	.12	.13	.18	.22	.26
DATE	01	01	01	01	02	02	02	02	02	02	02	02
TIME	2345	2350	2350	2355	0005	0015	0015	0015	0015	0015	0015	0015
MAR	.23	.25	.30	.32	.36	.41	.50	.66	.70	.78	.89	1.00
DATE	11	11	11	11	11	16	16	16	16	16	16	16
TIME	1440	1445	1445	1450	1450	1740	1740	1815	1832	1850	1920	1930
APR	.08	[illegible]	.14	.16	.19	.27	.32	.36	.36	.42	.54	.58
DATE	27	27	27	27	27	27	27	27	27	26	26	26
TIME	0259	0259	0302	0310	0330	0330	0330	0330	0330	2245	2315	2345
MAY	.30	.47	.48	.49	.52	.58	.63	.67	.69	.70	.70	.70
DATE	23	23	23	23	23	23	23	23	23	23	23	23
TIME	1915	1921	1925	1930	1940	1955	2010	2030	2050	2110	2150	2210
JUN	.32	.47	.57	.59	.60	.60	.60	.60	.60	.60	.60	.60
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	1620	1545	1550	1555	1605	1605	1605	1605	1605	1605	1605	1605
JUL	.48	.52	.63	.81	1.02	1.04	1.24	1.27	1.29	1.29	1.29	1.29
DATE	05	05	31	31	31	31	31	31	31	31	31	31
TIME	0044	0049	1932	1939	1947	2002	2017	2037	2057	2057	2057	2057
AUG	.26	.41	.45	.47	.72	.77	.77	.78	.81	.82	.84	.84
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	1727	1732	1737	1742	1737	1752	1807	1827	1847	1907	1937	2007
SEP	.33	.46	.50	.51	.52	.53	.53	.53	.53	.53	.53	.53
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	0322	0325	0330	0335	0345	0400	0400	0400	0400	0400	0400	0400
OCT	.14	.21	.22	.24	.25	.33	.49	.57	.64	.65	.67	.68
DATE	28	28	28	28	28	28	28	28	28	28	28	28
TIME	0847	0949	0954	0959	1009	1024	1039	1059	1119	1139	1209	1239
NOV	.26	.33	.33	.34	.38	.44	.51	.62	.64	.74	.80	1.03
DATE	26	26	26	26	11	11	11	26	26	27	27	27
TIME	2213	2218	2223	2225	2130	2140	2200	2328	2348	0008	0038	0108
DEC	.14	.17	.19	.20	.23	.29	.35	.40	.52	.54	.62	.71
DATE	29	29	29	29	29	29	29	29	29	31	31	31
TIME	1914	1917	1920	1925	1940	1953	2010	2025	2047	1000	1030	1100
YEAR	.38	.52	.63	.81	1.02	1.04	1.24	1.27	1.29	1.29	1.29	1.29
MONTH	07	07	07	07	07	07	07	07	07	07	07	07

CHATTANOOGA, TENNESSEE

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.16	.29	.33	.35	.42	.47	.50	.54	.62	.67	.74	.75
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	0042	0042	0043	0045	0047	0054	0109	0129	0149	0206	0236	0306
FEB	.14	.18	.22	.25	.26	.28	.34	.37	.39	.42	.44	.46
DATE	01	01	01	01	01	01	01	01	01	01	01	08+
TIME	2059	2101	2107	2112	2122	2130	1549	1609	1629	1626	1626	0940
MAR	.22	.37	.56	.66	.79	1.08	1.24	1.35	1.43	1.44	1.50	1.70
DATE	06	06	06	06	06	06	06	06	06	06	06	06
TIME	0656	0656	0656	0656	0656	0656	0709	0722	0722	0722	1520	1520
APR	.23	.44	.59	.71	.82	1.03	1.08	1.08	1.10	1.10	1.10	1.37
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	1312	1317	1322	1327	1336	1351	1406	1428	1448	1506	1536	1607
MAY	.70	.97	1.08	1.21	1.31	1.53	1.57	1.60	1.63	1.66	1.67	1.71
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	1648	1648	1654	1654	1654	1654	1701	1725	1746	1759	1813	1902
JUN	.43	.61	.84	.96	1.07	1.08	1.08	1.08	1.08	1.08	1.08	1.08
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	1214	1219	1219	1222	1227	1240	1240	1240	1240	1240	1240	1240
JUL	.49	.86	1.19	1.26	1.29	1.31	1.52	1.89	1.95	1.99	1.99	1.99
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	1420	1423	1424	1428	1434	1450	1507	1527	1548	1548	1604	1604
AUG	.27	.40	.44	.46	.68	.73	.74	.84	.87	.87	.88	.88
DATE	11	06	06	06	13	13	13	11	11	11	11	11
TIME	2218	0952	0955	0958	1858	1859	1859	2333	2353	2340	2344	2344
SEP	.24	.44	.49	.57	.64	1.09	1.23	1.59	1.81	2.08	2.39	2.67
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	0910	0910	0845	0918	0845	0915	0918	0918	0950	0958	1022	1023
OCT	.13	.18	.25	.33	.41	.50	.58	.72	.94	1.03	1.09	1.14
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	0700	0810	0810	0825	0828	0827	0826	0835	0825	0830	0908	0920
NOV	.26	.32	.43	.47	.55	.65	.73	1.01	1.12	1.27	1.40	1.59
DATE	27	25	27	27	27	27	27	27	27	27	27	27
TIME	2153	0758	1906	1910	1914	1934	1934	2011	2021	2047	2047	2152
DEC	.25	.38	.50	.61	.87	.98	1.08	1.12	1.16	1.19	1.20	1.20
DATE	05	04	04	04	04	04	04	04	04	04	04	04
TIME	2150	1848	1852	1856	1905	1904	1924	1935	1949	2009	2009	2009
YEAR	.70	.97	1.19	1.26	1.31	1.53	1.57	1.89	1.95	2.08	2.39	2.67
MONTH	05	05	07	07	05	05	05	07	07	09	09	09

[illegible], TENNESSEE

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	.10	[illegible]	.18	[illegible]	[illegible]	.32	.35	[illegible]	.39	.47
DATE	[illegible]	[illegible]	03	[illegible]	[illegible]	03	[illegible]	03	[illegible]	03	03	03
TIME	[illegible]	[illegible]	[illegible]	1050	1105	1110	[illegible]	1110	[illegible]	1110	1110	1110
FEB	[illegible]	[illegible]	[illegible]	.12	.14	.23	.26	.34	[illegible]	.42	.49	.56
DATE	07	07	[illegible]	[illegible]	07	[illegible]	07	07	07	[illegible]	[illegible]	07
TIME	[illegible]	0637	0637	[illegible]	0740	[illegible]	0745	0745	0745	0745	0745	0745
MAR	.25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.85	[illegible]	[illegible]	.94	.95
DATE	15	15	[illegible]	15	[illegible]	15	[illegible]	15	15	[illegible]	[illegible]	[illegible]
TIME	0812	[illegible]	[illegible]	[illegible]	0813	0815	0830	0850	0900	[illegible]	0955	1000
APR	[illegible]	.33	[illegible]	[illegible]	[illegible]	[illegible]	.45	.45	.45	[illegible]	.48	[illegible]
DATE	[illegible]	[illegible]	25	25	[illegible]	[illegible]	25	[illegible]	[illegible]	[illegible]	26	26
TIME	2040	[illegible]	2050	2055	[illegible]	2120	[illegible]	[illegible]	2215	[illegible]	[illegible]	1815
MAY	[illegible]	[illegible]	[illegible]	.42	[illegible]	.60	[illegible]	[illegible]	.78	[illegible]	.80	.84
DATE	[illegible]	[illegible]	[illegible]	10	[illegible]	27	[illegible]	27	[illegible]	27	27	[illegible]
TIME	[illegible]	[illegible]	2145	[illegible]	[illegible]	1215	[illegible]	1247	1315	1330	1330	1330
JUN	.44	[illegible]	[illegible]	[illegible]	1.12	1.17	[illegible]	1.21	[illegible]	1.23	1.59	1.62
DATE	[illegible]	[illegible]	27	[illegible]	27	27	27	[illegible]	[illegible]	[illegible]	16	16
TIME	[illegible]	[illegible]	[illegible]	2203	2213	2228	[illegible]	[illegible]	2323	[illegible]	[illegible]	[illegible]
JUL	.27	.38	[illegible]	[illegible]	[illegible]	.65	[illegible]	.68	.71	[illegible]	.74	.75
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	14	[illegible]	[illegible]	[illegible]	14	14
TIME	[illegible]	1550	1550	1550	[illegible]	1615	1630	1650	1710	1730	1800	1830
AUG	[illegible]	[illegible]	.53	.59	.65	.66	[illegible]	.66	[illegible]	[illegible]	.66	.66
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	20	20	[illegible]	[illegible]	[illegible]	20
TIME	[illegible]	[illegible]	1213	[illegible]	[illegible]	1243	[illegible]	1318	[illegible]	[illegible]	[illegible]	1458
SEP	[illegible]	.27	.30	[illegible]	.52	.57	.57	.59	.60	.65	.77	.80
DATE	[illegible]	[illegible]	[illegible]	29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	09	09	09
TIME	1655	1700	[illegible]	1710	[illegible]	1503	1518	[illegible]	1825	[illegible]	[illegible]	[illegible]
OCT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.72	.80	1.06	[illegible]	[illegible]	1.51
DATE	[illegible]	01	[illegible]	01	[illegible]	[illegible]	[illegible]	[illegible]	01	[illegible]	01	[illegible]
TIME	[illegible]	[illegible]	1102	1107	1117	1132	1147	1207	[illegible]	[illegible]	1317	1317
NOV	.15	[illegible]	.35	.35	.35	.35	[illegible]	.55	[illegible]	[illegible]	.70	.75
DATE	05	15	[illegible]	[illegible]	[illegible]	15	[illegible]	27	27	[illegible]	28	28
TIME	[illegible]	2016	2018	2018	[illegible]	[illegible]	2018	1615	1615	1615	0115	0115
DEC	.17	.20	[illegible]	[illegible]	[illegible]	.27	.30	.40	.45	.48	.57	.67
DATE	[illegible]	[illegible]	13	29	[illegible]	[illegible]	31	31	26	[illegible]	[illegible]	25
TIME	[illegible]	[illegible]	0850	[illegible]	[illegible]	[illegible]	1400	[illegible]	0005	0005	[illegible]	2350
YEAR	.44	[illegible]	.84	[illegible]	1.12	[illegible]	1.19	1.21	1.22	1.27	1.59	1.62
MONTH	[illegible]	[illegible]	06	06	06	[illegible]	[illegible]	06	06	10	06	06

MEMPHIS, TENNESSEE

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.18	.31	.38	[illegible]	.44	.46	.49	.51	.54	.56	.59	.63
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	[illegible]	0034	0037	0038	0042	0041	0112	0128	0112	0123	0153	0150
FEB	.08	[illegible]	[illegible]	[illegible]	.20	.29	.38	.49	.60	[illegible]	.84	[illegible]
DATE	01	07	07	07	07	07	07	07	07	07	08	08
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2327	2257	[illegible]	2336	2359	0006	0036
MAR	.32	.55	.67	.73	.77	.82	.87	.93	.96	1.04	1.10	1.17
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	0907	[illegible]	[illegible]	0912	0914	0922	0937	0952	1004	0946	1002	0944
APR	M	M	M	M	M	M	1.32	M	M	1.64	M	1.74
DATE							19			19		19
TIME							1800			1900		2000
MAY	.35	.58	.83	.91	.99	1.03	1.05	1.06	1.29	1.38	1.44	1.45
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	0243	0243	0243	0250	0258	0306	0322	0351	0404	0426	0452	0452
JUN	.19	.32	.41	.50	.55	.59	.63	.68	.70	.71	.71	.71
DATE	30	30	30	30	30	30	30	30	30	30	30	30
TIME	1326	1326	1326	1326	1326	1326	1326	1326	1326	1326	1326	1326
JUL	.22	.47	.58	.72	.97	1.40	1.56	1.57	1.62	1.69	1.89	1.92
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	0804	0804	0804	0804	0810	0815	0823	0823	0823	0823	0823	0826
AUG	.42	.57	.76	.88	1.21	1.39	1.43	1.43	1.43	1.43	1.43	1.43
DATE	13	10	13	13	13	13	13	13	13	13	13	13
TIME	1256	0635	1258	1258	1318	1323	1323	1323	1323	1323	1323	1323
SEP	.23	.43	.55	.78	1.10	1.55	1.94	2.06	2.06	2.06	2.06	2.06
DATE	23	23	23	23	23	23	23	23	23	23	23	23
TIME	1744	1749	1750	1734	1746	1746	1755	1809	1809	1809	1803	1809
OCT	.33	.47	.53	.58	.64	.70	.70	.70	.71	.71	.71	.71
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	0826	0834	0833	0838	0839	0844	0844	0844	0844	0844	0844	0844
NOV	.47	[illegible]	.98	1.24	1.39	1.54	1.55	1.56	1.58	1.62	1.68	1.76
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	0728	0732	0736	0742	0752	0806	0822	0842	0902	0922	0952	1022
DEC	.46	.88	1.01	1.12	1.29	1.35	1.43	1.48	1.54	1.56	1.62	1.66
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	0222	0227	0232	0233	0243	0250	0250	0250	0250	0252	0340	0340
YEAR	M	M	M	M		M	1.94	M	M	[illegible]	M	2.06
MONTH							09			09		09

NASHVILLE, TENNESSEE

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.09	.11	.15	.15	.18	.20	.23	.27	.28	.36	.42	.50
DATE	18	18	18	18	18	18	18	18	21	21	21	21
TIME	2035	2038	2038	2040	2045	2050	2100	2120	1700	1500	1600	1700
FEB	.07	[illegible]	.14	.15	.19	.23	.30	.36	.45	.50	.58	.64
DATE	06	06	06	06	06	06	06	06	06	06	06	06
TIME	0052	0055	0100	0100	0100	0130	0145	0205	0225	0245	0300	0315
MAR	.35	.40	.45	.52	.60	.77	.80	.85	.88	.88	.88	.88
DATE	20	20	06	06	06	06	06	06	06	06	06	06
TIME	1430	1430	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300
APR	.10	.20	.35	.40	.43	.58	.65	.85	.92	.95	1.05	1.15
DATE	19	19	25	25	25	24	19	19	19	19	19	19
TIME	1830	1835	1400	1405	1415	1705	1930	1950	2010	2030	2100	2130
MAY	.70	.77	.87	.98	1.06	1.12	1.15	1.19	1.25	1.33	1.43	1.51
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	0505	0510	0515	0520	0530	0545	0600	0620	0640	0700	0730	0800
JUN	.25	.45	.65	.85	.98	1.02	1.03	1.03	1.05	1.08	1.10	1.10
DATE	15	15	05	05	05	05	05	05	05	05	05	05
TIME	1620	1625	1910	1915	1925	1940	1955	2015	2035	2055	2125	2155
JUL	.50	.53	.55	.90	.90	1.24	1.38	1.58	1.66	1.70	1.70	1.72
DATE	04	04	04	26	26	01	01	01	01	01	01	01
TIME	1520	1525	1530	1840	1850	1440	1455	1515	1535	1555	1625	1655
AUG	.23	.35	.40	.50	.75	.88	.88	.88	.88	.88	.88	.88
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1915	1920	1925	1930	1940	1955	2010	2030	2050	2110	2140	2210
SEP	.15	.16	.17	.20	.23	.25	.32	.40	.45	.50	.58	.67
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1547	1555	1557	1600	1615	1630	1645	1700	1720	1744	1744	1744
OCT	.10	.22	.35	.50	.80	.93	1.10	1.14	1.14	1.14	1.14	1.14
DATE	07	07	07	07	07	07	07	07	07	07	07	07
TIME	[illegible]	1240	1258	1215	1300	1330	1330	1340	1340	1340	1340	1340
NOV	.22	.35	.43	.58	.75	1.00	1.07	1.16	1.23	1.29	1.38	1.47
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	[illegible]	0203	0207	0207	0215	0215	0220	0247	0310	0330	0400	0430
DEC	.05	.10	.15	.17	.20	.30	.33	.38	.43	.48	.55	.65
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	0335	0340	0345	0350	0400	0415	0430	0450	0510	0530	0600	0630
YEAR	.70	.77	.87	.98	1.06	[illegible]	1.38	1.58	1.66	1.70	1.70	1.72
MONTH	05	05	05	05	05	07	07	07	07	07	07	07

ABILENE, TEXAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.05	.10	.12	.14	[illegible]	[illegible]	.25	.26	[illegible]	[illegible]	.38	.45
DATE	02	[illegible]	02	02	[illegible]	[illegible]	[illegible]	[illegible]	02	[illegible]	02	02
TIME	[illegible]	[illegible]	[illegible]	1953	[illegible]	[illegible]	2035	2055	2115	2130	2200	2230
FEB	[illegible]	[illegible]	[illegible]	.05	[illegible]	.12	[illegible]	[illegible]	.23	[illegible]	[illegible]	.36
DATE	[illegible]	[illegible]	[illegible]	22	22	22	22	[illegible]	[illegible]	22	22	[illegible]
TIME	[illegible]	[illegible]	0802	[illegible]	[illegible]	0804	0804	[illegible]	0805	0805	[illegible]	0805
MAR	[illegible]	.60	[illegible]	[illegible]	1.05	1.12	[illegible]	1.57	1.78	[illegible]	1.80	1.80
DATE	23	23	23	23	23	23	23	23	23	23	23	23
TIME	[illegible]	1759	1759	1759	[illegible]	[illegible]	1845	1845	1904	[illegible]	1956	2024
APR	.19	.23	[illegible]	[illegible]	[illegible]	.24	[illegible]	[illegible]	.34	[illegible]	.38	.40
DATE	[illegible]	[illegible]	[illegible]	19	19	19	19	17	17	17	17	17
TIME	[illegible]	[illegible]	[illegible]	0232	0240	0240	0240	[illegible]	1044	1050	1050	1055
MAY	[illegible]	[illegible]	.55	[illegible]	[illegible]	[illegible]	.85	.85	.85	.85	.85	.85
DATE	11	[illegible]	11	[illegible]	[illegible]	[illegible]	11	11	11	11	11	11
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1725	1755	1825
JUN	[illegible]	[illegible]	[illegible]	[illegible]	.55	[illegible]	[illegible]	.75	[illegible]	.75	.75	.75
DATE	[illegible]	[illegible]	[illegible]	01	[illegible]	01	[illegible]	18	[illegible]	18	18	[illegible]
TIME	[illegible]	[illegible]	0436	[illegible]	[illegible]	0420	[illegible]	[illegible]	[illegible]	1902	1902	1902
JUL	[illegible]	[illegible]	[illegible]	.95	1.21	[illegible]	[illegible]	1.33	1.33	1.33	1.33	1.33
DATE	[illegible]	08	[illegible]	[illegible]	[illegible]	08	08	08	08	08	08	08
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1324	1324	1324	1324	1324	1324
AUG	.12	[illegible]	[illegible]	.15	.15	[illegible]	[illegible]	[illegible]	.15	[illegible]	.15	.15
DATE	15	15	15	15	15	15	15	15	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1810	[illegible]	1835	[illegible]	1910	1930	1950	2020	2050
SEP	[illegible]	[illegible]	.56	[illegible]	[illegible]	[illegible]	[illegible]	1.12	1.15	[illegible]	1.17	1.27
DATE	[illegible]	06	06	06	[illegible]	06	06	[illegible]	[illegible]	06	[illegible]	06
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1640	1640	1618	[illegible]
OCT	.45	.68	[illegible]	[illegible]	[illegible]	.97	1.13	[illegible]	1.27	[illegible]	1.28	1.31
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	11	11	11	[illegible]	[illegible]
TIME	[illegible]	1504	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0112	0133	[illegible]	0105
NOV	.05	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.16	[illegible]	[illegible]	.16
DATE	[illegible]	[illegible]	17	[illegible]	17	17	[illegible]	17	[illegible]	17	[illegible]	17
TIME	[illegible]	[illegible]	[illegible]	1640	1637	1640	[illegible]	[illegible]	1640	1640	[illegible]	1640
DEC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.01	.01
DATE	[illegible]	[illegible]	[illegible]	03	[illegible]	[illegible]	03	[illegible]	[illegible]	03	03	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0840	0840	[illegible]	0840
YEAR	.45	[illegible]	.75	[illegible]	[illegible]	[illegible]	1.33	[illegible]	[illegible]	[illegible]	1.80	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	03	[illegible]	[illegible]	[illegible]	03

AMARILLO, TEXAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	.03	.04	.06	.08	.10	.12	.13	.14	.15	.17
DATE	02	02	02	02	02	02	02	02	02	02	02	02
TIME	1730	1730	1730	1730	1740	1755	1800	1800	1800	1800	1830	1900
FEB	T	T	.01	.01	.02	.03	.04	.04	.04	.05	.06	.08
DATE			28	28	28	28	28	28	28+	22	22	22
TIME			2115	2120	2130	2145	2200	2220	2240	1500	1530	1600
MAR	.16	.18	.20	.22	.38	.47	.61	.68	.82	.88	.90	.92
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	1654	1654	1704	1709	1719	1734	1749	1725	1745	1805	1835	1905
APR	.10	.14	.14	.15	.16	.20	.24	.30	.32	.36	.44	.45
DATE	23	23	23	23	23	23	23	23	23	23	23	23
TIME	1510	1513	1513	1513	1513	2033	2004	2004	2004	1933	1923	1927
MAY	.18	.27	.35	.39	.42	.44	.48	.50	.55	.55	.55	.55
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME	1702	1704	1647	1647	1647	1647	1647	1647	1647	1647	1647	1645
JUN	.50	.68	.68	.68	.68	.68	.68	.68	.68	.68	.68	.68
DATE	12	12	12	12	12	12	12	12	12	12	12	12
TIME	1410	1405	1405	1405	1405	1405	1405	1405	1405	1405	1405	1405
JUL	.25	.33	.38	.38	.40	.46	.57	.59	.59	.61	.83	1.08
DATE	28	28	28	28	28	28	28	28	28	28	28	28
TIME	1625	1620	1620	1620	1620	1620	1815	1815	1815	1815	1620	[illegible]
AUG	.23	.41	.55	.70	.89	.90	.90	.90	.90	.90	.90	.90
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
SEP	.07	.13	.16	.18	.22	.24	.25	.25	.25	.25	.25	.26
DATE	25	25	25	25	25	25	25	25	25	25	25	06
TIME	2332	2332	2312	2332	2332	2332	2332	2332	2332	2332	2332	1545
OCT	.10	.17	.18	.19	.30	.32	.32	.32	.32	.35	.45	.45
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	1750	1934	1934	1934	1934	1934	1934	1934	1815	1755	1730	1730
NOV	.06	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	1403	1401	1401	1401	1401	1401	1401	1401	1401	1401	1401	1401
DEC	[illegible]	[illegible]	.03	.03	.04	.05	.06	.07	.07	.08	.09	.10
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	2005	2005	2007	2007	2020	2025	2050	2110	2130	2145	2215	2245
YEAR	.50	.68	.68	.70	.89	.90	.90	.90	.90	.90	.90	1.08
MONTH	06	06	06	08	08	08	08	08	08	08	08+	07

AUSTIN, TEXAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.12	.22	.26	.27	.28	.30	.30	.31	.31	.41	.43	.45
DATE	20	20	20	20	20	20	20	20	20	25	25	25
TIME	2009	2011	2015	2020	2020	2020	2020	2020	2020	0556	0615	0615
FEB	.02	.04	.05	.06	.07	.10	.12	.16	.18	.19	.20	.21
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME	1121	1121	1126	1126	1136	1151	1200	1226	1246	1300	1310	1310
MAR	.26	.34	.41	.44	.54	.59	.61	.66	.68	.69	.69	.73
DATE	15	15	15	15	24	24	24	24	24	24	24	16
TIME	2142	2145	2150	2155	0253	0306	0320	0320	0328	0348	0418	0035
APR	.16	.23	.31	.37	.51	.63	.72	.94	1.00	1.04	1.05	1.05
DATE	17	17	17	17	17	17	17	17	17	17	17	17
TIME	0818	0820	0818	0830	0832	0847	0902	0922	0942	0959	1029	1059
MAY	.18	.29	.37	.38	.38	.38	.38	.48	.54	.56	.58	.59
DATE	01	01	01	01	01	01	01	07	07	07	07	07
TIME	1714	1714	1715	1722	1722	1722	1722	0014	0019	0019	0049	0119
JUN	.28	.54	.74	.95	1.06	1.14	1.15	1.16	1.16	1.17	1.19	1.19
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	0856	0858	0906	0906	0918	0933	0948	1008	1028	1048	1118	1148
JUL	.21	.31	.44	.52	.65	.69	.74	.76	.78	.83	.87	.87
DATE	08	08	08	08	08	06	06	06	06	08	08	08
TIME	0731	0429	0731	0736	0745	0447	0458	0518	0538	0746	0816	0846
AUG	.01	.01	.02	.02	.03	.03	.03	.03	.03	.03	.03	.03
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	1906	1906	1906	1906	1906	1906	1906	1906	1906	1906	1906	1906
SEP	.50	.75	.95	1.08	1.25	[illegible]	1.80	2.29	2.65	2.95	3.23	3.44
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	1822	1913	1918	1915	1925	1942	1957	1923	1946	2006	2000	2030
OCT	.59	.87	[illegible]	1.30	1.57	1.96	2.23	2.50	2.68	2.79	3.42	3.86
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	0730	0733	0738	0742	0751	0804	0816	0836	0850	0915	[illegible]	0838
NOV	.15	.18	.21	.22	.24	.30	.32	.32	.32	.32	.33	.33
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	[illegible]	0200	0205	0210	0204	0205	0213	0213	0213	0213	0237	0237
DEC	.13	.18	.21	.30	.39	.45	.52	.54	.57	.63	.63	.63
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	0348	0350	0356	0402	0403	0418	0433	0454	0514	0534	0604	0634
YEAR	.59	.87	[illegible]	[illegible]	1.57	1.96	2.23	2.50	2.68	2.95	3.42	3.86
MONTH	10	10	10	10	10	10	10	10	10	09	10	10

MAXIMUM SHORT DURATION PRECIPITATION

[illegible] TEXAS

[illegible]	.06	.10	.11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.21	[illegible]
[illegible]	[illegible]	24	24	[illegible]	[illegible]	[illegible]	25	25	[illegible]	[illegible]	05	05
[illegible]	[illegible]	2311	[illegible]	[illegible]	0626	0635	0647	0647	0647	0213	[illegible]	0400
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.10	[illegible]	.18	.21	.24	[illegible]	.28	[illegible]
[illegible]	[illegible]	[illegible]	27	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	22	[illegible]
TIME	[illegible]	[illegible]	1235	[illegible]	1247	1245	[illegible]	1258	1304	1304	1354	[illegible]
[illegible]	.02	.03	.03	[illegible]	[illegible]	.03	[illegible]	[illegible]	.04	.04	.04	.04
[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	[illegible]	16	16	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0000	[illegible]	0000	[illegible]	[illegible]	0200	0200	[illegible]	0200
[illegible]	.11	[illegible]	.25	.31	.45	.58	.64	[illegible]	.71	[illegible]	.84	.86
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	06	06	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1407	1420	1430	1500	[illegible]	1540	1610
[illegible]	[illegible]	[illegible]	[illegible]	.32	[illegible]	[illegible]	.56	.56	[illegible]	[illegible]	.56	.56
[illegible]	[illegible]	[illegible]	[illegible]	12	[illegible]	12	[illegible]	12	[illegible]	12	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0419	0426	[illegible]	0453	0513	[illegible]	0525	0525	0525
[illegible]	[illegible]	[illegible]	1.12	[illegible]	[illegible]	[illegible]	[illegible]	2.44	2.47	2.50	2.50	2.50
DATE	13	13	[illegible]	[illegible]	[illegible]	13	[illegible]	13	[illegible]	[illegible]	13	[illegible]
[illegible]	[illegible]	1300	[illegible]	[illegible]	1318	[illegible]	[illegible]	[illegible]	1415	[illegible]	1425	[illegible]
[illegible]	[illegible]	.22	[illegible]	.22	.22	.22	.24	.25	[illegible]	.43	.44	.44
DATE	[illegible]	03	[illegible]	[illegible]	03	03	[illegible]	[illegible]	[illegible]	03	03	03
TIME	[illegible]	[illegible]	0940	0940	[illegible]	0940	0940	0940	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	.80	[illegible]	[illegible]	.95	1.02	1.52	1.56	1.56	1.56	1.56
DATE	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27	27	[illegible]	27	[illegible]	27
[illegible]	[illegible]	[illegible]	1025	1028	[illegible]	1049	[illegible]	1044	1049	1049	1049	1049
SEP	[illegible]	[illegible]	.61	[illegible]	[illegible]	1.31	1.33	1.43	[illegible]	1.43	1.43	[illegible]
DATE	[illegible]	17	17	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	17	[illegible]	17
[illegible]	[illegible]	[illegible]	1640	1640	1540	[illegible]	[illegible]	1640	1640	1640	1640	1640
OCT	[illegible]	[illegible]	[illegible]	.62	[illegible]	1.35	1.64	1.98	[illegible]	[illegible]	2.90	3.05
DATE	[illegible]	[illegible]	11	11	[illegible]	11	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	1800	1802	1802	[illegible]	1822	[illegible]	[illegible]	1820	[illegible]
NOV	[illegible]	[illegible]	.12	.12	[illegible]	[illegible]	[illegible]	.13	.13	.13	[illegible]	.13
[illegible]	[illegible]	18	[illegible]	18	[illegible]	18	[illegible]	18	[illegible]	19	[illegible]	18
[illegible]	[illegible]	0431	0431	0431	0431	[illegible]	0431	0529	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.06	[illegible]	.12	.12	.12	[illegible]	.12	.12
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	19	19	19	19	19
TIME	[illegible]	[illegible]	0822	[illegible]	[illegible]	0822	[illegible]	0822	0822	0822	0822	[illegible]
[illegible]	[illegible]	.85	[illegible]	[illegible]	[illegible]	1.98	2.30	2.44	2.47	2.50	2.90	3.05
[illegible]	[illegible]	06	[illegible]	06	06	[illegible]	[illegible]	06	[illegible]	06	10	10

[illegible] TEXAS

[illegible]	[illegible]	[illegible]	.04	.05	.07	[illegible]	.13	.16	.17	.17	.17	.18
DATE	[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	10	06
TIME	[illegible]	[illegible]	1045	1045	[illegible]	1045	[illegible]	1045	1105	1105	1105	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.14	[illegible]	.20	[illegible]	[illegible]	.27	.28	[illegible]
DATE	[illegible]	08	08	08	[illegible]	08	[illegible]	08	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	0010	0015	[illegible]	0020	0030	[illegible]	[illegible]	[illegible]	0115	0145	[illegible]
[illegible]	[illegible]	[illegible]	.05	.06	[illegible]	.12	.15	.19	[illegible]	.25	.28	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	10	[illegible]	[illegible]	10	[illegible]	10	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0656	0716	0733	0756	0808	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	.00	.00	.00	[illegible]	.00	.00	[illegible]	.00	[illegible]
[illegible]												
TIME												
[illegible]	[illegible]	[illegible]	.11	[illegible]	.14	[illegible]	.16	.16	.17	.17	.17	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1800	[illegible]	[illegible]	[illegible]	1835	[illegible]	1915	1915	1915	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.40	[illegible]	.40	.40	.40	.40	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	1725	[illegible]	1725	[illegible]	1725	1725	[illegible]	1725	[illegible]
[illegible]	[illegible]	.21	.35	.40	.44	.62	.65	.69	.75	[illegible]	1.20	[illegible]
DATE	[illegible]	[illegible]	[illegible]	14	[illegible]	14	[illegible]	14	14	14	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0749	0749	0749	0749	0749	0729	0709	0649	0621	[illegible]
AUG	[illegible]	.17	[illegible]	[illegible]	[illegible]	.22	.23	.29	[illegible]	[illegible]	.33	[illegible]
DATE	[illegible]	28	[illegible]	28	[illegible]	01	[illegible]	[illegible]	01	[illegible]	01	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1344	1354	0046	[illegible]	0121	0141	0201	0201	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.01	.01	[illegible]	[illegible]	.01
[illegible]					19	19	[illegible]	19	19	19	19	[illegible]
TIME					[illegible]	0220	0220	[illegible]	[illegible]	[illegible]	0220	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.01	.04	.04	.05	.05	.05	[illegible]
[illegible]						[illegible]	[illegible]	04	04	[illegible]	[illegible]	[illegible]
[illegible]						2203	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.06	[illegible]	.06	.06	[illegible]
[illegible]						[illegible]	[illegible]	[illegible]	26	27	27	[illegible]
[illegible]						2300	2315	2335	[illegible]	0015	[illegible]	[illegible]
DEC	T	[illegible]	T	[illegible]	T	[illegible]	T	T	T	T	T	T
DATE												
TIME												
YEAR	.18	.30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.85	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

JAN	[illegible]	.11	.12	[illegible]	[illegible]	.25	[illegible]	.32	[illegible]	.35	.37	[illegible]
[illegible]	[illegible]	[illegible]	25	[illegible]	[illegible]	[illegible]	[illegible]	25	25	25	25	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1310	1310	1330	1345	[illegible]
[illegible]	.16	[illegible]	.30	.32	.34	[illegible]	.40	.44	[illegible]	.52	.54	[illegible]
DATE	[illegible]	[illegible]	13	13	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	13
TIME	[illegible]	1530	[illegible]	[illegible]	1540	1600	1615	[illegible]	1655	1715	1730	1730
[illegible]	[illegible]	.38	[illegible]	.42	[illegible]	[illegible]	.63	[illegible]	[illegible]	.64	[illegible]	[illegible]
DATE	[illegible]	[illegible]	28	28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	1600	1600	1320	1330	1347	1347	[illegible]	[illegible]	[illegible]	[illegible]
APR	[illegible]	[illegible]	.65	[illegible]	1.17	1.44	1.47	1.52	[illegible]	1.55	1.58	1.59
DATE	25	16	16	16	[illegible]	[illegible]	[illegible]	16	16	16	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	0212	[illegible]	[illegible]	0215	0230	0250	[illegible]	0330	[illegible]	[illegible]
[illegible]	[illegible]	.87	1.17	1.52	*2.37	2.60	2.60	2.60	[illegible]	2.60	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	31	31	31	[illegible]	31	[illegible]	31	31	31
TIME	[illegible]	[illegible]	1910	[illegible]	[illegible]	1932	[illegible]	1932	1932	1932	[illegible]	[illegible]
[illegible]	[illegible]	1.02	[illegible]	1.09	1.30	1.70	1.76	[illegible]	[illegible]	2.55	[illegible]	4.07
[illegible]	[illegible]	11	11	11	[illegible]	11	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1055	[illegible]	1105	[illegible]	[illegible]	[illegible]	[illegible]	1210	[illegible]	1250	1320	[illegible]
[illegible]	[illegible]	.64	.75	1.00	1.45	[illegible]	2.45	2.80	[illegible]	2.97	2.98	3.02
DATE	[illegible]	[illegible]	[illegible]	05	05	05	[illegible]	05	05	05	[illegible]	05
TIME	1442	1447	[illegible]	2005	2008	[illegible]	[illegible]	[illegible]	[illegible]	2130	[illegible]	[illegible]
[illegible]	.65	.85	1.02	1.13	[illegible]	1.22	[illegible]	1.23	[illegible]	[illegible]	[illegible]	1.73
DATE	[illegible]	[illegible]	02	02	[illegible]	02	02	[illegible]	[illegible]	[illegible]	02	02
[illegible]	1445	[illegible]	[illegible]	[illegible]	1510	1525	1530	1530	1530	[illegible]	1530	[illegible]
[illegible]	[illegible]	[illegible]	.60	[illegible]	[illegible]	[illegible]	.98	1.12	1.33	1.55	1.68	1.75
DATE	[illegible]	23	[illegible]	01	[illegible]	01	[illegible]	[illegible]	04	[illegible]	04	04
TIME	[illegible]	[illegible]	1130	1358	[illegible]	[illegible]	1653	1620	1630	1653	1653	[illegible]
OCT	.45	[illegible]	[illegible]	1.01	[illegible]	1.42	1.66	1.86	1.97	2.06	2.20	[illegible]
DATE	[illegible]	16	[illegible]	[illegible]	16	16	[illegible]	11	11	11	[illegible]	11
TIME	[illegible]	[illegible]	0922	0927	[illegible]	[illegible]	[illegible]	[illegible]	1555	1630	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.43	.45	.47	.50	.51	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	20	20	[illegible]	20	[illegible]	20	20	[illegible]
[illegible]	0544	[illegible]	[illegible]	0557	0643	0658	0713	[illegible]	[illegible]	0813	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	.30	.36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	03	03	[illegible]	[illegible]	[illegible]	19	19	19	19	19	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1059	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1031
[illegible]	.65	[illegible]	[illegible]	[illegible]	[illegible]	2.60	2.60	2.80	2.93	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07	[illegible]	[illegible]	[illegible]	[illegible]

MAXIMUM SHORT DURATION PRECIPITATION

Maximum precipitation in inches (5 to 180 minutes)

[illegible], TEXAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	[illegible]	[illegible]	.06	.08	.09	.10	.11	.14	.16	.18
DATE	[illegible]	[illegible]	[illegible]	20	20	[illegible]	20	[illegible]	25	25	25	25
TIME	[illegible]	[illegible]	[illegible]	1900	[illegible]	1920	1935	1950	1000	1030	1045	1100
FEB	[illegible]	[illegible]	[illegible]	.05	[illegible]	.09	[illegible]	[illegible]	.16	.20	.22	.24
DATE	[illegible]	[illegible]	[illegible]	07	07	07	07	07	07	07	07	07
TIME	[illegible]	[illegible]	[illegible]	1730	1740	[illegible]	1800	1820	1840	1900	1930	2100
MAR	[illegible]	[illegible]	[illegible]	.18	[illegible]	[illegible]	.28	.29	[illegible]	.43	.44	.46
DATE	[illegible]	[illegible]	[illegible]	23	24	09	[illegible]	09	[illegible]	10	10	30
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1302	[illegible]	[illegible]	2330	0245	0330	0330	0225
APR	[illegible]	.24	[illegible]	.25	.25	[illegible]	[illegible]	.32	.32	.32	.32	.32
DATE	15	[illegible]	15	15	15	[illegible]	15	15	15	[illegible]	[illegible]	15
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0427	[illegible]	[illegible]	0455	0515	0515	[illegible]	0515
MAY	[illegible]	[illegible]	.05	[illegible]	[illegible]	[illegible]	.10	.11	.13	.13	.13	.13
DATE	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	[illegible]	13	13	[illegible]	13	13
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1420	1440	1500	1500	[illegible]	1500
JUN	.18	[illegible]	[illegible]	[illegible]	.30	[illegible]	.30	.30	.30	.30	.30	[illegible]
DATE	[illegible]	01	[illegible]	01	01	01	01	01	01	[illegible]	01	01
TIME	[illegible]	[illegible]	[illegible]	1941	1941	[illegible]	1941	1941	[illegible]	[illegible]	1941	1941
JUL	.25	.35	.47	[illegible]	[illegible]	[illegible]	.94	[illegible]	1.15	1.16	1.20	1.25
DATE	[illegible]	[illegible]	31	[illegible]	31	31	[illegible]	17	17	17	17	17
TIME	[illegible]	[illegible]	0155	0200	0200	[illegible]	[illegible]	2305	2310	[illegible]	2358	0025
AUG	[illegible]	[illegible]	.11	[illegible]	.11	.11	[illegible]	.12	.12	.12	.12	.12
DATE	[illegible]	01	[illegible]	[illegible]	[illegible]	01	01	[illegible]	01	01	01	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1528	[illegible]	1528	[illegible]	1615	1615	1615	1615	1615
SEP	.15	[illegible]	.06	[illegible]	[illegible]	[illegible]	.10	[illegible]	.10	.12	.13	.17
DATE	[illegible]	06	[illegible]	[illegible]	06	[illegible]	06	06	[illegible]	[illegible]	06	06
TIME	[illegible]	[illegible]	[illegible]	1301	[illegible]	[illegible]	0105	[illegible]	[illegible]	0532	0602	[illegible]
OCT	[illegible]	.23	.26	.34	[illegible]	[illegible]	.41	.41	.41	.42	.42	.42
DATE	[illegible]	[illegible]	[illegible]	10	10	10	10	[illegible]	10	10	[illegible]	10
TIME	[illegible]	[illegible]	[illegible]	1920	1925	[illegible]	[illegible]	2010	2035	2055	2125	2155
NOV	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
DEC	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
YEAR	.25	.35	.47	.54	.64	.78	.94	1.10	1.15	1.16	1.20	1.25
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07	07	[illegible]	[illegible]	07	07	07

SAN ANGELO, TEXAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.06	.08	.09	.10	[illegible]	[illegible]	.20	.24	.25	.27	.33	.38
DATE	[illegible]	[illegible]	02	[illegible]	[illegible]	[illegible]	02	02	[illegible]	02	02	02
TIME	[illegible]	1910	1915	[illegible]	1915	1910	1925	1940	[illegible]	2020	2050	[illegible]
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.20	.22	.27	.30	.34	.38
DATE	[illegible]	07	07	22+	22+	22	22	22	22+	22+	07	07
TIME	[illegible]	[illegible]	1727	[illegible]	0745	0800	0800	0800	[illegible]	[illegible]	1940	2010
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.37	[illegible]	.46	.46	.46	.46
DATE	[illegible]	10	[illegible]	[illegible]	[illegible]	10	10	10	[illegible]	[illegible]	10	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0220	[illegible]	0245	[illegible]	0300	0317	0330	0330	0330
APR	.14	.23	.28	.29	.43	.52	.56	.62	[illegible]	[illegible]	.78	.84
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	17	17	17	17	17	17
TIME	[illegible]	0630	0637	[illegible]	[illegible]	[illegible]	[illegible]	0720	0730	[illegible]	0830	0900
MAY	[illegible]	[illegible]	.36	.39	.40	[illegible]	[illegible]	.40	.40	[illegible]	.54	.57
DATE	[illegible]	11	[illegible]	11	[illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1847	[illegible]	1847	[illegible]	[illegible]	1945	1945	2000
JUN	.20	.46	[illegible]	.69	.78	.87	.91	.93	[illegible]	.95	.96	.96
DATE	[illegible]	19	[illegible]	19	[illegible]	[illegible]	03	03	03	03	03	03
TIME	[illegible]	1611	1616	[illegible]	0315	[illegible]	0335	0355	0415	0435	0510	0510
JUL	[illegible]	.10	[illegible]	[illegible]	[illegible]	[illegible]	.17	.18	.20	.24	.26	.31
DATE	[illegible]	[illegible]	30	30	[illegible]	30	30	[illegible]	[illegible]	11	11	[illegible]
TIME	[illegible]	[illegible]	1300	1305	1315	1330	[illegible]	0145	0145	0200	0213	0245
AUG	[illegible]	[illegible]	.13	.14	.18	.25	.29	.31	.32	.33	.34	.34
DATE	[illegible]	[illegible]	[illegible]	11	[illegible]	11	[illegible]	11	[illegible]	11	11	11
TIME	[illegible]	[illegible]	1628	1633	1645	1658	[illegible]	1733	[illegible]	1813	1843	1913
SEP	.12	[illegible]	.22	.32	.50	.68	.83	.94	1.06	1.17	1.45	1.57
DATE	[illegible]	06	06	06	[illegible]	[illegible]	06	06	06	06	06	06
TIME	[illegible]	1358	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1505	1525	1545	1615	1615
OCT	[illegible]	.30	.38	.46	.52	.55	.55	.56	.58	.58	.59	.70
DATE	[illegible]	11	[illegible]	11	[illegible]	11	11	12	12	12	12	12
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0045	0045	0100	[illegible]	[illegible]	[illegible]	1930	2000
NOV	.02	[illegible]	.02	.02	.03	.03	.03	.03	.03	.03	.03	.03
DATE	[illegible]	19	19	19	[illegible]	19	19	19	19	19	[illegible]	19
TIME	[illegible]	2020	[illegible]	[illegible]	2045	2045	2045	[illegible]	2045	2045	2045	2045
DEC	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
YEAR	.20	.46	[illegible]	.69	.78	.87	.91	.94	[illegible]	1.17	1.45	1.57
MONTH	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]	06	[illegible]	[illegible]	09	09	09

WACO, TEXAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	.12	[illegible]	.17	[illegible]	.21	.22	.25	.31	.37	.43	.52
DATE	31	31	31	[illegible]	31	02	[illegible]	03	03	03	03	03
TIME	[illegible]	[illegible]	1538	[illegible]	[illegible]	2355	[illegible]	0030	0050	[illegible]	[illegible]	0210
FEB	[illegible]	[illegible]	.12	.13	[illegible]	.19	.20	.21	.22	.29	.34	.35
DATE	[illegible]	07	[illegible]	[illegible]	07	[illegible]	07	07	07	07	07	07
TIME	2105	[illegible]	[illegible]	2115	[illegible]	[illegible]	2330	[illegible]	[illegible]	2300	2330	2345
MAR	.25	.38	.39	.39	[illegible]	.50	.59	.67	.86	.99	1.10	1.16
DATE	[illegible]	10	[illegible]	10	24	24	10	24	[illegible]	24	24	24
TIME	[illegible]	[illegible]	[illegible]	0826	[illegible]	0057	0826	0132	[illegible]	0212	[illegible]	[illegible]
APR	.48	[illegible]	.89	[illegible]	1.51	1.67	[illegible]	1.98	2.03	2.03	2.03	2.03
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	[illegible]	1005	1005	1005	1005	1005	1005	0955	[illegible]	1015	0945	0915
MAY	.28	[illegible]	[illegible]	.82	1.06	[illegible]	[illegible]	1.25	[illegible]	1.25	1.25	1.25
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25	25	[illegible]	25	[illegible]	25
TIME	[illegible]	[illegible]	[illegible]	1650	[illegible]	[illegible]	[illegible]	1640	1640	1640	[illegible]	[illegible]
JUN	.32	.42	.46	.56	.70	.75	.94	1.19	1.27	1.28	1.28	1.28
DATE	01	01	[illegible]	01	20	01	[illegible]	20	20	[illegible]	20	20
TIME	[illegible]	1520	1520	[illegible]	[illegible]	1518	0001	0001	0001	[illegible]	0001	0001
JUL	.30	[illegible]	.85	[illegible]	[illegible]	2.67*	3.48	3.86	4.17*	4.20	4.25*	4.27
DATE	[illegible]	15	15	15	15	15	15	[illegible]	[illegible]	15	[illegible]	[illegible]
TIME	0055	0145	[illegible]	0140	[illegible]	[illegible]	0055	[illegible]	0032	[illegible]	0032	0032
AUG	.13	[illegible]	.19	.27	.29	[illegible]	[illegible]	.32	.32	[illegible]	.32	.32
DATE	17	17	[illegible]	17	[illegible]	17	[illegible]	17	17	17	17	17
TIME	[illegible]	[illegible]	[illegible]	1858	[illegible]	1850	1850	[illegible]	1845	1845	1845	[illegible]
SEP	.19	.35	.48	.54	.78	.97	[illegible]	1.12	1.16	1.21	1.36	1.45
DATE	[illegible]	26	[illegible]	26	[illegible]	[illegible]	26	26	20	26	26	26
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1820	1820	1820	1820	1820	1820
OCT	[illegible]	.78	.92	[illegible]	[illegible]	1.42	1.58	1.67	1.70	1.75	1.79	1.86
DATE	[illegible]	[illegible]	[illegible]	04	[illegible]	11	11	[illegible]	11	11	11	11
TIME	[illegible]	[illegible]	[illegible]	1545	1545	0545	0545	0545	0545	0545	[illegible]	[illegible]
NOV	.12	[illegible]	.16	[illegible]	[illegible]	.21	.23	.26	[illegible]	.27	.29	.32
DATE	20	[illegible]	20	[illegible]	[illegible]	20	20	20	[illegible]	20	20	[illegible]
TIME	[illegible]	[illegible]	0018	[illegible]	[illegible]	0018	0018	0018	0018	0018	0018	[illegible]
DEC	[illegible]	.22	[illegible]	[illegible]	[illegible]	[illegible]	.52	.56	[illegible]	.63	.69	.71
DATE	[illegible]	[illegible]	[illegible]	19	19	[illegible]	19	19	[illegible]	19	19	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0208	0208	0208	0208	[illegible]	0208	[illegible]	[illegible]
YEAR	.48	[illegible]	.92	1.25	[illegible]	2.67*	3.48	3.86	4.17*	4.20	4.25*	4.27
MONTH	[illegible]	[illegible]	[illegible]	07	07	07	[illegible]	07	07	[illegible]	07	07

MIDLAND, TEXAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.02	.03	.04	.04	.06	.08	.11	.12	.13	.14	.15	.18
DATE	[illegible]	10	[illegible]	10	[illegible]	21	21	21	21	21	21	21
TIME	1350	1350	1350	1355	0050	0050	[illegible]	0055	0125	[illegible]	0200	0300
FEB	.02	.03	.04	.05	.07	.11	.14	[illegible]	.20	.24	.26	.28
DATE	[illegible]	07	07	07	07	07	07	07	07	07	22	22
TIME	[illegible]	[illegible]	[illegible]	1110	1110	[illegible]	1110	1120	1140	1200	0500	0500
MAR	.28	.32	.50	.56	.58	.62	.62	.63	.63	.63	[illegible]	.77
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	1947	1955	2000	2005	2015	2030	2040	2105	[illegible]	2145	2215	2245
APR	.10	[illegible]	.24	.24	.24	.38	.39	.40	.40	.40	.43	.45
DATE	[illegible]	18	18	18	[illegible]	23	23	23	23	17	17	17
TIME	2102	2107	2112	2117	2127	1520	1535	1555	1615	0730	0800	0830
MAY	.15	[illegible]	.18	.18	.21	.25	.28	.28	.28	.28	.28	.28
DATE	21	[illegible]	21	21	[illegible]	21	21	21	22	22	22	22
TIME	2240	2245	[illegible]	2255	2305	2320	2335	2355	0015	0035	0105	0135
JUN	.12	[illegible]	.17	.17	.17	.19	.19	.19	.19	.19	.19	.19
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	2055	2055	2100	2105	2115	2130	2145	2205	2225	2245	2315	2345
JUL	.19	.32	.42	.47	.48	.48	.48	.48	.48	.48	.48	.48
DATE	[illegible]	27	27	27	27	27	27	27	27	27	27	27
TIME	1940	1620	1625	1630	1640	1655	1710	1730	1750	1810	1840	1910
AUG	.03	.04	.05	.05	.07	.07	.10	.10	.10	.10	.10	[illegible]
DATE	11	11	11	11	11	11	11	[illegible]	11	11	11	11
TIME	1725	1732	1735	1735	1730	1745	1800	1820	1840	1900	1930	2000
SEP	.07	.09	.10	.12	.16	.23	.25	.28	.40	.43	.48	.59
DATE	06	06	06	06	06	06	06	06	06	06	06	06
TIME	2125	[illegible]	1855	1900	2125	1922	1937	1958	2020	2037	2107	2137
OCT	.12	.17	.16	.18	.21	.24	.25	.36	.36	.38	.39	.40
DATE	10	10	10	10	10	10	[illegible]	10	[illegible]	10	10	10
TIME	2039	2044	2049	2054	0705	0720	0735	0700	0720	0740	0810	0840
NOV	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
DEC	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
DATE												
TIME												
YEAR	.28	.32	.50	.56	.58	.62	.62	.63	.63	.63	[illegible]	.77
MONTH	[illegible]	07+	03	03	03	03	03	03	03	03	03	03

SAN ANTONIO, TEXAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.17	.19	.22	.23	.24	.24	.33	.34	.34	.40	.45	.47
DATE	20	20	20	20	20	20	20	20	20	25	25	25
TIME	1835	1836	1841	[illegible]	1848	[illegible]	1926	[illegible]	1940	0542	0621	0630
FEB	.02	.03	.04	.05	.07	.10	.12	.15	.19	.21	.27	.32
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	0356	0356	0400	0406	0416	0420	0200	0420	0240	0300	0400	0400
MAR	.25	.30	.33	.39	.50	.52	.53	.53	.55	.55	.56	.56
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	0149	0153	0153	[illegible]	0153	0153	0158	0158	[illegible]	0158	0232	0232
APR	.40	.68	1.04	1.12	1.20	1.23	1.23	1.23	1.23	1.23	1.23	1.23
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	1733	1739	1742	[illegible]	1743	1745	1745	1745	[illegible]	1745	1745	1745
MAY	.34	.65	.88	1.04	1.25	1.40	1.41	1.42	1.42	1.42	1.43	1.43
DATE	12	12	12	12	12	12	12	12	12	12	12	12
TIME	0147	0151	0153	0154	0155	0156	0156	[illegible]	0156	[illegible]	0156	0156
JUN	.33	.49	.59	.72	.92	1.39	1.65	1.83	1.93	2.01	2.02	2.03
DATE	12	[illegible]	11	11	11	11	11	[illegible]	11	11	11	11
TIME	0026	0650	0649	0725	0710	0725	0732	0731	0744	0745	0745	0801
JUL	.26	.49	.54	.69	.89	[illegible]	1.43	1.53	[illegible]	1.83	1.83	1.84
DATE	07	07	07	16	16	16	16	16	16	16	16	16
TIME	1735	1735	1735	0537	0537	0537	0537	0537	0537	0537	0537	0537
AUG	.02	.04	.06	.07	.08	.09	.10	.10	.10	.10	.10	.10
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1911	1914	1919	1924	1929	1929	1957	1957	1957	1957	1957	1957
SEP	.47	.63	.95	1.09	1.70	2.70	3.16	3.73	4.47*	5.21	5.34	5.44
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	1856	1900	2007	2026	2026	2030	2038	2049	2027	2047	2117	2147
OCT	.22	.35	.44	.50	.69	.70	.78	.96	1.07	1.19	1.22	1.40
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	0842	0846	0849	0850	0852	0852	0920	0940	0940	0940	0940	0940
NOV	.05	.07	.07	.08	.09	.09	.09	.09	.09	.10	.10	.11
DATE	20	20	20	20	20	20	20	20	24+	24	24	24
TIME	[illegible]	0135	[illegible]	0135	0140	0140	0140	0140	0441	0445	0515	0545
DEC	.06	.09	.09	.10	.11	.11	.14	.16	.16	.16	.16	.16
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	1647	1653	1653	1653	1653	1653	1653	1653	1653	1653	1653	1653
YEAR	.47	.68	1.04	[illegible]	1.70	2.70	3.16	3.73	4.47*	5.21	5.34	5.44
MONTH	09	04	04	04	09	09	09	09	09	09	09	09

WICHITA FALLS, TEXAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.03	.06	.08	.10	.14	.21	.25	.32	.38	.44	.51	.63
DATE	02	02	02	02	02	02	02	02	02	02	03	03
TIME	[illegible]	[illegible]	2215	2220	2230	2245	2300	2315	2335	2355	0030	0100
FEB	M	M	M	.04	.07	.10	.12	.14	.16	.18	.20	.23
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME				1120	1130	[illegible]	1200	1200	1200	1210	1240	1310
MAR	.34	.47	.54	.62	.69	.75	.83	1.16	1.23	1.23	1.23	1.25
DATE	23	23	23	23	23	23	23	23	23	23	23	23
TIME	1900	[illegible]	1910	[illegible]	1925	1940	1955	2015	2055	2055	2115	2115
APR	.30	[illegible]	.66	.67	.67	.68	.82	1.01	1.04	1.14	1.14	1.14
DATE	22	22	22	22	22	19	19	19	19	19	19	19
TIME	0120	0125	0130	0135	0145	0210	0225	0245	0305	0325	0355	0425
MAY	.10	.12	.19	.19	[illegible]	.20	.20	.20	.20	.20	.20	.20
DATE	22	22	22	22	22	22	22	22	22	23	23	23
TIME	2222	2227	2224	2229	2239	2254	2309	2329	2249	0009	0039	0109
JUN	.36	.50	.70	.93	[illegible]	1.38	1.72	1.92	1.97	1.98	1.98	1.98
DATE	02	02	16	16	16	16	02	02	02	02	02	02
TIME	[illegible]	1651	1453	1500	1507	1522	1737	1743	1748	1759	1759	1759
JUL	.20	.35	.44	.51	.63	.69	.88	1.14	1.16	1.23	1.47	1.53
DATE	17	17	17	17	17	17	17	17	17	29	29	29
TIME	1505	1517	1523	1530	1532	[illegible]	1555	1555	1555	1127	1135	1135
AUG	.01	.02	.02	.03	.03	.03	.03	.03	.03	.03	.03	.03
DATE	16	16	16	16	16	16	16	16	16	16	16	16
TIME	0020	[illegible]	0030	0050	0050	0050	0050	0050	0050	0050	0050	0050
SEP	.15	.18	.21	.26	.34	.52	.58	.73	.88	1.13	1.22	1.27
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	1337	1342	1347	1352	1402	1417	1413	1430	1353	1413	1453	1513
OCT	.22	[illegible]	.51	.60	.76	.97	1.10	1.15	1.17	1.19	1.27	1.33
DATE	11	11	11	11	11	11	11	11	11	11	11	11
TIME	0022	0027	0037	0042	0037	0052	0107	0127	0147	0207	[illegible]	0307
NOV	.22	.32	.42	.48	.54	.59	.61	.64	.68	.69	.69	.69
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	0916	0914	0915	0920	[illegible]	0930	0929	0930	0930	0930	0930	0930
DEC	.02	.03	.03	.03	.03	.04	.04	.04	.04	.04	.04	.04
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	[illegible]	1045	1045	1045	1045	1110	1110	1110	1110	1110	1110	1110
YEAR	.36	.62	.70	.93	1.17	1.38	1.72	1.92	1.97	1.98	1.98	1.98
MONTH	06	04	06	06	06	06	06	06	06	06	06	06

PORT ARTHUR, TEXAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.11	.18	.21	.21	.29	.32	.34	.35	.36	.39	.46	.55
DATE	27	21	18	18	27	27	27	27	25	25	25	25
TIME	1524	0154	1119	1119	1527	1539	1554	1608	1620	1624	1607	1629
FEB	.20	.40	.50	.63	.72	.86	.90	.91	.91	.91	1.00	1.03
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1745	1745	1749	1754	1803	1818	1832	1830	1840	1846	2003	2033
MAR	.31	.43	.47	.52	.64	.84	1.07	1.60	1.75	1.94	2.14	2.31
DATE	24	24	24	23	23	23	23	23	23	23	23	23
TIME	0847	0848	0853	1659	1723	1652	1705	1736	1740	1741	1813	1840
APR	.55	1.02	1.56	1.66	2.14	2.83	3.92	4.14	4.41	5.05	[illegible]	5.53
DATE	17	17	17	17	17	17	17	17	17	17	17	17
TIME	0609	0609	0609	0611	0611	0611	0611	0611	0612	0611	0615	0615
MAY	.23	.38	.54	.67	.89	.98	1.03	1.16	[illegible]	1.44	1.63	1.73
DATE	12	12	12	12	12	12	12	12	12	12	12	12
TIME	1348	1343	1341	1333	1330	1327	1329	1329	1218	1212	1212	1208
JUN	.28	.42	.54	.61	.75	.79	.80	.80	.85	.88	.89	.89
DATE	05	05	05	05	05	05	05	05	11	11	11	11
TIME	1228	1227	1227	1225	1220	1220	1220	1220	2035	2030	2030	2030
JUL	.49	.84	1.08	1.33	1.74	2.00	2.65	2.84	2.89	3.05	3.12	3.13
DATE	05	05	05	05	05	05	05	05	05	05	05	05
TIME	1353	1351	1351	1342	1338	1331	1310	1310	1239	1222	1222	1222
AUG	.47	.71	1.04	1.21	1.66	2.62	3.02	3.08	3.31	3.37	3.37	3.37
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	1253	1249	1243	1241	1304	1241	1241	1241	1159	1159	1159	1159
SEP	.37	.68	.94	.98	1.20	1.45	1.46	1.47	1.49	1.50	1.56	1.80
DATE	28	28	28	28	28	28	28	28	28	28	04	04
TIME	0621	0621	0615	0614	0600	0556	0556	0556	0556	0556	1531	1531
OCT	.38	.50	.56	.58	.66	.71	.74	.76	.76	.76	.76	.76
DATE	31	31	31	31	31	27	27	27	27	27	27	27
TIME	0052	0048	0045	0041	0033	1836	1836	1836	1836	1836	1836	1836
NOV	.22	.33	.47	.60	.81	1.21	1.28	1.40	1.43	1.44	[illegible]	1.44
DATE	05	05	05	05	05	05	05	05	05	05	05	05
TIME	0731	0730	0721	0720	0700	0658	0658	0658	0646	0646	0646	0646
DEC	.39	.72	.89	.95	.99	1.01	1.02	1.03	1.03	1.03	1.03	1.03
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	0912	0911	0911	0908	0905	0856	0843	0843	0843	0843	0843	0843
YEAR	.55	1.02	1.56	1.66	2.14	2.83	3.92	4.14	4.41	5.05	5.41	5.53
MONTH	04	04	04	04	04	04	04	04	04	04	04	04

VICTORIA, TEXAS

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.06	[illegible]	.11	[illegible]	.17	.23	.26	.28	.31	.37	.43	.45
DATE	25	25	25	25	25	25	25	25	25	25	25	25
TIME	0810	0815	0820	0825	0835	[illegible]	0905	0915	0935	1000	1030	1100
FEB	.12	.20	.26	.30	.35	[illegible]	[illegible]	.40	.40	.41	.41	.41
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	1433	1435	1440	1440	1450	1500	1500	1500	1500	1500	1500	1500
MAR	.11	.16	.20	.22	.25	.25	.25	.25	.25	.26	.26	.26
DATE	16	16	16	16	16	16	16	16	16	16	16	16
TIME	0040	0040	0045	0050	0100	0100	[illegible]	0100	0100	0100	0100	0100
APR	.15	.30	.48	.55	.67	.82	.90	.98	1.01	1.07	1.07	1.10
DATE	17	16	16	16	16	16	16	16	16	16	16	17
TIME	0810	0713	0720	0722	0730	0734	0745	0810	0827	0900	0900	1046
MAY	.14	.28	.36	.47	[illegible]	.67	.73	.75	.80	.86	.94	.98
DATE	12	12	12	12	12	12	12	12	12	12	12	12
TIME	0408	0411	0416	0421	0431	0446	0453	0513	0533	0553	0623	0653
JUN	.37	.63	.67	.82	1.33	1.65	2.31	2.56	2.92	3.04	3.16	3.18
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	0740	0745	0750	0755	0805	[illegible]	0835	0855	0915	0935	1005	1035
JUL	.28	.55	.69	1.00	1.38	1.47	1.54	1.61	1.61	1.61	1.61	1.61
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	1814	1819	1824	1829	1839	1852	1850	1908	1911	1911	1911	1911
AUG	.20	.26	.39	.48	.55	.57	.67	.75	.79	.89	1.01	1.08
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	0415	0420	0425	0430	0440	0455	0510	0530	0550	0610	0640	0710
SEP	.23	.32	.42	[illegible]	.59	.84	.95	1.22	1.48	1.52	1.54	1.57
DATE	14	02	02	02	02	02	11	11	11	11	11	11
TIME	1230	1525	1530	1535	1545	1533	1922	1942	2002	2022	2052	2122
OCT	.20	.40	.48	.64	.73	.79	1.22	1.42	1.64	1.72	1.75	1.95
DATE	11	05	11	11	11	11	11	11	11	11	11	11
TIME	1347	2042	1634	1349	1359	1420	1429	1449	1509	1529	1559	1629
NOV	.23	.25	.29	.40	.47	.53	.55	.64	.67	.69	.69	.69
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	0459	0500	0500	0500	0504	0519	[illegible]	0554	0614	0630	0630	0630
DEC	.32	.48	.53	.56	.58	[illegible]	.62	.67	.73	.79	.83	.84
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	0650	0655	0700	0705	0715	[illegible]	0745	0805	0825	0845	0915	0945
YEAR	.37	.63	.69	1.00	1.38	1.65	2.31	2.56	2.92	3.04	3.16	3.18
MONTH	06	06	07	07	07	06	06	06	06	06	06	06

MILFORD, UTAH

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.01	.01	.03	.04	.05	.08	.10	.12	.18	.20	.23	.26
DATE	19	19	19	19	19	19	19	19	19	19	19	19
TIME	[illegible]	1125	1130	1135	1145	1150	1200	1230	1250	1300	1335	1400
FEB	.06	.06	.07	.08	.12	.15	.19	.24	.29	.35	.37	.38
DATE	28	28	28	28	28	28	28	28	28	28	28	28
TIME	1050	1055	1100	1100	1100	1050	1050	1050	1050	1050	1050	1050
MAR	.02	.04	.05	.06	.07	.07	.11	.11	.12	.12	.13	.14
DATE	28+	28+	24	24	24	24	21	21	21	21	29	29
TIME	0245	0250	0635	0640	0645	0645	0720	0740	0800	0800	0830	0905
APR	.06	.11	.11	.12	[illegible]	.18	.23	.27	.29	.38	.44	.47
DATE	24	24	24	24	17	17	17	17	17	17	17	17
TIME	1204	1213	1215	1220	1958	2006	2025	2045	2105	2117	2155	2224
MAY	.02	.03	.04	.06	.07	.09	.12	.15	.17	.19	.23	.26
DATE	05	05	05	05	05	05	05	05	05	05	05	05
TIME	1955	1955	2000	2005	2010	2030	2015	2015	2040	2000	2130	2200
JUN	.04	.08	.10	.11	.14	.23	.26	.29	.30	.30	.30	.30
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	1832	1838	1842	1845	1850	1853	1857	1920	1935	1935	1935	1935
JUL	.14	.22	.26	.26	.28	.28	.28	.28	.28	.28	.28	.28
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	1710	[illegible]	1715	1720	1720	1740	1740	1740	1740	1740	1740	1740
AUG	.03	.07	.13	.18	.28	.33	.35	.37	.37	.37	.37	.37
DATE	06	06	06	06	06	06	06	06	06	06	06	06
TIME	1447	1459	1515	1518	1523	1532	1547	1605	1615	1615	1615	1615
SEP	.01	.02	.02	.02	.03	.04	.05	.05	.05	.05	.05	.05
DATE	25	25	25	25	25	24	24	24	24	24	24	24
TIME	0422	0428	0431	0431	0445	2335	2335	2335	2335	2335	2335	2335
OCT	.04	.07	.08	.08	.08	.09	.12	.14	.16	.18	.21	.23
DATE	09	09	09	09	09	09	09	09	09	09	09	09
TIME	0650	0655	0659	0702	0715	0729	0744	0802	0813	0800	0800	0800
NOV	.03	.06	.07	.08	.11	.12	.18	.20	.23	.28	.31	.34
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	1047	1057	1059	1102	1100	1115	1100	1127	1100	1103	1105	1238
DEC	.02	.03	.04	.04	.06	.09	.10	.14	.15	.16	.17	.22
DATE	01	01	01	01	01	01	02	02	02	02	02	02
TIME	2330	2330	2330	2330	2335	2335	0020	0050	0110	[illegible]	0145	0230
YEAR	.14	.22	.26	.26	.28	.33	.35	.37	.37	.38	.44	.47
MONTH	07	07	07	07	08+	08	08	08	08	04	04	04

MAXIMUM SHORT DURATION PRECIPITATION

(5 to 180 minutes)

SALT LAKE CITY, UTAH

	[illegible]	10	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	.05	.06	[illegible]	[illegible]	.13	.15	.17	.21	.25	.28
DATE	19	19	19	19	19	19	19	19	[illegible]	19	19	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1325	[illegible]	1335	[illegible]	1430	[illegible]	[illegible]	1535	1600
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.12	.15	.20	.21	[illegible]	.28	.28
DATE	[illegible]	[illegible]	[illegible]	10	[illegible]	10	10	[illegible]	[illegible]	[illegible]	10	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1815	[illegible]	[illegible]	[illegible]	[illegible]	1840	1920	[illegible]
MAR	[illegible]	.06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.14	[illegible]	[illegible]	.22	[illegible]
DATE	[illegible]	13	[illegible]	[illegible]	13	13	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0345	[illegible]	0400	0445	[illegible]	[illegible]	0446	[illegible]	[illegible]
APR	.11	[illegible]	.13	.14	.15	.16	[illegible]	[illegible]	[illegible]	.31	.31	[illegible]
DATE	[illegible]	28	28	28	28	[illegible]	[illegible]	28	[illegible]	28	28	[illegible]
TIME	[illegible]	2107	2107	2115	[illegible]	[illegible]	[illegible]	2214	2232	2247	2300	[illegible]
MAY	.12	[illegible]	[illegible]	[illegible]	.19	[illegible]	[illegible]	.22	[illegible]	[illegible]	.36	[illegible]
DATE	25	25	[illegible]	25	25	[illegible]	25	25	25	[illegible]	25	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0405	0430	0445	0517	[illegible]
JUN	[illegible]	[illegible]	[illegible]	[illegible]	.07	[illegible]	[illegible]	.08	.08	.08	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]
TIME	[illegible]	1918	[illegible]	[illegible]	[illegible]	[illegible]	1932	[illegible]	1930	[illegible]	[illegible]	[illegible]
JUL	.12	[illegible]	.20	.21	.21	[illegible]	[illegible]	.23	.24	.27	.29	[illegible]
DATE	[illegible]	18	[illegible]	18	[illegible]	18	[illegible]	[illegible]	[illegible]	19	19	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1658	1703	[illegible]	1745	1237	1258	1324	[illegible]
AUG	[illegible]	[illegible]	[illegible]	.29	[illegible]	.30	.30	[illegible]	.30	[illegible]	.30	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	04	[illegible]	[illegible]	[illegible]	[illegible]	12
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1320	[illegible]	[illegible]	1320	1320	[illegible]
SEP	.20	[illegible]	.29	[illegible]	.40	[illegible]	[illegible]	.45	.50	.55	.65	[illegible]
DATE	[illegible]	[illegible]	[illegible]	08	[illegible]	[illegible]	[illegible]	08	[illegible]	23	23	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0440	[illegible]	[illegible]	0520	0520	[illegible]	[illegible]	[illegible]	[illegible]
OCT	[illegible]	[illegible]	[illegible]	.09	[illegible]	[illegible]	[illegible]	[illegible]	.19	.22	.23	.23
DATE	[illegible]	[illegible]	29	[illegible]	[illegible]	[illegible]	23	[illegible]	[illegible]	[illegible]	23	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0945	0955	1000	[illegible]	[illegible]	[illegible]	[illegible]	1645	[illegible]
NOV	[illegible]	[illegible]	[illegible]	.11	[illegible]	.20	[illegible]	.31	.36	.40	.47	[illegible]
DATE	[illegible]	[illegible]	[illegible]	18	08	08	08	08	[illegible]	08	[illegible]	08
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0847	[illegible]	0915	[illegible]	0957	[illegible]	1045	1100
DEC	[illegible]	[illegible]	[illegible]	.07	[illegible]	[illegible]	.18	[illegible]	.21	.21	.24	.27
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	17	01	01
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1801	[illegible]	[illegible]	1844	[illegible]	2100
YEAR	[illegible]	[illegible]	.29	.30	.40	.42	.44	.45	[illegible]	.55	.65	.77
MONTH	[illegible]	[illegible]	[illegible]	09	09	[illegible]	09	09	09	[illegible]	09	09

WENDOVER, UTAH

	[illegible]	10	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	T	T	T	T	T	T	.01	.01	.01	.02	.02	.03
DATE							[illegible]	[illegible]	31+	[illegible]	[illegible]	26
TIME							[illegible]	1600	1600	1700	1700	0600
FEB	.02	.02	.02	.03	[illegible]	.05	[illegible]	.07	[illegible]	.12	.13	[illegible]
DATE	[illegible]	11	11	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	11	[illegible]	11
TIME	1100	[illegible]	[illegible]	1105	[illegible]	[illegible]	[illegible]	[illegible]	1315	1400	[illegible]	1400
MAR	[illegible]	[illegible]	[illegible]	.07	[illegible]	[illegible]	.13	.17	.23	.24	.28	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	11	[illegible]	11	11	[illegible]
TIME	[illegible]	1315	1315	[illegible]	[illegible]	[illegible]	1315	[illegible]	1315	[illegible]	1315	[illegible]
APR	[illegible]	[illegible]	[illegible]	[illegible]	.17	[illegible]	.17	.17	.17	.17	[illegible]	.17
DATE	[illegible]	29	29	29	29	29	29	29	29	29	29	29
TIME	0306	0306	0306	[illegible]	0320	0335	[illegible]	[illegible]	0430	0430	0430	[illegible]
MAY	[illegible]	[illegible]	.17	[illegible]	[illegible]	[illegible]	.18	[illegible]	.21	.21	.21	[illegible]
DATE	[illegible]	19	[illegible]	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	19
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1650	[illegible]	1650	1650	[illegible]	1650	1650
JUN	[illegible]	[illegible]	.16	[illegible]	[illegible]	[illegible]	[illegible]	.19	.19	.19	.23	[illegible]
DATE	[illegible]	14	[illegible]	14	14	[illegible]	14	14	[illegible]	14	14	[illegible]
TIME	0517	0517	0517	0527	0537	0545	0545	0545	[illegible]	0545	0545	[illegible]
JUL	.03	[illegible]	.06	.07	.10	.14	[illegible]	[illegible]	.18	[illegible]	[illegible]	.25
DATE	21	[illegible]	21	[illegible]	21	21	21	21	21	[illegible]	21	21
TIME	0120	0315	0255	0300	0300	0300	0300	0325	0330	[illegible]	0335	0345
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.20	[illegible]	.20	[illegible]	.20	.20
DATE	[illegible]	21	04	04	[illegible]	[illegible]	[illegible]	21	[illegible]	21	21	[illegible]
TIME	[illegible]	1630	[illegible]	[illegible]	1635	[illegible]	[illegible]	1640	[illegible]	1640	1640	[illegible]
SEP	[illegible]	.21	.24	.26	[illegible]	[illegible]	[illegible]	.32	.32	[illegible]	.33	.33
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01	[illegible]	[illegible]	[illegible]	01	01
TIME	0555	[illegible]	[illegible]	[illegible]	0615	[illegible]	0645	[illegible]	0725	[illegible]	0815	0845
OCT	.03	.03	[illegible]	.03	.05	[illegible]	[illegible]	.10	[illegible]	.14	.15	.16
DATE	[illegible]	08	[illegible]	08	[illegible]	[illegible]	[illegible]	08	08	[illegible]	08	[illegible]
TIME	0903	[illegible]	0913	[illegible]	0330	0345	[illegible]	0400	0400	0400	0430	0500
NOV	.03	[illegible]	.05	[illegible]	.07	.10	[illegible]	.15	.16	.16	.16	.16
DATE	[illegible]	18	[illegible]	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]
TIME	[illegible]	0355	[illegible]	0355	[illegible]	0420	0430	0450	0510	[illegible]	0530	0530
DEC	.02	[illegible]	.04	.04	[illegible]	.05	.07	.07	.07	.07	.07	.07
DATE	[illegible]	17	17	[illegible]	[illegible]	17	[illegible]	[illegible]	17	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1743	1703	1708	1718	1740	[illegible]	1745	[illegible]	[illegible]	1745	[illegible]
YEAR	.15	.21	.24	.26	.28	[illegible]	.32	[illegible]	[illegible]	.32	[illegible]	.33
MONTH	[illegible]	09	09	[illegible]	[illegible]	[illegible]	09	09	[illegible]	09	09	09

[illegible]

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	M	M	M	M	M	M	.25	M	M	[illegible]	M	[illegible]
DATE							20			[illegible]		[illegible]
TIME							[illegible]			[illegible]		[illegible]
FEB	M	M	M	M	M	M	.14	M	M	[illegible]	M	[illegible]
DATE							15			[illegible]		[illegible]
TIME							0600			[illegible]		[illegible]
MAR	[illegible]	[illegible]	[illegible]	[illegible]			.19	[illegible]		[illegible]	[illegible]	.25
DATE							17			[illegible]		
TIME							2300			2300		2359
APR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		.37		[illegible]
DATE							28					[illegible]
TIME							[illegible]			[illegible]		[illegible]
MAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.46	[illegible]	.46
DATE							[illegible]					31
TIME							[illegible]			[illegible]		[illegible]
JUN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.46	[illegible]	[illegible]	.56	[illegible]	.64
DATE							[illegible]			04		[illegible]
TIME							[illegible]			[illegible]		[illegible]
JUL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.49	[illegible]		.89		1.10
DATE							[illegible]			[illegible]		28
TIME							[illegible]			2200		2300
AUG	M	M	M	M	M		.97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE							18			[illegible]		
TIME							1800			1900		2000
SEP	[illegible]	[illegible]	M	M	[illegible]	[illegible]	[illegible]	M	[illegible]	.46		[illegible]
DATE							06			06		[illegible]
TIME							[illegible]			[illegible]		[illegible]
OCT	[illegible]	M	[illegible]	[illegible]	[illegible]	[illegible]	.14	[illegible]	[illegible]	.20	[illegible]	.29
DATE							16			[illegible]		[illegible]
TIME							[illegible]			1200		[illegible]
NOV	.07	.11	.13	[illegible]	[illegible]	.15	.15	.15	.15	.17	.22	[illegible]
DATE	28	28	[illegible]	28	[illegible]	28	28	28	28	[illegible]	[illegible]	[illegible]
TIME	1812	1812	1812	1812	[illegible]	1812	[illegible]	[illegible]	1812	1905	2130	[illegible]
DEC		M	[illegible]	M								
DATE												
TIME												
YEAR					M					M		
MONTH												

LYNCHBURG, VIRGINIA

	[illegible]	10	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	.10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.26	[illegible]	[illegible]	.42	[illegible]
DATE	[illegible]	22	[illegible]	22	[illegible]	[illegible]	[illegible]	22	[illegible]	22	22	[illegible]
TIME	[illegible]	0925	[illegible]	0935	[illegible]	[illegible]	[illegible]	0950	1005	[illegible]	1000	1000
FEB	.04	[illegible]	.10	[illegible]	[illegible]	.24	.32	.37	.47	[illegible]	.57	.65
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	02	02	02	02	02	02	02
TIME	[illegible]	[illegible]	1735	[illegible]	[illegible]	[illegible]	1735	[illegible]	1735	1735	[illegible]	1735
MAR	.13	[illegible]	[illegible]	[illegible]	[illegible]	.29	[illegible]	.35	[illegible]	.52	[illegible]	.70
DATE	[illegible]	[illegible]	16	[illegible]	17	17	[illegible]	17	[illegible]	25	[illegible]	25
TIME	[illegible]	0608	[illegible]	[illegible]	[illegible]	0608	0630	0630	[illegible]	2000	[illegible]	2047
APR	[illegible]	.28	[illegible]	.37	[illegible]	[illegible]	.48	.58	.63	.64	.64	[illegible]
DATE	[illegible]	09	[illegible]	[illegible]	[illegible]	09	[illegible]	[illegible]	[illegible]	[illegible]	09	09
TIME	[illegible]	[illegible]	[illegible]	[illegible]	2225	[illegible]	2300	2300	[illegible]	2330	2330	[illegible]
MAY	[illegible]	.25	.28	[illegible]	.30	[illegible]	[illegible]	.38	[illegible]	.52	.55	.58
DATE	[illegible]	29	29	29	[illegible]	28	28	[illegible]	[illegible]	28	28	[illegible]
TIME	[illegible]	1750	[illegible]	1755	[illegible]	[illegible]	0715	0715	0715	[illegible]	[illegible]	0745
JUN	.35	.65	[illegible]	[illegible]	[illegible]	[illegible]	.88	.88	[illegible]	[illegible]	.88	.88
DATE	[illegible]	[illegible]	[illegible]	21	[illegible]	[illegible]	21	[illegible]	21	21	21	21
TIME	[illegible]	[illegible]	1500	[illegible]	[illegible]	1520	[illegible]	[illegible]	[illegible]	[illegible]	1535	[illegible]
JUL	.50	.88	1.17	[illegible]	1.40	1.67	1.69	[illegible]	2.14	2.41	[illegible]	2.52
DATE	10	[illegible]	[illegible]	10	10	[illegible]	10	[illegible]	[illegible]	17	[illegible]	[illegible]
TIME	[illegible]	0810	[illegible]	0808	0808	0745	0740	0314	0314	0314	[illegible]	[illegible]
AUG	.72	[illegible]	[illegible]	[illegible]	[illegible]	1.52	1.75	[illegible]	[illegible]	2.11	2.25	2.33
DATE	[illegible]	18	[illegible]	18	[illegible]	[illegible]	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0140	[illegible]	0150	[illegible]	0215	0220	0240	0300	[illegible]	[illegible]	0415
SEP	[illegible]	[illegible]	[illegible]	.53	[illegible]	.55	[illegible]	.55	[illegible]	[illegible]	[illegible]	.63
DATE	06	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]	06	06	[illegible]	14
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1548	1548	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OCT	[illegible]	.20	[illegible]	.29	.31	[illegible]	.41	[illegible]	.54	[illegible]	.65	[illegible]
DATE	[illegible]	[illegible]	29	29	[illegible]	[illegible]	02	02	02	[illegible]	02	02
TIME	[illegible]	[illegible]	0001	0006	[illegible]	0017	0950	[illegible]	1030	1050	[illegible]	1040
NOV	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.20	.21	.23	[illegible]	.30	[illegible]
DATE	28	[illegible]	05	05	[illegible]	05	05	[illegible]	05	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0424	0423	[illegible]	[illegible]	0330	0340	0345	0345	0352
DEC	[illegible]	[illegible]	.15	[illegible]	.18	.25	.27	[illegible]	.37	.42	.46	.53
DATE	[illegible]	20	20	20	[illegible]	20	20	[illegible]	20	20	20	20
TIME	[illegible]	[illegible]	1318	1318	[illegible]	[illegible]	1318	1318	1318	1318	[illegible]	1318
YEAR	.50	.88	1.17	1.23	1.40	1.67	[illegible]	1.93	[illegible]	2.41	[illegible]	2.52
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07	08	08	07	[illegible]	07	[illegible]

NORFOLK, VIRGINIA

	[illegible]	10	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	.11	.14	[illegible]	.19	.20	[illegible]	[illegible]	.35	.38	[illegible]	.43	.45
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28	[illegible]	28	[illegible]	28	[illegible]	[illegible]
TIME	1517	[illegible]	2107	[illegible]	[illegible]	[illegible]	2116	2136	[illegible]	[illegible]	2145	[illegible]
FEB	.23	.34	[illegible]	[illegible]	[illegible]	.57	[illegible]	.73	.84	[illegible]	[illegible]	.94
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	02	02	02	02	02
TIME	1405	1408	1411	1413	1418	[illegible]	1418	1418	[illegible]	[illegible]	1418	1500
MAR	.15	.22	[illegible]	[illegible]	[illegible]	[illegible]	.34	.34	.40	[illegible]	.54	[illegible]
DATE	26	26	[illegible]	[illegible]	26	26	[illegible]	26	[illegible]	[illegible]	21	21
TIME	1457	[illegible]	[illegible]	1504	[illegible]	[illegible]	1544	[illegible]	2327	[illegible]	[illegible]	[illegible]
APR	[illegible]	[illegible]	[illegible]	.73	[illegible]	[illegible]	.75	[illegible]	.75	[illegible]	.75	.75
DATE	27	27	27	27	27	27	[illegible]	27	27	[illegible]	27	27
TIME	[illegible]	[illegible]	1140	[illegible]	1147	[illegible]	1209	1209	[illegible]	[illegible]	1209	[illegible]
MAY	.37	.65	[illegible]	[illegible]	[illegible]	[illegible]	.73	.73	[illegible]	.73	[illegible]	[illegible]
DATE	[illegible]	28	[illegible]	28	[illegible]	[illegible]	[illegible]	28	[illegible]	[illegible]	28	[illegible]
TIME	[illegible]	[illegible]	0632	0632	[illegible]	[illegible]	0650	0650	[illegible]	0650	0650	0804
JUN	.22	.39	.51	[illegible]	[illegible]	.73	.79	.85	.91	.97	1.16	1.26
DATE	[illegible]	13	[illegible]	13	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	29	29
TIME	[illegible]	1534	1536	1546	[illegible]	[illegible]	[illegible]	[illegible]	1915	[illegible]	0841	[illegible]
JUL	[illegible]	[illegible]	.65	[illegible]	[illegible]	1.31	1.40	[illegible]	[illegible]	1.98	[illegible]	2.20
DATE	[illegible]	28	[illegible]	28	[illegible]	28	[illegible]	10	[illegible]	[illegible]	10	[illegible]
TIME	1520	[illegible]	1520	1520	[illegible]	[illegible]	[illegible]	1534	1539	[illegible]	[illegible]	[illegible]
AUG	[illegible]	[illegible]	.57	.58	[illegible]	[illegible]	1.12	1.27	1.40	1.47	1.50	1.50
DATE	[illegible]	12	12	[illegible]	[illegible]	21	21	[illegible]	[illegible]	[illegible]	21	21
TIME	[illegible]	[illegible]	1434	1738	1749	0006	[illegible]	0006	0006	0006	0016	[illegible]
SEP	[illegible]	.08	.10	.14	.18	.21	.25	.31	.34	[illegible]	.39	[illegible]
DATE	[illegible]	[illegible]	[illegible]	14	[illegible]	14	14	[illegible]	[illegible]	[illegible]	[illegible]	14
TIME	[illegible]	1008	1016	1019	1022	[illegible]	1100	[illegible]	1111	1133	1132	[illegible]
OCT	.19	[illegible]	[illegible]	.33	.41	.50	[illegible]	.57	.79	.95	1.00	1.01
DATE	[illegible]	[illegible]	[illegible]	02	[illegible]	02	[illegible]	02	[illegible]	02	[illegible]	02
TIME	[illegible]	[illegible]	[illegible]	1522	[illegible]	[illegible]	[illegible]	[illegible]	1622	[illegible]	[illegible]	1735
NOV	[illegible]	[illegible]	.12	[illegible]	.24	[illegible]	.38	[illegible]	.51	.58	.78	.86
DATE	05	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	05	05	[illegible]	05	[illegible]	05
TIME	1013	1016	1024	1030	1035	1036	1040	1059	[illegible]	1053	1041	[illegible]
DEC	[illegible]	[illegible]	.18	.25	[illegible]	[illegible]	.54	.58	.65	[illegible]	.77	[illegible]
DATE	[illegible]	21	21	21	21	21	21	21	21	[illegible]	21	21
TIME	[illegible]	[illegible]	[illegible]	2147	2142	2140	2129	[illegible]	2051	2058	2051	[illegible]
YEAR	[illegible]	[illegible]	.70	.73	[illegible]	[illegible]	1.40	1.65	1.82	1.98	2.12	2.20
MONTH	05	[illegible]	05	[illegible]	07	07	[illegible]	07	07	07	07	07

RICHMOND, VIRGINIA

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	.14	[illegible]	.15	[illegible]	[illegible]	[illegible]	.28	[illegible]	.32	.36	[illegible]
DATE	19	[illegible]	[illegible]	[illegible]	[illegible]	27	[illegible]	27	[illegible]	28	[illegible]	[illegible]
TIME	1331	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0725	2023	2000	2030	[illegible]
FEB	.12	.19	.23	.25	[illegible]	[illegible]	.59	.68	[illegible]	.84	.93	1.05
DATE	[illegible]	02	[illegible]	02	[illegible]	[illegible]	[illegible]	02	02	[illegible]	02	[illegible]
TIME	[illegible]	[illegible]	1121	1126	[illegible]	1128	[illegible]	[illegible]	1140	1148	1220	[illegible]
MAR	[illegible]	[illegible]	.12	.15	[illegible]	[illegible]	.24	.27	.30	.32	.32	.32
DATE	[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	16	[illegible]	16	[illegible]	[illegible]
TIME	[illegible]	0744	0744	[illegible]	0750	[illegible]	[illegible]	0803	0803	[illegible]	0803	[illegible]
APR	[illegible]	.22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.73	[illegible]
DATE	01	[illegible]	[illegible]	[illegible]	27	[illegible]	25	27	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1617	1617	[illegible]	0150	[illegible]	2121	0240	0300	[illegible]	[illegible]	[illegible]
MAY	.23	.38	[illegible]	[illegible]	[illegible]	[illegible]	.71	.73	.74	.76	[illegible]	[illegible]
DATE	[illegible]	20	20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1740	1745	[illegible]	1802	1810	1834	1846	[illegible]	1920	[illegible]
JUN	.29	.34	[illegible]	.56	.70	[illegible]	[illegible]	.72	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	13	[illegible]	[illegible]	13	[illegible]	13	13	[illegible]	13	[illegible]
TIME	2039	[illegible]	2039	[illegible]	2045	2050	2050	2122	2122	[illegible]	[illegible]	[illegible]
JUL	[illegible]	[illegible]	[illegible]	[illegible]	.71	.72	.72	.72	[illegible]	.72	[illegible]	.72
DATE	[illegible]	[illegible]	[illegible]	[illegible]	11	11	[illegible]	11	11	11	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1628	[illegible]	1645	1645	1645	[illegible]	1645	[illegible]
AUG	[illegible]	[illegible]	[illegible]	.83	[illegible]	.88	[illegible]	1.52	[illegible]	1.69	[illegible]	[illegible]
DATE	[illegible]	[illegible]	20	[illegible]	[illegible]	20	20	[illegible]	[illegible]	[illegible]	20	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1958	2013	[illegible]	2053	[illegible]	2144	[illegible]
SEP	[illegible]	.20	[illegible]	[illegible]	.25	[illegible]	[illegible]	[illegible]	.43	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	07	14	[illegible]	14	[illegible]	14	[illegible]	[illegible]	[illegible]	[illegible]
TIME	1732	1733	1733	[illegible]	[illegible]	[illegible]	[illegible]	0900	[illegible]	[illegible]	[illegible]	[illegible]
OCT	[illegible]	.27	.36	[illegible]	.59	[illegible]	.83	[illegible]	.98	[illegible]	1.02	[illegible]
DATE	[illegible]	02	[illegible]	02	[illegible]	02	[illegible]	02	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1125	[illegible]	[illegible]	1145	[illegible]	[illegible]	1235	[illegible]	[illegible]	1325	[illegible]
NOV	.06	.09	[illegible]	[illegible]	.20	.26	[illegible]	.41	[illegible]	.51	[illegible]	[illegible]
DATE	[illegible]	05	05	05	05	05	[illegible]	05	[illegible]	05	05	[illegible]
TIME	0742	0736	0742	0744	0754	[illegible]	[illegible]	0840	[illegible]	[illegible]	0906	[illegible]
DEC	[illegible]	.13	.16	.18	[illegible]	.27	[illegible]	.39	.49	[illegible]	.60	.65
DATE	20	20	20	20	31	[illegible]	[illegible]	[illegible]	09	09	09	09
TIME	1736	1739	[illegible]	1749	[illegible]	1908	0216	0236	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	[illegible]	.62	.76	.83	.86	.88	.99	[illegible]	1.60	[illegible]	[illegible]	[illegible]
MONTH	07	07	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

ROANOKE, VIRGINIA

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	.04	[illegible]	.10	.12	.14	.18	.23	.25	[illegible]	.27	.28	.33
DATE	[illegible]	19	19	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22
TIME	[illegible]	[illegible]	[illegible]	0840	[illegible]	0900	0900	0915	0945	[illegible]	1030	0600
FEB	[illegible]	[illegible]	.09	[illegible]	[illegible]	.25	.34	[illegible]	[illegible]	.58	.70	.86
DATE	[illegible]	02	[illegible]	02	[illegible]	[illegible]	02	[illegible]	02	02	02	02
TIME	[illegible]	[illegible]	0415	0420	[illegible]	0445	[illegible]	0500	0500	0500	0500	[illegible]
MAR	[illegible]	.17	.20	.22	.25	[illegible]	[illegible]	.32	.36	.40	[illegible]	[illegible]
DATE	[illegible]	26	[illegible]	26	26	26	[illegible]	26	[illegible]	26	26	[illegible]
TIME	[illegible]	1207	[illegible]	[illegible]	1228	1247	1255	[illegible]	1345	1400	1425	1445
APR	[illegible]	.80	.82	[illegible]	.82	.82	.82	.82	[illegible]	.82	.82	.82
DATE	01	01	[illegible]	01	01	[illegible]	01	01	01	[illegible]	[illegible]	01
TIME	[illegible]	1659	[illegible]	[illegible]	[illegible]	1600	1600	[illegible]	1600	1600	1600	1600
MAY	.32	.56	[illegible]	.72	.93	1.06	1.28	1.34	1.67	1.76	2.18	[illegible]
DATE	[illegible]	28	[illegible]	28	28	28	[illegible]	28	28	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0150	0150	0150	[illegible]	0150	0150	[illegible]	[illegible]	0150
JUN	.22	.43	[illegible]	[illegible]	1.15	1.27	[illegible]	1.29	1.29	[illegible]	1.29	1.29
DATE	21	[illegible]	[illegible]	[illegible]	21	21	[illegible]	21	21	21	21	21
TIME	[illegible]	[illegible]	[illegible]	1330	[illegible]	1355	[illegible]	1420	1430	[illegible]	1430	1430
JUL	[illegible]	[illegible]	.63	.76	.87	[illegible]	1.13	[illegible]	[illegible]	[illegible]	1.33	1.34
DATE	[illegible]	[illegible]	01	01	01	[illegible]	[illegible]	10	[illegible]	10	[illegible]	10
TIME	[illegible]	[illegible]	1605	1605	1605	2030	2030	2045	2045	2045	2045	2045
AUG	[illegible]	[illegible]	[illegible]	.50	.70	.92	.98	[illegible]	[illegible]	[illegible]	.98	[illegible]
DATE	[illegible]	01	01	[illegible]	[illegible]	[illegible]	[illegible]	01	01	[illegible]	[illegible]	[illegible]
TIME	1517	1522	1500	1505	1515	[illegible]	[illegible]	[illegible]	1545	[illegible]	1545	[illegible]
SEP	[illegible]	[illegible]	[illegible]	.31	.38	[illegible]	.43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	09	[illegible]	[illegible]	[illegible]	[illegible]	09	[illegible]	[illegible]	[illegible]	09	[illegible]
TIME	[illegible]	1208	[illegible]	[illegible]	1228	1243	[illegible]	1245	1245	[illegible]	[illegible]	[illegible]
OCT	[illegible]	.19	.20	[illegible]	[illegible]	[illegible]	.38	.45	.51	[illegible]	[illegible]	.65
DATE	[illegible]	02	[illegible]	[illegible]	[illegible]	02	02	[illegible]	02	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0100	[illegible]	[illegible]	[illegible]	0100	[illegible]	0100	[illegible]	0035	[illegible]	[illegible]
NOV	[illegible]	[illegible]	[illegible]	.38	[illegible]	.38	.38	.40	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	28	28	28	[illegible]	[illegible]	[illegible]	28	[illegible]	[illegible]	28	[illegible]
TIME	[illegible]	1135	[illegible]	[illegible]	[illegible]	[illegible]	1135	[illegible]	[illegible]	1135	[illegible]	[illegible]
DEC	[illegible]	[illegible]	.07	.10	.14	[illegible]	.25	.28	.30	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	05	20	[illegible]	20	[illegible]	20	[illegible]	[illegible]	[illegible]	20
TIME	[illegible]	0840	[illegible]	[illegible]	1110	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.28	1.34	[illegible]	[illegible]	[illegible]	2.23
MONTH	[illegible]	[illegible]	04	04	[illegible]	06	06	[illegible]	05	05	[illegible]	05

WALLOPS ISLAND, VIRGINIA

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	.10	[illegible]	.19	[illegible]	.37	[illegible]	.58	.75	[illegible]	.98	1.12
DATE	[illegible]	28	28	28	[illegible]	[illegible]	28	28	28	[illegible]	28	28
TIME	2035	2040	[illegible]	2220	2225	2235	2300	2300	2300	2300	2300	[illegible]
FEB	.15	.20	.25	[illegible]	[illegible]	.62	.73	[illegible]	.98	[illegible]	1.23	[illegible]
DATE	02	02	[illegible]	[illegible]	[illegible]	[illegible]	02	02	02	02	02	02
TIME	1455	1500	1500	1510	1520	1520	[illegible]	1520	[illegible]	1520	1520	1520
MAR	.10	[illegible]	.20	.22	.26	.30	.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	26	[illegible]	26	26	26	26	26	26	[illegible]	26	26	[illegible]
TIME	1620	[illegible]	[illegible]	[illegible]	1645	1700	[illegible]	1735	1755	[illegible]	[illegible]	[illegible]
APR	[illegible]	.35	[illegible]	[illegible]	[illegible]	[illegible]	.45	[illegible]	.48	.54	[illegible]	.72
DATE	[illegible]	10	10	[illegible]	[illegible]	25	[illegible]	25	08	08	[illegible]	08
TIME	0400	[illegible]	0408	0415	[illegible]	[illegible]	[illegible]	[illegible]	0307	0307	0307	0307
MAY	.14	.17	[illegible]	.23	[illegible]	.26	[illegible]	[illegible]	[illegible]	.55	.66	.68
DATE	03	[illegible]	20	20	[illegible]	20	20	20	20	20	20	[illegible]
TIME	[illegible]	0742	[illegible]	[illegible]	0755	[illegible]	1300	[illegible]	1305	1300	1305	1305
JUN	.23	[illegible]	.55	[illegible]	[illegible]	[illegible]	1.13	[illegible]	1.49	1.70	[illegible]	2.05
DATE	[illegible]	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]	18	[illegible]
TIME	[illegible]	[illegible]	1628	1633	1640	1220	1220	1220	1243	[illegible]	1244	1244
JUL	[illegible]	[illegible]	.41	[illegible]	[illegible]	.49	[illegible]	.52	.53	.54	.54	.54
DATE	[illegible]	[illegible]	[illegible]	12	[illegible]	12	12	12	[illegible]	[illegible]	12	12
TIME	[illegible]	1747	[illegible]	[illegible]	1807	1822	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2037
AUG *	[illegible]	.84	.85	.91	.98	[illegible]	1.27	[illegible]	1.82	1.97	2.37*	[illegible]
DATE	[illegible]	02	[illegible]	02	02	[illegible]	[illegible]	21	21	21	21	[illegible]
TIME	1250	1250	[illegible]	1250	1250	1450	1650	1650	[illegible]	[illegible]	1623	1623
SEP	.25	[illegible]	.45	[illegible]	[illegible]	.53	.55	[illegible]	[illegible]	[illegible]	.58	.58
DATE	02	[illegible]	[illegible]	02	02	02	02	02	02	[illegible]	02	02
TIME	0904	[illegible]	[illegible]	[illegible]	0929	[illegible]	0959	1019	1039	1039	1039	1039
OCT	[illegible]	.18	.18	.19	[illegible]	.25	.29	[illegible]	.40	[illegible]	.40	[illegible]
DATE	29	29	29	[illegible]	[illegible]	[illegible]	02	02	02	[illegible]	02	[illegible]
TIME	0310	0315	0320	[illegible]	[illegible]	0350	[illegible]	1710	[illegible]	[illegible]	1820	0605
NOV	.13	.20	[illegible]	.23	.28	.39	.45	.50	[illegible]	[illegible]	.68	.76
DATE	[illegible]	29	29	29	29	[illegible]	[illegible]	[illegible]	29	29	[illegible]	[illegible]
TIME	[illegible]	0633	0633	[illegible]	[illegible]	0714	[illegible]	0712	[illegible]	[illegible]	0757	0827
DEC	.13	.14	.15	.15	.16	.19	[illegible]	[illegible]	[illegible]	.29	[illegible]	.43
DATE	31	21	21	21	[illegible]	[illegible]	21	[illegible]	21	21	[illegible]	21
TIME	2127	0012	[illegible]	0022	0032	[illegible]	0107	[illegible]	0600	[illegible]	0600	[illegible]
YEAR *	[illegible]	.84	.85	.91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.37*	2.54
MONTH	08	08	08	08	08	[illegible]	[illegible]	08	[illegible]	[illegible]	[illegible]	[illegible]

WASHINGTON, [illegible]

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	.10	.12	[illegible]	[illegible]	.20	[illegible]	[illegible]	.26	.27	.27
DATE	22	22	22	22	[illegible]	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	1447	[illegible]	1455	1458	[illegible]	1447	1500	1520	[illegible]	[illegible]	0250	[illegible]
FEB	.05	[illegible]	.11	.14	.18	.23	.26	.31	.34	[illegible]	[illegible]	[illegible]
DATE	02	[illegible]	02	02	02	02	02	02	02	[illegible]	[illegible]	[illegible]
TIME	[illegible]	1138	[illegible]	1145	1155	1200	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR	.05	[illegible]	.08	.09	.14	[illegible]	.22	.24	.29	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25	[illegible]	[illegible]	26	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0110	0115	0120	2230	2230	2228	0117	[illegible]	0117	[illegible]	[illegible]
APR	[illegible]	[illegible]	.18	.20	[illegible]	[illegible]	[illegible]	[illegible]	.49	.54	.68	[illegible]
DATE	[illegible]	27	[illegible]	[illegible]	[illegible]	04	04	[illegible]	[illegible]	[illegible]	04	[illegible]
TIME	0245	0810	0815	0820	1120	[illegible]	1150	1210	[illegible]	[illegible]	1200	[illegible]
MAY	.10	.14	[illegible]	.24	.26	.30	[illegible]	.41	.48	.50	.56	[illegible]
DATE	28	28	[illegible]	03	[illegible]	28	28	28	[illegible]	28	28	[illegible]
TIME	0525	0532	0535	1200	1210	0600	0600	[illegible]	0638	0638	[illegible]	[illegible]
JUN	.40	.70	.78	.82	.92	.93	[illegible]	.97	.99	1.01	1.05	1.09
DATE	[illegible]	21	21	21	21	21	21	[illegible]	21	[illegible]	21	[illegible]
TIME	1650	[illegible]	1652	1652	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1657	[illegible]
JUL	[illegible]	.24	[illegible]	[illegible]	.50	[illegible]	[illegible]	.59	[illegible]	.59	[illegible]	.59
DATE	02	02	02	[illegible]	[illegible]	[illegible]	[illegible]	02	02	02	02	02
TIME	1415	1415	[illegible]	1432	1445	1446	1446	[illegible]	1446	1446	1446	1446
AUG	.21	[illegible]	.47	.63	[illegible]	[illegible]	[illegible]	[illegible]	1.42	[illegible]	1.93	[illegible]
DATE	[illegible]	[illegible]	20	20	20	20	[illegible]	[illegible]	[illegible]	20	[illegible]	20
TIME	[illegible]	2314	[illegible]	2322	[illegible]	[illegible]	2350	2158	2220	2230	[illegible]	[illegible]
SEP	[illegible]	[illegible]	.18	.20	.20	.21	.21	[illegible]	[illegible]	[illegible]	.34	.36
DATE	06	[illegible]	06	[illegible]	[illegible]	06	06	14	[illegible]	[illegible]	14	14
TIME	[illegible]	1920	1925	[illegible]	1935	[illegible]	2010	1220	1245	1200	1245	1245
OCT	.07	[illegible]	[illegible]	[illegible]	.27	.32	[illegible]	[illegible]	.49	[illegible]	.65	.72
DATE	02	[illegible]	[illegible]	02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	02	[illegible]
TIME	1345	1350	[illegible]	[illegible]	[illegible]	1425	[illegible]	1415	1415	[illegible]	1425	1425
NOV	.20	[illegible]	[illegible]	.25	[illegible]	.29	.29	.29	.29	[illegible]	.29	[illegible]
DATE	28	[illegible]	28	[illegible]	[illegible]	28	[illegible]	[illegible]	[illegible]	28	28	28
TIME	1537	1537	1540	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1710	[illegible]	1900	[illegible]
DEC	.06	.11	.14	.19	.26	[illegible]	.43	.53	.53	[illegible]	.68	[illegible]
DATE	20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	20
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2030	[illegible]
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.57
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MAXIMUM SHORT DURATION PRECIPITATION

(5 to 180 minutes)

[illegible]

[illegible]	.04	[illegible]	[illegible]	[illegible]	.12	[illegible]	[illegible]	.28	.34	.38	.51	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	13	[illegible]	13	[illegible]	13
[illegible]	[illegible]	[illegible]	[illegible]	0425	0443	0500	[illegible]	[illegible]	0545	0600	[illegible]	0615
[illegible]	.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.16	[illegible]	.17	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28	28	28	28	[illegible]	[illegible]	28
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2150	2150	[illegible]	2235	[illegible]	2300	[illegible]	2345
[illegible]	[illegible]	[illegible]	.10	.10	[illegible]	.17	[illegible]	.26	[illegible]	.37	.42	[illegible]
[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	18	18	[illegible]	18	18	[illegible]
[illegible]	[illegible]	[illegible]	0203	[illegible]	0607	0606	0608	0608	0608	0609	[illegible]	0610
[illegible]	[illegible]	[illegible]	[illegible]	.12	[illegible]	[illegible]	[illegible]	.22	[illegible]	.25	.30	.35
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	19	19	19	16	16	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	1750	[illegible]	[illegible]	1835	[illegible]	[illegible]	0310	0310	[illegible]
[illegible]	.12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.56	[illegible]	[illegible]	[illegible]	.63
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23	[illegible]	23	[illegible]	23	[illegible]	[illegible]
TIME	[illegible]	1820	[illegible]	[illegible]	[illegible]	[illegible]	1850	1850	[illegible]	1850	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	.12	.13	.15	.16	.17	[illegible]	.22	.27	.28	.33
[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]	24	[illegible]	24	24	[illegible]	24	[illegible]
[illegible]	[illegible]	[illegible]	1700	[illegible]	[illegible]	1215	1230	[illegible]	1200	[illegible]	[illegible]	1245
[illegible]	[illegible]	[illegible]	.03	[illegible]	.05	[illegible]	.05	[illegible]	[illegible]	[illegible]	[illegible]	.05
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	06	[illegible]	06	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1550	1550	1550	[illegible]	1550	1550	1550
[illegible]	[illegible]	[illegible]	.34	[illegible]	[illegible]	.43	.45	[illegible]	[illegible]	[illegible]	[illegible]	.50
DATE	[illegible]	23	[illegible]	[illegible]	23	[illegible]	23	23	[illegible]	23	23	[illegible]
[illegible]	[illegible]	1445	[illegible]	[illegible]	1505	[illegible]	1535	1555	1615	1635	1705	1735
[illegible]	[illegible]	[illegible]	.20	[illegible]	.21	[illegible]	.23	.23	.24	.24	.26	.30
[illegible]	[illegible]	22	22	22	[illegible]	22	[illegible]	22	[illegible]	22	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0245	0250	[illegible]	[illegible]	[illegible]	0305	0320	[illegible]	0040	[illegible]
[illegible]	.05	[illegible]	[illegible]	.13	.14	.14	.17	[illegible]	.28	.32	.39	.45
[illegible]	[illegible]	[illegible]	23	23	23	23	06	[illegible]	[illegible]	[illegible]	06	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1615	1630	[illegible]	1410	1430	1450	1520	1550
[illegible]	[illegible]	.23	.25	.26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.68	.77	[illegible]
[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]	11	[illegible]
[illegible]	[illegible]	0320	0325	1700	[illegible]	1650	1710	1730	1750	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	.08	[illegible]	[illegible]	[illegible]	[illegible]	.35	[illegible]	.48	.57	[illegible]
DATE	[illegible]	[illegible]	03	[illegible]	[illegible]	11	[illegible]	[illegible]	11	[illegible]	11	[illegible]
TIME	[illegible]	[illegible]	0144	0129	0200	0616	0616	[illegible]	0615	0630	[illegible]	[illegible]
YEAR	[illegible]	[illegible]	.34	[illegible]	[illegible]	.51	[illegible]	[illegible]	[illegible]	[illegible]	.77	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	05	[illegible]	11	[illegible]	[illegible]	11	11	[illegible]

QUILLAYUTE, WASHINGTON

[illegible] *	.06*	.09*	.13	[illegible]*	.25	[illegible]*	.45	[illegible]	.75*	.85	[illegible]*	[illegible]
DATE	01	23+	23	23	[illegible]	23	23	23	[illegible]	[illegible]	23	[illegible]
TIME	[illegible]	1958	1958	[illegible]	2000	[illegible]	2005	2005	2005	[illegible]	[illegible]	2008
FEB *	[illegible]*	[illegible]*	[illegible]	.23*	[illegible]	.28	[illegible]	.30	[illegible]	[illegible]	.45	.47
DATE	[illegible]	[illegible]	28	28	28	28	28	28	[illegible]	28	28	28
TIME	1628	[illegible]	1633	[illegible]	1648	1652	[illegible]	[illegible]	2127	2136	[illegible]	[illegible]
[illegible] *	.07*	[illegible]*	.19	.21	.25	[illegible]	[illegible]	[illegible]	[illegible]	.55	.64	[illegible]
DATE	[illegible]	[illegible]	18	18	[illegible]	18	18	18	18	[illegible]	18	18
TIME	1519	1519	[illegible]	1520	1522	[illegible]	1548	1520	1525	[illegible]	1605	[illegible]
[illegible]	.06	.11	[illegible]	[illegible]	.22	.22	.22	.24	[illegible]	.24	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	18	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]
TIME	[illegible]	[illegible]	1221	[illegible]	1236	[illegible]	1306	[illegible]	1346	1406	1436	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	.16	[illegible]	.20	[illegible]	[illegible]	.34	.42	.49	[illegible]
DATE	25	[illegible]	25	[illegible]	[illegible]	[illegible]	08	[illegible]	23	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0230	0230	0232	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	.11	.15	.21	[illegible]	.27	[illegible]	.33	.35	.39	.46	[illegible]
DATE	[illegible]	16	[illegible]	16	[illegible]	16	[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]
TIME	2259	2300	2259	2310	2316	2312	2315	2320	2350	0939	0945	1016
[illegible]	[illegible]	.07	.07	.07	[illegible]	.12	[illegible]	.18	.19	.20	.21	.22
DATE	[illegible]	[illegible]	07	[illegible]	[illegible]	06	[illegible]	06	06	[illegible]	06	[illegible]
TIME	[illegible]	0236	0240	0240	1853	[illegible]	1856	1856	[illegible]	1910	1856	[illegible]
AUG	.03	[illegible]	[illegible]	[illegible]	[illegible]	.20	[illegible]	.25	[illegible]	[illegible]	.42	.49
[illegible]	[illegible]	[illegible]	[illegible]	16	[illegible]	16	16	[illegible]	16	16	16	[illegible]
TIME	[illegible]	[illegible]	0855	0854	0900	[illegible]	0913	[illegible]	0956	0908	0915	[illegible]
[illegible]	.07	[illegible]	[illegible]	.13	[illegible]	.22	[illegible]	.27	.30	.35	.37	[illegible]
DATE	21	21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	17	[illegible]
TIME	0457	0430	0434	0438	0454	[illegible]	[illegible]	[illegible]	0700	1846	1854	[illegible]
[illegible] *	.12*	[illegible]*	[illegible]	.29*	.36	.52*	[illegible]	.55	.56	[illegible]	.72	.83
DATE	[illegible]	[illegible]	07	[illegible]	[illegible]	[illegible]	[illegible]	07	07	[illegible]	20	[illegible]
[illegible]	1553	[illegible]	[illegible]	1536	1543	[illegible]	1555	1555	1631	2230	1030	1026
[illegible]	[illegible]	.15	.18	.21	.30	.45*	.55	.68	.82*	[illegible]	[illegible]	.95
[illegible]	9	9	09	09	09	09	[illegible]	09	[illegible]	[illegible]	[illegible]	09
TIME	[illegible]	[illegible]	0829	[illegible]	[illegible]	[illegible]	[illegible]	0829	0829	[illegible]	[illegible]	[illegible]
DEC	.10*	[illegible]*	.25	.34*	[illegible]	.63*	[illegible]	.78	.85*	[illegible]	.95	.99
DATE	[illegible]	[illegible]	12	[illegible]	12	[illegible]	12	12	[illegible]	12	12	12
TIME	[illegible]	[illegible]	1424	[illegible]	[illegible]	[illegible]	1444	[illegible]	[illegible]	1448	1448	[illegible]
[illegible] *	.12*	[illegible] *	.25	.34*	[illegible]	[illegible]*	[illegible]	[illegible]	[illegible]*	[illegible]	1.01*	1.17
[illegible]	[illegible]	12	12	[illegible]	12	[illegible]	[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]

SEATTLE-TACOMA, WASH.

JAN *	.02*	[illegible]*	.05	.08*	[illegible]	[illegible]*	[illegible]	.25	[illegible]*	[illegible]	.53*	.60
DATE	[illegible]	13	13	13	28	28	13	[illegible]	[illegible]	13	[illegible]	[illegible]
TIME	0015	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0120	0145	[illegible]	[illegible]	[illegible]
FEB *	[illegible]*	[illegible]	[illegible]	.05	.05	.07	[illegible]	[illegible]	[illegible]	.13	.15	.19
[illegible]	25	25	25	25	25	25	26+	[illegible]	[illegible]	25	[illegible]	[illegible]
TIME	0935	0940	0945	[illegible]	0952	0955	1300	0500	0500	[illegible]	0500	0500
[illegible] *	[illegible]*	[illegible]*	[illegible]	.07	.09	.14	[illegible]	.18	[illegible]	[illegible]	.36	.44
[illegible]	[illegible]	10	10	10	[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	0048	[illegible]	0219	0220	0231	0247	[illegible]	[illegible]	[illegible]	0347	0417	0345
[illegible]	[illegible]	.04*	.07	.09*	[illegible]	[illegible]*	.23	.28	.31	.33	.34	.34
DATE	[illegible]	8	18	[illegible]	18	18	[illegible]	[illegible]	[illegible]	[illegible]	18	18
TIME	[illegible]	[illegible]	1130	[illegible]	[illegible]	[illegible]	1200	1200	1200	1200	1230	1230
[illegible]	.02	.04	.05	.06	.07	.09	.10	[illegible]	.14	[illegible]	[illegible]	[illegible]
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	[illegible]	[illegible]	0610	[illegible]	0625	0640	0700	[illegible]	0720	0800	0800	0800
[illegible] *	[illegible]*	[illegible]*	.08	[illegible]	.10	.11	[illegible]	[illegible]	[illegible]	.19	.20	.20
[illegible]	[illegible]	25	25	25	25	25	25	25	25	[illegible]	25	25
TIME	0335	0340	0340	0345	[illegible]	0410	0425	0445	0505	0525	[illegible]	0625
[illegible]	.01	.01	.01	.01	.02	.02	.03	.03	.03	.03	.03	.03
DATE	[illegible]	[illegible]	[illegible]	05	[illegible]	[illegible]	05	05	05	05	05	05
TIME	1930	[illegible]	1940	1945	1955	2010	[illegible]	2045	[illegible]	2125	2200	[illegible]
[illegible]	.01	.02	[illegible]	[illegible]	.05	.07	[illegible]	.08	[illegible]	.11	.11	.11
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
TIME	1430	[illegible]	1445	1450	1500	1515	1530	1550	[illegible]	[illegible]	1600	1600
SEP	[illegible]	[illegible]	[illegible]	.07	.07	[illegible]	.12	.13	[illegible]	[illegible]	.13	.13
DATE	[illegible]	[illegible]	23	[illegible]	[illegible]	19	[illegible]	[illegible]	[illegible]	20	[illegible]	20
TIME	[illegible]	[illegible]	2150	[illegible]	2205	[illegible]	1700	1800	1800	1800	1800	1800
[illegible]	.02	[illegible]	.04	[illegible]	[illegible]	[illegible]	[illegible]	.17	[illegible]	.26	.31	.36
DATE	[illegible]	[illegible]	13	03	31	06	06	06	[illegible]	06	[illegible]	06
TIME	0700	[illegible]	0710	[illegible]	[illegible]	1545	1600	1750	1810	1823	1835	[illegible]
[illegible] *	.09*	[illegible]*	.25	.29*	[illegible]	.35*	[illegible]	.38	[illegible]*	.45	.56*	[illegible]
DATE	11	11	[illegible]	11	11	11	11	11	[illegible]	11	11	[illegible]
TIME	[illegible]	1740	1745	1750	1800	1815	[illegible]	1850	[illegible]	1930	2000	2030
[illegible]	.05	.08	.09	[illegible]	.14	.24	.27	.33	[illegible]	.40	.45	[illegible]
[illegible]	[illegible]	20	[illegible]	[illegible]	07	07	07	07	07	07	[illegible]	07
TIME	1150	[illegible]	[illegible]	[illegible]	0530	0545	0600	0600	0620	[illegible]	0710	[illegible]
YEAR *	[illegible]*	.17*	[illegible]	.29*	.32	.35*	[illegible]	[illegible]	.41*	.45	.56*	.61
MONTH	11	11	[illegible]	[illegible]	11	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]

[illegible], WASH. [illegible]

[illegible] *	[illegible]*	[illegible]*	[illegible]	[illegible]*	[illegible]	.13*	[illegible]	.23	.27*	.29	.38*	[illegible]
DATE	[illegible]	11	[illegible]	[illegible]	12	12	12	12	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2350	1315	[illegible]	[illegible]	[illegible]	[illegible]	0245	0145	[illegible]
[illegible] *	[illegible]*	[illegible]*	[illegible]	.18*	[illegible]	[illegible]*	[illegible]	.23	[illegible]	.28	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	26	26	[illegible]	[illegible]	26	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	1950	[illegible]	[illegible]	2015	[illegible]	[illegible]	2020	[illegible]	2020	[illegible]
[illegible]	[illegible]	[illegible]	.06	.07	.08	.11	.14	[illegible]	.21	[illegible]	.26	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2210	[illegible]	2210	[illegible]	2300	[illegible]
[illegible]	[illegible]	.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.08	.10	.12	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	16	[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0245	[illegible]	[illegible]	0325	0330	[illegible]	0330	0330
[illegible]	[illegible]	[illegible]	.04	.06	[illegible]	.11	.15	[illegible]	.19	[illegible]	.20	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24	24	[illegible]	24	24	24	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	0400	0400	0630	[illegible]	0645	0700	0720	0730	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	.07	[illegible]	.12	.14	[illegible]	.20	.22	.26	.28
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24	[illegible]	25	25	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	2335	[illegible]	2335	2350	[illegible]	[illegible]	0050	0115	[illegible]
[illegible]	[illegible]	[illegible]	.03	.04	.05	[illegible]	[illegible]	[illegible]	.11	.11	.11	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	22	[illegible]	22	22	[illegible]
[illegible]	[illegible]	[illegible]	1000	1005	1015	1015	[illegible]	[illegible]	[illegible]	[illegible]	1100	1100
[illegible]	[illegible]	[illegible]	.06	.06	[illegible]	.11	[illegible]	.11	[illegible]	.12	.19	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31	[illegible]	31	31	31+	31+	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0544	0549	[illegible]	0750	0800	0800	0800	[illegible]	[illegible]	0800
[illegible]	[illegible]	.03	.05	.06	[illegible]	.11	[illegible]	[illegible]	.15	[illegible]	.18	.21
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	[illegible]	20	[illegible]	[illegible]	24	24
TIME	[illegible]	[illegible]	1510	[illegible]	0400	[illegible]	0410	0415	[illegible]	0415	[illegible]	0500
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.27	[illegible]	.33	.36
[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]	06	06	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1700	1700	1700	1700	[illegible]	[illegible]	1725	[illegible]	[illegible]	1830	1900
[illegible] *	[illegible]	[illegible]	.10	.11	.11	[illegible]	.17	.22	[illegible]*	.31	.38*	.45
[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	19	19	19	19	19	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0345	0350	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2100	2300
DEC	.04	.06	[illegible]	[illegible]	[illegible]	.12	.16	.20	.24	.28	.37	.44
[illegible]	[illegible]	[illegible]	20	[illegible]	20+	[illegible]	[illegible]	15	[illegible]	[illegible]	15	15
[illegible]	[illegible]	[illegible]	1105	1105	[illegible]	1105	1105	[illegible]	[illegible]	1100	[illegible]	1100
[illegible] *	[illegible]*	[illegible]*	[illegible]	[illegible]*	[illegible]	[illegible]*	.23	.24	[illegible]*	[illegible]	.38*	.45
[illegible]	[illegible]	[illegible]	[illegible]	02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11+	[illegible]

SPOKANE, WASHINGTON

[illegible]	.02	[illegible]	[illegible]	.05	[illegible]	.10	[illegible]	.21	[illegible]	.22	.23	[illegible]
DATE	13	13	[illegible]	[illegible]	[illegible]	[illegible]	13	13	13	[illegible]	13	[illegible]
TIME	0805	[illegible]	[illegible]	0830	0830	[illegible]	0900	[illegible]	[illegible]	0930	0930	[illegible]
FEB	.01	.01	.02	.02	.03	.04	[illegible]	[illegible]	.08	[illegible]	.10	[illegible]
DATE	10	[illegible]	10	10	[illegible]	10	10	[illegible]	[illegible]	[illegible]	10	[illegible]
TIME	1210	1215	1220	1225	[illegible]	[illegible]	[illegible]	1325	[illegible]	1405	1435	[illegible]
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.13	.15	.18	.20	[illegible]
DATE	[illegible]	10	10	10	10	[illegible]	10	10	10	10	10	10
TIME	[illegible]	[illegible]	[illegible]	0643	[illegible]	[illegible]	0720	0740	0800	[illegible]	0845	[illegible]
APR	.01	.02	.02	[illegible]	.04	[illegible]	[illegible]	.08	.10	.12	.15	[illegible]
DATE	[illegible]	[illegible]	16	[illegible]	[illegible]	16	[illegible]	16	16	[illegible]	[illegible]	[illegible]
TIME	0415	[illegible]	0516	0620	[illegible]	0500	0500	0500	0500	[illegible]	0500	[illegible]
MAY	[illegible]	.12	.12	[illegible]	.13	.15	[illegible]	[illegible]	[illegible]	.23	.23	[illegible]
DATE	[illegible]	03	03	24	24	24	24	[illegible]	03	03	[illegible]	[illegible]
TIME	2030	2030	2030	[illegible]	[illegible]	[illegible]	1000	2115	[illegible]	2115	2115	[illegible]
JUN	.07	[illegible]	.09	[illegible]	[illegible]	.11	.11	[illegible]	[illegible]	[illegible]	.11	.11
DATE	23	23	23	[illegible]	23	[illegible]	[illegible]	23	23	23	23	23
TIME	[illegible]	[illegible]	0508	0513	0523	0538	0553	0612	0633	0653	0723	[illegible]
[illegible]	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
AUG	.03	.04	.05	.05	[illegible]	[illegible]	.09	[illegible]	.10	[illegible]	.10	[illegible]
DATE	30	[illegible]	[illegible]	30	[illegible]	30	[illegible]	30	[illegible]	[illegible]	30	30
TIME	[illegible]	[illegible]	[illegible]	2033	2000	[illegible]	1930	1930	[illegible]	[illegible]	[illegible]	[illegible]
SEP	.13	[illegible]	[illegible]	.42	.47	.52	.55	[illegible]	.74	.78	.78	[illegible]
DATE	[illegible]	[illegible]	19	19	[illegible]	19	19	19	[illegible]	[illegible]	19	[illegible]
TIME	[illegible]	2317	2315	[illegible]	2315	[illegible]	[illegible]	[illegible]	2210	2210	2210	2210
[illegible]	[illegible]	[illegible]	[illegible]	.06	[illegible]	.09	.11	.14	[illegible]	.19	.20	.21
DATE	[illegible]	[illegible]	21	21	[illegible]	28	28	28	[illegible]	28	28	[illegible]
TIME	1638	[illegible]	1620	[illegible]	1614	[illegible]	[illegible]	1202	1140	1120	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	.08	.09	.11	[illegible]	.19	.22	.22	.23	.25	.26
DATE	[illegible]	[illegible]	12	12	[illegible]	12	[illegible]	12	[illegible]	12	12	[illegible]
TIME	[illegible]	[illegible]	0745	0745	[illegible]	[illegible]	0705	0705	0705	0700	0700	[illegible]
[illegible]	.02	.03	.03	[illegible]	[illegible]	[illegible]	.10	.12	[illegible]	[illegible]	.17	[illegible]
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	[illegible]	1714	1714	[illegible]	1700	1700	1645	1645	[illegible]	1545	[illegible]	1500
[illegible]	[illegible]	.27	.37	.42	.47	.52	.55	[illegible]	.74	.78	.78	.79
[illegible]	[illegible]	[illegible]	[illegible]	09	[illegible]	[illegible]	09	09	[illegible]	09	[illegible]	09

STAMPEDE PASS, WASHINGTON

[illegible]		M	M	M	M	M *	[illegible]	M	M *	.37	M *	.56
DATE							[illegible]			[illegible]		13
TIME							1500			1500		[illegible]
FEB	T *	[illegible]*	[illegible]	.03*	[illegible]	[illegible]	.07	.08	[illegible]	.13	.14	.17
DATE		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	17	[illegible]	[illegible]
TIME		1335	1345	1350	1400	[illegible]	1400	1300	[illegible]	1400	1430	1400
[illegible] *	[illegible]*	[illegible]*	[illegible]	[illegible]*	[illegible]	[illegible]*	[illegible]	.23	[illegible]	.28	.33	.37
DATE	[illegible]	[illegible]	18	18	18	18	[illegible]	18	[illegible]	19	19	19
TIME	[illegible]	[illegible]	2225	2220	2235	[illegible]	2305	[illegible]	2340	0005	0035	0105
[illegible]	[illegible]	[illegible]	[illegible]	.07	[illegible]	.13	.16	.18	[illegible]	[illegible]	.21	.22
DATE	[illegible]	[illegible]	[illegible]	18	[illegible]	18	[illegible]	18	18	[illegible]	[illegible]	18
TIME	[illegible]	1345	1345	1350	[illegible]	[illegible]	1415	1415	1425	[illegible]	1500	1500
[illegible]	.02	.04	[illegible]	[illegible]	.09	.11	.15	.17	[illegible]	.20	.24	.29
DATE	[illegible]	[illegible]	08	08	[illegible]	8	[illegible]	08	[illegible]	08	08	[illegible]
TIME	2012	2012	2017	2022	2032	2047	2102	[illegible]	[illegible]	[illegible]	2232	2302
[illegible]	.04	.06	.08	[illegible]	.10	.10	.12	.20	.20	[illegible]	.30	.35
DATE	[illegible]	16	16	16	22	22	[illegible]	17	[illegible]	[illegible]	17	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1145	0730	0730	0730	0750	0750	0750	[illegible]	1000
JUL	[illegible]	[illegible]	.01	.02	.03	[illegible]	[illegible]	.04	[illegible]	.06	.08	.09
DATE		[illegible]	21	[illegible]	21	21	21	06	[illegible]	06	06	[illegible]
TIME		[illegible]	0705	0705	[illegible]	0705	0745	0700	[illegible]	0700	0700	1013
[illegible]	.02	[illegible]	[illegible]	[illegible]	.06	[illegible]	[illegible]	[illegible]	[illegible]	.10	.10	[illegible]
DATE	[illegible]	05	05	[illegible]	05	05	05	05	05	05	05	[illegible]
TIME	[illegible]	0945	[illegible]	[illegible]	0945	0945	[illegible]	0945	[illegible]	[illegible]	0945	[illegible]
SEP *	.19*	[illegible]*	[illegible]	.26*	.32	.33*	.36	.36	.36	[illegible]	.36	[illegible]
DATE	[illegible]	19	19	19	[illegible]	19	19	19	19	[illegible]	22	22
TIME	[illegible]	[illegible]	2130	2130	2130	2130	2130	2130	2130	2130	1230	1530
OCT	.03	.04	.06	.08	[illegible]	.18	[illegible]	.29	.34*	.39	.43	[illegible]
DATE	[illegible]	28	[illegible]	28	28	[illegible]	28	28	28	28	[illegible]	[illegible]
TIME	1700	1700	1700	1700	1700	1700	[illegible]	2000	[illegible]	2000	[illegible]	2000
NOV	.02	[illegible]	.06	.08	[illegible]	[illegible]	.23	.29	.35*	.41	.50*	.58
DATE	9	[illegible]	09	09	09	[illegible]	09	[illegible]	08	09	09	09
TIME	0001	0001	[illegible]	0001	0001	[illegible]	0001	2201	2201	[illegible]	[illegible]	[illegible]
[illegible]	.02	[illegible]	[illegible]	.08	.12	[illegible]	.23	.29	.35*	[illegible]	.52*	.62
[illegible]	[illegible]	24	24	[illegible]	24	[illegible]	24	24	24	[illegible]	24	24
TIME	1300	1300	1300	1300	1300	1300	1300	1300	1300	[illegible]	1300	[illegible]
YEAR	[illegible]			[illegible]			* .36			* .41		.62
MONTH							09			12+		[illegible]

[illegible]

[illegible]	.01	[illegible]	.02	[illegible]	.05	[illegible]	[illegible]	.11	.13	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	12	12	[illegible]	[illegible]	[illegible]	[illegible]	12	[illegible]	[illegible]	12
[illegible]	1845	[illegible]	[illegible]	[illegible]	1855	1910	[illegible]	1910	1930	[illegible]	[illegible]	2000
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.11	[illegible]	.23	.27	.33	[illegible]	.35	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28	22	[illegible]
[illegible]	2045	[illegible]	[illegible]	[illegible]	2059	[illegible]	2134	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	.09	.12	[illegible]	[illegible]	.20	[illegible]	.21	.22	.23
[illegible]	[illegible]	[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2345	[illegible]	[illegible]	2359	[illegible]
[illegible]	[illegible]	[illegible]	.03	.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.15	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]	18	[illegible]	18	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2020	[illegible]	2030	[illegible]	2114	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	.06	.08	.11	.16	.21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	24	24	[illegible]	24	24	24	24	24	24	24
[illegible]	[illegible]	1415	1410	[illegible]	1447	1406	[illegible]	1500	[illegible]	[illegible]	1605	1636
[illegible]	[illegible]	[illegible]	.10	[illegible]	.12	.12	[illegible]	.13	[illegible]	.13	.14	[illegible]
[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	[illegible]
[illegible]	[illegible]	1531	[illegible]	[illegible]	1542	[illegible]	1542	1542	[illegible]	1542	[illegible]	[illegible]
[illegible]	[illegible]	.10	.10	.10	.11	.12	.12	[illegible]	.12	.12	.12	[illegible]
[illegible]	20	[illegible]	[illegible]	[illegible]	20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2200	2200	2200	2200	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	.02	[illegible]	.03	.05	[illegible]	[illegible]	.07	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	10	10	[illegible]	[illegible]	[illegible]	10	10	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0049	[illegible]	[illegible]	[illegible]	0049	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	.05	.08	[illegible]	[illegible]	.15	[illegible]	[illegible]	[illegible]	.24	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0448	[illegible]	0448	[illegible]	[illegible]	[illegible]	[illegible]	0443	0448
[illegible]	[illegible]	[illegible]	.06	[illegible]	.09	.13	[illegible]	.21	.25	[illegible]	.35	[illegible]
[illegible]	[illegible]	[illegible]	31	31	31	31	[illegible]	[illegible]	[illegible]	31	31	[illegible]
[illegible]	[illegible]	1449	[illegible]	[illegible]	1442	[illegible]	1402	1354	[illegible]	1300	1255	1300
[illegible]	M	M	M	M	M	M	M	M	M	M	M	M
[illegible]												
TIME												
[illegible]	.02	.03	[illegible]	.05	[illegible]	[illegible]	[illegible]	[illegible]	.20	.23	.28	[illegible]
[illegible]	[illegible]	[illegible]	27	27	[illegible]	[illegible]	27	27	[illegible]	27	27	[illegible]
[illegible]	[illegible]	0700	0700	[illegible]	0700	[illegible]	[illegible]	0700	[illegible]	0700	0700	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	M
[illegible]												

YAKIMA, WASHINGTON

[illegible]	.03	.04	.05	.07	[illegible]	.15	.17	.18	[illegible]	.19	[illegible]	.20
DATE	12	12	12	12	[illegible]	12	[illegible]	12	[illegible]	[illegible]	12	[illegible]
TIME	0320	[illegible]	0335	0340	0345	[illegible]	0400	0400	[illegible]	0415	0415	0415
FEB	.02	[illegible]	.03	.04	[illegible]	.05	[illegible]	.08	.09	.10	.12	.12
DATE	[illegible]	[illegible]	10	[illegible]	10	[illegible]	10	10	10	10	[illegible]	[illegible]
TIME	[illegible]	0950	[illegible]	[illegible]	1000	[illegible]	[illegible]	1000	1000	1010	1100	[illegible]
MAR	[illegible]	[illegible]	.01	.01	.01	[illegible]	[illegible]	.01	.01	[illegible]	.01	.01
DATE	[illegible]	[illegible]	[illegible]	01	01	01	[illegible]	01	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0340	0345	0350	[illegible]	0400	0400	0420	0440	0500	0500	0500
APR	.01	.02	.02	.02	[illegible]	.03	.03	[illegible]	.03	.03	.03	.03
DATE	18	18	[illegible]	18	[illegible]	18	[illegible]	18	18	[illegible]	18	18
TIME	[illegible]	[illegible]	1845	[illegible]	[illegible]	1855	1855	1855	1855	1855	1855	1855
[illegible]	.02	.02	.02	[illegible]	.03	.03	.03	[illegible]	.04	.04	.04	[illegible]
[illegible]	[illegible]	23	23	23	[illegible]	23	[illegible]	23	23	23	23	[illegible]
TIME	[illegible]	[illegible]	0710	0715	0725	[illegible]	0755	0815	0835	[illegible]	0925	[illegible]
[illegible]	T	T	T	T	T	.01	.01	[illegible]	.01	.01	.01	.01
DATE						24+	24+	24+	24+	24+	24+	24+
TIME						[illegible]	1607	1627	[illegible]	1707	1737	1807
[illegible]	T	T	T	T	T	T	T	T	T	T	T	T
DATE												
TIME												
AUG	.01	.01	.01	.01	.01	[illegible]	.01	[illegible]	.01	.01	.01	.01
DATE	13	13	13	13	[illegible]	13	[illegible]	13	13	[illegible]	13	13
TIME	0250	0250	0250	[illegible]	0250	0250	0250	0250	0250	0250	[illegible]	0250
SEP	.01	[illegible]	[illegible]	.04	[illegible]	.06	.07	.09	.10	.12	.13	[illegible]
DATE	19	19	[illegible]	19	[illegible]	19	19	19	[illegible]	19	19	[illegible]
TIME	1718	[illegible]	0830	0835	[illegible]	0900	0915	0915	0915	0900	0930	1000
OCT	.02	.04	.05	[illegible]	[illegible]	.13	.15	[illegible]	[illegible]	.28	.35	.40
DATE	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	06	06	06
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1600	[illegible]	[illegible]	1600	[illegible]	[illegible]	1600	[illegible]
[illegible]	.02	[illegible]	.04	.05	[illegible]	.09	.11	[illegible]	.16	.19	.22	.28
DATE	12+	[illegible]	[illegible]	[illegible]	12+	12	[illegible]	12	12	12	12	12
TIME	[illegible]	[illegible]	0245	0250	0500	0515	[illegible]	0550	0610	0630	[illegible]	[illegible]
[illegible]	.02	.03	.05	.06	[illegible]	[illegible]	.09	.10	.11	[illegible]	.16	[illegible]
DATE	[illegible]	27	27	20	27	20	27	27	27	27	17	27
TIME	0345	0345	0345	0730	0345	1002	0345	0345	0345	0345	[illegible]	0345
YEAR	.03	[illegible]	.05	.07	.11	.15	.17	.18	[illegible]	.28	.35	[illegible]
[illegible]	01	[illegible]	12+	01	01	01	[illegible]	[illegible]	10	[illegible]	10	[illegible]

BECKLEY, WEST VIRGINIA

JAN	[illegible]	.07	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.25	.27	.30	.32	.33
DATE	3	03	03	03	[illegible]	03	03	03	[illegible]	03	03	03
TIME	[illegible]	1610	1615	1635	1645	1645	1645	[illegible]	1645	1645	1645	1645
FEB	.04	.05	.05	[illegible]	.08	[illegible]	.14	.18	.20	.22	.27	.28
[illegible]	[illegible]	06	[illegible]	06	[illegible]	06	06	06	[illegible]	01	01	[illegible]
TIME	[illegible]	[illegible]	1030	[illegible]	1045	[illegible]	1100	1120	1130	2345	2345	2355
MAR	.14	.15	.17	.19	.23	[illegible]	.27	.29	[illegible]	.39	.50	.54
DATE	16	[illegible]	[illegible]	15	03	03	[illegible]	[illegible]	16	[illegible]	16	16
TIME	[illegible]	1915	1913	0704	1740	[illegible]	1745	1745	1914	1914	1914	1914
APR	.12	[illegible]	.14	[illegible]	.16	[illegible]	.25	.30	.33	.37	.40	.48
DATE	01	[illegible]	01	01	[illegible]	01	25	25	25	[illegible]	25	25
TIME	[illegible]	0301	0303	0310	0320	0325	2030	2030	[illegible]	2035	2035	2020
MAY	.20	.27	[illegible]	.30	.34	.36	.43	.54	.63	.78	.92	1.02
DATE	[illegible]	8	08	08	08	[illegible]	23	23	23	23	23	23
TIME	[illegible]	1043	1048	[illegible]	1103	1116	0252	0312	0332	0352	0400	0400
JUN	.18	.33	.38	.48	.52	.54	.55	[illegible]	[illegible]	.56	.56	.56
DATE	[illegible]	08	[illegible]	08	[illegible]	[illegible]	[illegible]	[illegible]	08	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1905	[illegible]	[illegible]	[illegible]	1950	2001	2001	[illegible]	2007	[illegible]
[illegible]	.27	.48	[illegible]	.67	.79	.82	.82	.82	.82	.82	.82	.82
DATE	23	23	[illegible]	23	[illegible]	23	23	23	[illegible]	23	23	23+
TIME	[illegible]	1133	1138	1143	[illegible]	[illegible]	1218	[illegible]	[illegible]	1318	[illegible]	1418
AUG	.21	.41	.43	.45	.49	.49	.49	.49	[illegible]	.53	.53	.53
DATE	12	12	12	12	[illegible]	12	[illegible]	12	[illegible]	[illegible]	14	14
TIME	1630	1635	[illegible]	1635	1645	1650	1650	1650	1447	1500	1530	[illegible]
[illegible]	.12	.15	.17	.22	[illegible]	.27	.27	.31	.36	.39	.50	.57
DATE	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]	[illegible]	09	[illegible]	09	09	[illegible]
TIME	0351	0356	0401	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1049	[illegible]	1133
[illegible]	[illegible]	.12	.13	[illegible]	.17	.18	.18	.22	.22	.24	.28	.34
DATE	[illegible]	08	08	08	[illegible]	08	[illegible]	01	[illegible]	29	01	28
TIME	1540	[illegible]	0715	0720	0730	0745	[illegible]	2000	2000	0900	2038	1450
[illegible]	.14	.23	.25	.34	.48	[illegible]	.68	[illegible]	[illegible]	.80	[illegible]	.92
DATE	26	26	26	26	[illegible]	26	26	26	26	26	26	26
TIME	1529	[illegible]	[illegible]	1544	[illegible]	1609	1600	[illegible]	1600	1600	[illegible]	[illegible]
DEC	.07	.12	.14	[illegible]	.19	.20	.22	.26	.27	.27	.37	.37
DATE	31	31	31	[illegible]	31	[illegible]	31	31	[illegible]	31	26	26
TIME	0605	[illegible]	0615	0620	0630	[illegible]	0700	0720	0800	0800	0000	0000
YEAR	.27	.48	.63	.67	[illegible]	.82	.82	.82	.82	.82	.92	1.02
MONTH	07	07	07	[illegible]	07	07	07	07	07	[illegible]	[illegible]	05

MAXIMUM SHORT DURATION PRECIPITATION

MAXIMUM SHORT DURATION PRECIPITATION

YEAR 1973

Maximum precipitation in inches (5 to 180 minutes)

LANDER, WYOMING

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	[illegible]	[illegible]	.02	.03	.04	[illegible]	[illegible]	.08	.10	.13	.14	.18
DATE	[illegible]	[illegible]	19	19	19	19	19	19	19	19	19	19
TIME	[illegible]	[illegible]	2330	2330	2330	2330	2330	[illegible]	2350	[illegible]	2350	[illegible]
FEB	T	.01	.02	[illegible]	.03	.04	.05	.05	[illegible]	.06	.06	.06
DATE		18	18	18	18	18	18	18	18	18	18	18
TIME		1315	1315	1315	1330	1330	[illegible]	[illegible]	1400	1400	1400	1400
MAR	.02	.04	[illegible]	[illegible]	[illegible]	[illegible]	.11	.13	.16	.19	.23	.28
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	1235	[illegible]	1245	1305	[illegible]	1315	1315	1345	1345	1330	[illegible]	[illegible]
APR	[illegible]	[illegible]	.06	.07	[illegible]	[illegible]	.14	.15	.20	[illegible]	.29	.32
DATE	[illegible]	06	06	06	06	06	06	06	07	07	07	07
TIME	[illegible]	[illegible]	[illegible]	2020	2030	2040	2045	2045	0030	0045	0050	0105
MAY	.04	[illegible]	.06	[illegible]	.08	.10	.12	.16	.18	.18	.18	.18
DATE	05	05	05	05	05	05	05	05	05	05	05	05
TIME	[illegible]	2152	2152	[illegible]	2152	2144	2152	2152	2133	2133	2133	2133
JUN	.02	.04	.05	[illegible]	.08	.10	.11	.13	.16	.16	.16	.16
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	[illegible]	1058	[illegible]	[illegible]	1047	[illegible]	1047	1047	1040	1040	1040	1040
JUL	[illegible]	[illegible]	.12	[illegible]	[illegible]	[illegible]	[illegible]	.37	.42	.49	.54	.57
DATE	13	13	13	13	13	13	13	13	13	13	13	13
TIME	[illegible]	[illegible]	1029	[illegible]	1029	1029	1029	1029	1029	1029	1012	[illegible]
AUG	.14	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	1327	1327	1327	1327	1327	1327	1327	1327	1327	1327	1327	1327
SEP	.45	[illegible]	.64	[illegible]	.81	.83	.83	.83	.83	.83	.83	.83
DATE	08	08	08	08	08	08	08	08	08	08	08	09
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1240	[illegible]	1240	1240	1240	1240	1240	1240
OCT	[illegible]	[illegible]	.05	.07	.09	.11	.15	.19	.22	.25	.30	.34
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	[illegible]	[illegible]	[illegible]	1048	[illegible]	[illegible]	1128	[illegible]	1208	1228	1258	1328
NOV	.04	[illegible]	.05	.05	[illegible]	.06	.06	.07	.08	.08	.10	.12
DATE	12	12	12	12	[illegible]	19	19	19	19	19	19	19
TIME	[illegible]	1740	1745	1755	[illegible]	[illegible]	[illegible]	2030	2030	2030	2030	[illegible]
DEC	.02	[illegible]	.03	.04	.05	.06	.07	.08	.10	.11	.11	.12
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	[illegible]	0250	0255	0305	0315	0325	0340	[illegible]	0420	0440	0510	0535
YEAR	.45	.53	.64	.76	.81	.83	.83	.83	.83	.83	.83	.83
MONTH	09	09	09	09	09	09	09	09	09	09	09	09

ANNETTE, ALASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.04	.05	.06	.08	[illegible]	[illegible]	[illegible]	.24	.30	.36	.46	.48
DATE	21	21	21	21	19	19	19	19	21	21	21	21
TIME	[illegible]	0810	1446	1446	[illegible]	1100	1130	1145	1730	1730	1730	1607
FEB	.07	.07	.08	[illegible]	.14	.20	.24	.28	.31	.33	.38	.40
DATE	13	13	01	01	01	16	16	16	16	12	16	17
TIME	1000	[illegible]	0130	0130	[illegible]	0347	0347	0347	0347	1300	0358	1300
MAR	.04	.06	.08	.10	.12	.14	.18	.20	.24	.26	.29	.39
DATE	19	19	19	19	[illegible]	19	19	19	19	29	19	29
TIME	1815	1815	1815	1815	1815	1815	1815	1815	1815	2359	1815	[illegible]
APR	[illegible]	.10	.13	.16	.17	.21	.24	.28	.31	.35	.43	.52
DATE	16	16	16	16	16	16	16	16	16	02	02	02
TIME	[illegible]	2110	2115	2120	2130	2145	[illegible]	2220	2240	1900	1930	2000
MAY	.09	[illegible]	.13	[illegible]	.19	.21	.24	.34	.41	.42	.53	.62
DATE	08	09	09	09	09	09	09	09	09	09	09	09
TIME	[illegible]	[illegible]	[illegible]	0457	0345	[illegible]	0530	0550	0610	0605	0605	0605
JUN	.07	[illegible]	.14	.16	[illegible]	.24	.27	.32	[illegible]	.46	.52	.56
DATE	12	12	12	12	12	12	05	05	05	05	05	05
TIME	1230	[illegible]	1235	1253	1304	[illegible]	1844	1845	1905	1937	1930	1900
JUL	.07	.11	.12	.14	.18	.24	.29	.35	.38	.46	.54	.65
DATE	13	13	13	12	12	12	12	12	13	13	13	13
TIME	[illegible]	0025	[illegible]	[illegible]	2330	2330	2330	2345	0008	0045	0045	0100
AUG	.04	.08	[illegible]	.14	[illegible]	[illegible]	.37	.50	[illegible]	.68	.88	.99
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	[illegible]	[illegible]	0125	0130	0140	0150	0210	0230	0250	[illegible]	0500	0410
SEP	.09	.14	.16	[illegible]	.18	.22	.30	.36	[illegible]	.49	.62	.66
DATE	03	03	03	03	03	02	02	02	02	02	02	02
TIME	0046	[illegible]	0046	0046	0046	0630	0645	0705	0715	0745	0815	0845
OCT	.07	[illegible]	.13	.14	[illegible]	.29	.37	.46	[illegible]	.73	.85	1.04
DATE	07	07	07	07	26	26	26	26	26	26	26	26
TIME	[illegible]	[illegible]	1330	1340	[illegible]	1130	1200	1130	[illegible]	1200	1200	1205
NOV	.05	.07	.08	.09	.11	.15	.19	.22	.29	.35	.42	.50
DATE	28	28	28	23	23	23	23	23	23	23	23	23
TIME	[illegible]	[illegible]	[illegible]	0220	[illegible]	0315	0330	0350	0440	0400	0430	0500
DEC	.05	.09	.11	.13	.17	.20	.26	.33	.39	.44	.46	.52
DATE	04	04	04	04	04	04	04	04	04	04	04	04
TIME	[illegible]	[illegible]	2215	[illegible]	2215	[illegible]	2300	2320	2340	2345	2345	2345
YEAR	.09	[illegible]	.16	.18	[illegible]	.29	.37	.50	[illegible]	.73	.88	1.04
MONTH	[illegible]	[illegible]	09	09	09+	10+	10+	08	10+	10	08	10

JUNEAU, ALASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	M	M	M	M	M	M	.14	M	M	.20	M	.28
DATE							22			22		22
TIME							1900			0200		0400
FEB	.02	.03	.04	.04	.06	.08	.11	.13	.16	.16	.21	.22
DATE	16	16	16	16	16	16	16	16	16	16	16	16
TIME	[illegible]	1830	1845	1845	[illegible]	1845	1845	1845	1845	1845	1845	1845
MAR	.02	.03	.04	.05	.06	[illegible]	[illegible]	.11	.12	.13	.16	.16
DATE	22	22	31	31	31	31	31	31	31	31	31	31+
TIME	[illegible]	[illegible]	1730	1730	1730	1745	1755	1855	1840	1855	1930	1930
APR	.02	.03	.04	.05	.07	.09	.10	.11	.12	.14	.16	.18
DATE	[illegible]	[illegible]		01	01	01	01	[illegible]	02	02	02	02
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0325	[illegible]	0330	0350	2235	2235	2245	2320
MAY	.03	.05	.06	[illegible]	.08	.10	.13	.16	.17	.21	.24	.26
DATE	07	07	07	07	27	27	27	27	27	27	27	27
TIME	[illegible]	[illegible]	1715	[illegible]	[illegible]	1915	1935	1953	[illegible]	2035	2105	2135
JUN	.05	[illegible]	[illegible]	[illegible]	.10	.11	[illegible]	[illegible]	[illegible]	.22	.25	.32
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	[illegible]	[illegible]	13	13	13	13
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1435	[illegible]	[illegible]	[illegible]	2045
JUL	[illegible]	.08	.09	.11	[illegible]	[illegible]	[illegible]	.20	[illegible]	.26	.27	.32
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29	[illegible]	[illegible]	[illegible]	29	29	29
TIME	[illegible]	[illegible]	[illegible]	0303	[illegible]	1712	[illegible]	0035	[illegible]	1708	1738	1708
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.25	[illegible]	[illegible]	.33	.37	.41	.46
DATE	[illegible]	08	[illegible]	[illegible]	[illegible]	08	08	[illegible]	[illegible]	12	12	12
TIME	[illegible]	[illegible]	[illegible]	[illegible]	2300	2310	[illegible]	0110	0052	[illegible]	[illegible]	[illegible]
SEP	[illegible]	[illegible]	.09	[illegible]	[illegible]	.14	[illegible]	.24	.32	.34	.44	.50
DATE	[illegible]	[illegible]	02	02	[illegible]	08	22	22	22	[illegible]	08	08
TIME	[illegible]	[illegible]	1527	[illegible]	[illegible]	0217	[illegible]	0817	0837	[illegible]	0320	[illegible]
OCT	[illegible]	[illegible]	.09	[illegible]	[illegible]	[illegible]	[illegible]	.19	[illegible]	[illegible]	.22	.25
DATE	[illegible]	[illegible]	[illegible]	03	[illegible]	[illegible]	[illegible]	03	[illegible]	[illegible]	26	26
TIME	1716	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1750	2155	[illegible]
NOV	.02	[illegible]	[illegible]	[illegible]	[illegible]	.06	[illegible]	.12	[illegible]	.17	.19	[illegible]
DATE	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	[illegible]	[illegible]	[illegible]	22	[illegible]
TIME	2145	[illegible]	[illegible]	2145	[illegible]	2145	[illegible]	2145	2145	[illegible]	2145	[illegible]
DEC	[illegible]	[illegible]	.03	[illegible]	.05	[illegible]	[illegible]	.10	.12	[illegible]	.17	[illegible]
DATE	[illegible]	[illegible]	[illegible]	06	[illegible]	06	[illegible]	06	06	06	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1135	1135	[illegible]	1153	1222
YEAR							.25	M	M	.37	M	.50
MONTH							08			08		09

SHERIDAN, WYOMING

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.01	.01	.01	.01	.03	.04	.06	.06	.06	.07	.10	.12
DATE	02	02	02	02	02	02	02	02	02	02	02	02
TIME	2135	2135	2135	2135	2200	2200	2200	2200	2200	2200	2200	2200
FEB	T	T	.01	.01	.01	.02	.03	.03	.03	.05	.06	.07
DATE			12	12	12	12	12	12	12	12	12	12
TIME			1815	1815	1815	1900	1900	1900	1900	1900	1900	1900
MAR	.02	.03	.04	.05	.06	.08	.10	.11	.13	.14	.20	.21
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME	1038	1038	1045	1048	1115	1115	1115	1115	1115	1115	1115	1115
APR	.05	.10	.13	.14	.16	.17	.17	.18	.23	.24	.30	.33
DATE	02	02	02	02	02	02	02	25	25	25	25	25
TIME	1500	1500	1500	1503	1505	1732	1732	1130	1130	1230	1230	1247
MAY	.02	.03	.04	.05	.08	.11	.11	.11	.11	.11	.11	.11
DATE	25	25	25	25	25	25	25	25	25	25	25	25
TIME	1215	1215	1215	1215	1230	1230	1230	1230	1230	1230	1230	1230
JUN	.16	.27	.35	.42	.63	.87	.89	.91	.91	.91	.91	.91
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	1418	1418	1418	1418	1430	1443	1448	1505	1505	1505	1505	1505
JUL	.13	.19	.21	.21	.22	.22	.22	.22	.22	.22	.22	.22
DATE	24	24	24	24	24	24	24	24	24	24	24	24
TIME	1215	1215	1215	1215	1215	1215	1215	1215	1215	1215	1215	1215
AUG	.12	.12	.12	.14	.21	.21	.21	.21	.21	.21	.21	.21
DATE	22	22	22	22	22	22	22	22	22	22	22	22
TIME	0900	0900	0900	0905	0915	0915	0915	0915	0915	0915	0915	0915
SEP	.04	.06	.07	.10	.13	.20	.23	.30	.35	.41	.42	.42
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	0830	0830	1830	1830	1830	1830	1830	1900	1900	1913	1913	1913
OCT	.02	.03	.03	.04	.05	.08	.08	.10	.11	.12	.14	.16
DATE	31	31	31	31	31	31	31	31	31	31	31	31
TIME	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	2000	2035
NOV	.03	.04	.05	.05	.06	.08	.08	.08	.14	.15	.17	.20
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	0146	0146	0146	0146	0146	0158	0246	0246	0246	0246	0246	0320
DEC	.03	.04	.05	.06	.09	.10	.11	.13	.14	.16	.21	.23
DATE	18	18	18	18	18	18	18	18	18	18	18	18
TIME	0058	0058	0058	0058	0058	0058	0058	0058	0058	0058	0058	0058
YEAR	.16	.27	.35	.42	.63	.87	.89	.91	.91	.91	.91	.91
MONTH	06	06	06	06	06	06	06	06	06	06	06	06

COLD BAY, ALASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	* .03*	.04*	.04	.07*	.09	.12*	.20	.20	.23*	.23	.30*	.32
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	0344	0345	0345	0351	0349	0358	0358	0358	0403	0400	0400	0400
FEB	.02*	.04*	.06	.07	.08	.09	.13	.17	.20*	.23	.28	.31
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	0353	0216	0230	0230	0232	0212	0246	0200	0239	0241	0304	0332
MAR	.02	.03	.05	.06*	.09	.11	.15	.18	.21*	.24	.28	.31
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	2230	2231	2230	2230	2230	2230	2230	2230	2230	2230	2230	2230
APR	.01	.02	.03	.04	.05	.05	.06	.07	.08	.10	.13	.15
DATE	11	11	11	11	11	11	11	11	11	04	04	04
TIME	1200	1200	1200	1200	1200	1215	1230	1250	1200	0600	0630	0700
MAY	T	T	.01	.01	.02	.03	.04	.05	.06	.07	.08	.09
DATE			14	14	14	14	14	14	14	14	14	14
TIME			1500	1500	1500	1500	1500	1520	1540	1600	1600	1600
JUN	* .06*	.10*	.14	.16*	.20	.23*	.26	.29	.32*	.33	.35*	.36
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	0243	0246	0250	0255	0305	0320	0330	0350	0355	0400	0400	0400
JUL	.02	.03	.04	.05	.07	.11	.14	.18	.21	.24	.26	.28
DATE	25	25	25	25	25	25	25	25	25	25	25	25
TIME	0315	0320	0325	0330	0335	0345	0400	0420	0440	0500	0515	0545
AUG	.03	.05	.06	.07	.09	.12	.16	.19	.22	.26	.30	.33
DATE	23	23	23	23	23	23	23	23	23	23	23	23
TIME	0937	094	0945	0945	0945	0945	0945	0945	1000	1000	1000	1000
SEP	.04	.06	.08	.10	.12	.14	.22	.27	.33*	.38	.43*	.48
DATE	30	09	09	09	09	09	09	09	09	09	09	09
TIME	0150	1910	1915	1920	1930	1945	2000	2020	2040	2100	2130	2200
OCT	.04	.05	.09	.11	.16	.21*	.31	.36	.38*	.45	.53*	.59
DATE	10	09	09	09	09	09	09	09	09	09	09	09
TIME	0310	1040	1045	1050	1100	1145	1200	1220	1240	1300	1330	1400
NOV	.02	.02	.06	.06	.06	.06	.10	.13	.18	.20	.23	.26
DATE	09	09	22	22	23	23	23	23	23	23	23	23
TIME	1005	1005	0500	0500	0600	0600	0600	0520	0540	0600	0600	0700
DEC	.02	.03	.06	.06	.06	.08	.10	.14	.18	.20	.27	.30
DATE	29	29	25	29	29	25	25	25	25	25	25	25
TIME	0645	1650	1330	0630	0600	1400	1600	1420	1440	1500	1530	1600
YEAR	* .06*	.10*	.14	.16*	.20	.23*	.31	.36	.38*	.45	.53*	.59
MONTH	06	06	06	06	06	06	10	10	10	10	10	10

KING SALMON, ALASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	* .02*	.03*	.04	.05*	.06	.07*	.07	.08	.09*	.10	.13*	.13
DATE	28+	28+	28	28	28	28	28	28	28	28	28	28
TIME	0550	0550	0550	0550	0550	0550	0550	0550	0600	0620	0650	0650
FEB	M	M	M	M	M	M	M	.08	.06	.08	.08	.08
DATE								20	20	20	20	20
TIME								0750	0750	0750	0750	0750
MAR	.01	.02*	.04	.05*	.06	.06*	.08	.10	.12*	.13	.14*	.14
DATE	27	27	27	27	27	27	27	27	27	27	27	27
TIME	1505	1510	1515	1515	1515	1515	1515	1530	1525	1615	1600	1615
APR	.01	.02	.03	.03	.04	.05	.06	.06	.07	.08	.09	.10
DATE	13	13	13	13	13	13	13	13	17	17	17	17
TIME	1615	1615	1620	1620	1630	1645	1700	1700	1015	1015	1015	1015
MAY	* .05*	.10*	.20	.21*	.26	.28*	.28	.29	.29*	.29	.31*	.36
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	1540	1545	1550	1555	1605	1630	1635	1735	1735	1735	1805	1835
JUN	* .08*	.12	.19	.24*	.28	.34*	.34	.35	.35*	.35	.35	.35
DATE	16	16	16	16	16	16	16	16	16	16	16	16
TIME	1830	1830	1830	1833	1838	1855	1910	1915	1915	1915	1915	1915
JUL	* .13*	.17	.19	.19	.20	.25	.33	.38	.39*	.39	.39*	.39
DATE	14	14	14	14	14	14	14	14	14	14	14	14
TIME	1605	1610	1615	1620	1630	1645	1700	1720	1740	1605	1605	1605
AUG	.08	[illegible]*	.20	.22	.26	.30	.32	.34	.37	.37	.38*	.39
DATE	05	05	05	05	05	05	05	05	05	05	05	05
TIME	0340	0340	0340	0340	0340	0340	0340	0340	0340	0340	0340	0340
SEP	.04	.05	.06	.06	.07	.09	.11	.15	.16	.18	.20	.21
DATE	30	30	30	30	12	12	12	12	12	12	12	12
TIME	2311	2316	2321	2321	2135	2150	2205	2225	2240	2230	2300	2300
OCT	.03	.03	.04	.06	.06	.08	.11	.14	.17	.19	.22	.24
DATE	10	10	10	10	10	09	09	09	09	09	09	09
TIME	0415	0415	0415	0415	0415	2045	2045	2045	2045	2045	2045	2045
NOV	.02	.03	.04	.05	.07	.07	.07	.09	.10	.12	.14	.15
DATE	17	17	17	17	17	17	17	22	22	23	23	23
TIME	0535	0535	0535	0535	0535	0535	0535	0515	0515	1445	1445	1445
DEC	.01	.02	.03	.05	.05	.07	.08	.08	.09	.10	.10	.11
DATE	15	15	15	15	15	15	15	15	15	15	15	15
TIME	1645	1645	1645	1645	1645	1645	1645	1645	1605	1545	1515	1430
YEAR	M	M	M	M	M	M	M	.38	.39*	.39	.39*	.39
MONTH								07	07	07	07	08+

ANCHORAGE, ALASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.04	.04	.04	.05	.06	.07	.09	.11	.12	.16	.17	.18
DATE	03	03	03	03	03	03	03	03	03	03	03	03
TIME	0522	0522	0522	0535	0520	0550	0550	0550	0550	0550	0550	0550
FEB	M	M	M	M	M	M	.02	M	M	.04	M	.06
DATE							20+			20+		02
TIME							0600			1200		0700
MAR	T	T	.01	.01	.02	.03	.03	.03	.04	.04	.05	.06
DATE			03	03	03	03	14+	14+	15+	15+	15+	15+
TIME			2315	2320	2330	2345	2359	2359	0040	0700	0730	0800
APR	.04	.08	.08	.08	.09	.10	.12	.12	.12	.12	.12	.14
DATE	30	30	30	30	30	30	30	30	30	30	30	30
TIME	0630	0630	0630	0630	0630	0632	0645	0645	0645	0645	0645	0645
MAY	T	.01	.01	.02	.03	.04	.05	.06	.07	.07	.08	.08
DATE		16	16	16	16	16	16	16	16	16	16	16
TIME		1020	1020	1025	1025	1045	1045	1100	1100	1100	1100	1100
JUN	.02	.04	.05	.05	.11	.13	.16	.19	.22	.22	.23	.26
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	2130	2130	2135	2135	2135	2145	2200	2210	2230	2230	2315	2330
JUL	.02	.03	.03	.04	.06	.06	.06	.06	.08	.08	.08	.09
DATE	31	31	31	31	31	31	31	31	31	31	31	31
TIME	1458	1445	1447	1447	1500	1500	1500	1500	1500	1500	1500	1530
AUG	.04	.07	.08	.10	.14	.16	.22	.26	.38	.42	.50	.56
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	0140	0508	0530	0530	0535	0538	0635	0630	0715	0730	0730	0730
SEP	.01	.02	.03	.04	.06	.09	.10	.14	.17	.20	.21	.25
DATE	26	26	26	26	26	26	26	26	26	26	26	26
TIME	1414	1420	1330	1330	1400	1415	1330	1400	1330	1330	1315	1300
OCT	.03	.05	.07	.09	.14	.22	.26	.30	.34	.34	.40	.42
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	1325	1330	1330	1330	1330	1330	1330	1300	1300	1300	1300	1300
NOV	.01	.02	.04	.04	.05	.06	.06	.07	.08	.10	.12	.14
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	2230	2240	2345	2250	2300	2300	2300	2300	2300	2300	2300	2300
DEC	.02	.02	.02	.02	.02	.03	.03	.04	.05	.05	.06	.07
DATE	23	23	23	23	23	23	23	23	23	23	23	29
TIME	2130	2130	2130	2130	2130	2200	2200	2215	2300	2300	2300	1100
YEAR	M	M	M	M	M	M	.26	M	M	.42	M	.56
MONTH							10			08		08

FAIRBANKS, ALASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.01	.01	.01	.02	.02	.03	.03	.04	.06	.07	.08	.10
DATE	29	29	29	29	29	29	29	29	29	29	29	29
TIME	0630	0635	0635	0640	0645	0705	0720	0740	0800	0820	0850	0920
FEB	.02	.02	.03	.03	.04	.05	.07	.09	.10	.10	.10	.10
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	0950	0950	0950	0950	0950	0950	0950	0950	0950	0950	0950	0950
MAR	T	T	T	T	.01	.01	.02	.02	.03	.04	.05	.05
DATE					08	08	08	08	08	08	08	08
TIME					1900	1915	1915	1915	1915	1915	1930	2000
APR	T	T	T	T	T	T	.01	.01	.01	.02	.02	.03
DATE							25	25	25	25	25	25
TIME							2159	2159	2159	2259	2259	2359
MAY	.03	.05	.07	.10	.13	.17	.19	.22	.23	.26	.31	.34
DATE	25	25	17	17	25	17	25	17	25	25	25	25
TIME	0250	0250	2256	2303	0300	2314	0330	2340	0405	0418	0448	0458
JUN	.09	.18	.26	.30	.39	.54	.60	.61	.61	.61	.61	.61
DATE	06	06	06	06	06	06	06	06	06	06	06	06
TIME	1500	1505	1505	1505	1500	1515	1530	1535	1535	1535	1535	1535
JUL	.03	.05	.05	.07	.10	.16	.21	.28	.32	.36	.43	.52
DATE	15	15	15	15	15	29	29	29	29	29	29	29
TIME	1247	1247	1247	1247	1247	0635	0635	0635	0635	0635	0647	0647
AUG	.03	.04	.05	.06	.07	.07	.12	.15	.18	.19	.20	.23
DATE	27	27	27	27	27	27	27+	10	22+	22	22	10
TIME	1525	1530	1535	1540	1640	1640	1620	2040	0455	0500	0530	2200
SEP	.02	.02	.03	.04	.04	.04	.04	.04	.04	.04	.05	.06
DATE	21	21	21	21	21	21	21	21	21	21	21	29
TIME	0445	0445	0445	0445	0445	0445	0445	0445	0445	0445	1545	1650
OCT	.01	.02	.02	.03	.03	.04	.05	.07	.09	.10	.13	.13
DATE	05	05	05	09	09	09	05	09	09	09	09	09
TIME	1130	1134	1134	0717	0717	0717	1238	0717	0717	0717	0745	0745
NOV	.02	.02	.03	.04	.05	.07	.08	.11	.12	.14	.16	.18
DATE	10	10	10	10	10	10	10	10	10	10	10	10
TIME	1810	1810	1815	1200	1700	1145	1145	1245	1245	1300	1230	1305
DEC	.02	.02	.02	.02	.03	.03	.04	.04	.04	.05	.06	.07
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2100
YEAR	.09	.18	.26	.30	.39	.54	.60	.61	.61	.61	.61	.61
MONTH	06	06	06	06	06	06	06	06	06	06	06	06

MC GRATH, ALASKA

	5	10	15	20	30	45	60	80	100	120	150	180
JAN	.02	.03	.03	.04	.06	.07	.09	.12	.13	.16	.20	.20
DATE	28	28	28+	28	28	28	28	28	28	28	28	28
TIME	1030	1300	1035	0845	0900	1017	1030	0952	1030	1030	1045	1100
FEB	.02	.02	.03	.03	.04	.04	.05	.07	.07	.07	.12	.14
DATE	01	01	01	01	01	01	01	01	01	01	01	01
TIME	1944	1944	1944	1944	1944	1944	1715	1730	1730	1822	1944	1944
MAR	T	.01	.02	.02	.03	.04	.04	.04	.05	.05	.06	.07
DATE		31	31	31	31	31	31	31	31	31+	12+	12+
TIME		0515	0520	0520	0530	0545	0600	0610	0630	0650	0830	0900
APR	T	T	.01	.02	.03	.04	.04	.04	.04	.05	.06	.07
DATE			08	08	08	08	08	30+	30	30	30	30
TIME			1930	1935	1940	1945	2000	0700	0700	0700	0730	0800
MAY	.08	.10	.12	.15	.21	.30	.33	.33	.33	.33	.34	.34
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	1355	1400	1405	1410	1410	1420	1430	1430	1430	1430	1430	1430
JUN	.04	.05	.06	.06	.06	.08	.11	.12	.14	.18	.21	.22
DATE	16	16	16	16	16+	12	11	11	11	11	11	11
TIME	1310	1312	1315	1315	1320	0350	0400	0400	0400	0400	0400	0400
JUL	.04	.06	.06	.08	.11	.15	.19	.23	.23	.23	.23	.23
DATE	05	05	05+	04	04	04	04	04	04	04	04	04
TIME	1555	1600	1600	1640	1645	1645	1700	1700	1700	1715	1715	1715
AUG	.03	.06	.06	.06	.10	.14	.18	.18	.20	.22	.26	.28
DATE	20	20	20	20	20	20	20	20	20	20	20	20
TIME	1300	1300	1300	1615	1313	1300	1312	1315	1315	1315	1315	1315
SEP	.13	.14	.14	.14	.14	.14	.15	.16	.16	.16	.18	.21
DATE	08	08	08	08	08	08	08	08	08	30	14	14
TIME	1807	1807	1807	1807	1807	1807	1625	1625	1625	0115	0050	0050
OCT	.02	.03	.03	.04	.06	.08	.09	.10	.13	.16	.20	.23
DATE	08	08	08	08	08	08	08	08	08	08	08	08
TIME	2349	2349	2349	2349	2349	2349	2349	2349	2349	2349	2349	2349
NOV	.02	.03	.03	.03	.04	.05	.07	.08	.09	.11	.12	.14
DATE	21	21	21	21	21	21	21	21	21	21	21	21
TIME	1348	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
DEC	T	.01	.02	.02	.04	.06	.08	.10	.10	.10	.12	.14
DATE		30	30	30	30	30	30	30	30	30	30	30
TIME		1000	1000	1000	1000	1000	1200	1200	1200	1200	1200	1200
YEAR	.13	.14	.14	.15	.21	.30	.33	.33	.33	.33	.34	.34
MONTH	09	09	09	05	05	05	05	05	05	05	05	05

MAXIMUM SHORT DURATION PRECIPITATION

ST. PAUL ISLAND, ALASKA

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	[illegible]	.05*	[illegible]	[illegible]	[illegible]	.12	.12*	[illegible]	.15*	[illegible]
DATE	[illegible]	27	27	[illegible]	[illegible]	[illegible]	27	27	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	2100	[illegible]	2150	2205	[illegible]	2215	2229	2229	2229	2229	2229
FEB	M	M	M	M	M	M	M	M	M	M	M	[illegible]
DATE												10
TIME												[illegible]
MAR	M	M	M	M	M	M	M	M	M	M	M	M
DATE												
TIME												
APR	[illegible]	[illegible]	.03	[illegible]	[illegible]	[illegible]	.08	[illegible]	.12*	[illegible]	[illegible]	.17
DATE	[illegible]	[illegible]	03	03	03	[illegible]	[illegible]	03	03	03	03	[illegible]
TIME	[illegible]	1630	[illegible]	[illegible]	[illegible]	[illegible]	1530	[illegible]	1610	1630	1630	1630
MAY			.01	[illegible]	.01	.02	.03	.04	.05	[illegible]	[illegible]	.08
DATE			19	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	19	19
TIME			0530	0530	[illegible]	[illegible]	[illegible]	[illegible]	0545	0600	0600	0600
JUN	.01	.01	.02	.03	[illegible]	.05	.06	.07	.11*	[illegible]	.16	.15
DATE	[illegible]	20	20	[illegible]	[illegible]	[illegible]	20	20	20	20	20	[illegible]
TIME	[illegible]	[illegible]	0750	[illegible]	0730	[illegible]	0800	0820	0730	0750	0800	[illegible]
JUL	[illegible]	[illegible]	.05	[illegible]	[illegible]	[illegible]	.14	.19	[illegible]	[illegible]	[illegible]	.29
DATE	[illegible]	[illegible]	[illegible]	24	[illegible]	[illegible]	24	24	[illegible]	[illegible]	24	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1300	[illegible]	[illegible]	[illegible]	[illegible]	1430
AUG	[illegible]	[illegible]	.06	.07*	.11	.13*	[illegible]	.21	.26*	[illegible]	[illegible]	.39
DATE	18	18	[illegible]	23	23	[illegible]	18	18	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0535	0535	[illegible]	2000	2015	[illegible]	2050	2120	2150
SEP	[illegible]	[illegible]	[illegible]	.05	.05	[illegible]	.08	.09	.12	.13	.14	[illegible]
DATE	17	[illegible]	17	17	29	[illegible]	[illegible]	29	[illegible]	29	29	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1140	1155	1200	1245
OCT	[illegible]	[illegible]	.04	[illegible]	.07	[illegible]	.11	.13	[illegible]	[illegible]	.23	.27
DATE	[illegible]	28	28	[illegible]	[illegible]	[illegible]	09	[illegible]	[illegible]	09	[illegible]	09
TIME	[illegible]	1030	1030	1030	1030	[illegible]	[illegible]	1015	[illegible]	[illegible]	[illegible]	1110
NOV	[illegible]	[illegible]	[illegible]	.04	.06	.08	.12	[illegible]	.17	[illegible]	.25	.29
DATE	[illegible]	[illegible]	[illegible]	[illegible]	23	[illegible]	23	[illegible]	01	01	01	01
TIME	[illegible]	[illegible]	1230	1230	[illegible]	[illegible]	[illegible]	0920	1700	1700	1700	1730
DEC	[illegible]	[illegible]	[illegible]	.10*	[illegible]	.13	.13	.14	[illegible]	.18	.20	.22
DATE	[illegible]	[illegible]	30	30	[illegible]	[illegible]	30	[illegible]	[illegible]	29	29	29
TIME	[illegible]	1220	[illegible]	[illegible]	1235	1250	1300	[illegible]	[illegible]	[illegible]	1910	[illegible]
YEAR	M		M						M			
MONTH												

YAKUTAT, ALASKA

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	45	[illegible]	[illegible]	100	[illegible]	[illegible]	[illegible]
JAN	.05	[illegible]	.09	.12	[illegible]	.23	.28	.33	.40	[illegible]	.55	.64
DATE	26	26	24	24	24	24	[illegible]	23	23	[illegible]	23	[illegible]
TIME	0248	[illegible]	2137	2134	[illegible]	2202	2207	0514	[illegible]	[illegible]	0500	[illegible]
FEB	.04	.07	[illegible]	.11	[illegible]	[illegible]	[illegible]	.27	.32	.34	[illegible]	.49
DATE	[illegible]	20	20	[illegible]	[illegible]	20	20	20	[illegible]	20	[illegible]	16
TIME	[illegible]	[illegible]	2032	2031	[illegible]	2045	[illegible]	2115	[illegible]	2158	2130	2130
MAR	.03	.06	.08	[illegible]	[illegible]	.21	[illegible]	.34	[illegible]	[illegible]	.61	[illegible]
DATE	29	29	29	29	[illegible]	29	[illegible]	29	[illegible]	[illegible]	29	[illegible]
TIME	[illegible]	0610	[illegible]	0620	[illegible]	[illegible]	0630	0630	0630	0630	0630	[illegible]
APR	.05	[illegible]	.09	.10	.13	.15	.20	.25	.28	[illegible]	.40	.47
DATE	19	[illegible]	19	19	[illegible]	[illegible]	02	02	02	02	20	02
TIME	1240	1245	1253	1253	[illegible]	1253	0130	[illegible]	0130	0130	1900	0130
MAY	.10	.12	[illegible]	.15	.17	.17	[illegible]	.20	[illegible]	[illegible]	.39	.40
DATE	[illegible]	22	[illegible]	22	22	[illegible]	22	05	[illegible]	[illegible]	05	05
TIME	[illegible]	[illegible]	0615	[illegible]	[illegible]	0620	0647	1620	[illegible]	[illegible]	1753	[illegible]
JUN	[illegible]	[illegible]	.03	.05	.08	[illegible]	.18	.21	[illegible]	.26	.31	.34
DATE	22	22	22	04	[illegible]	04	04	[illegible]	[illegible]	[illegible]	[illegible]	04
TIME	1200	1200	1200	[illegible]	0230	0245	0245	0245	0245	0300	0300	0300
JUL	[illegible]	.14	.15	[illegible]	.20	.29	[illegible]	.43	.51	.57	[illegible]	.71
DATE	[illegible]	31	31	[illegible]	31	[illegible]	[illegible]	31	31	[illegible]	31	[illegible]
TIME	[illegible]	1015	1015	1020	2245	2300	2315	2315	2315	[illegible]	2338	[illegible]
AUG	[illegible]	.11	.15	.19	[illegible]	.34	[illegible]	[illegible]	.58	.68	[illegible]	.95
DATE	13	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	13	[illegible]	13	[illegible]
TIME	[illegible]	[illegible]	1215	1223	1226	[illegible]	1226	1226	[illegible]	1345	[illegible]	[illegible]
SEP	[illegible]	.17	.19	.22	[illegible]	[illegible]	[illegible]	.48	.62	.64	.67	.76
DATE	[illegible]	[illegible]	04	04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	09	09	09
TIME	1005	[illegible]	1005	1010	1030	[illegible]	1045	1105	1117	[illegible]	1137	[illegible]
OCT	[illegible]	.11	[illegible]	[illegible]	[illegible]	.29	.39	.40	.41	[illegible]	.70	[illegible]
DATE	[illegible]	27	27	27	[illegible]	27	27	27	27	[illegible]	27	27
TIME	1605	[illegible]	1712	1717	1715	1730	1745	1805	1825	1845	[illegible]	[illegible]
NOV	.03	.06	.07	.09	.12	[illegible]	.23	[illegible]	[illegible]	.42	.49	[illegible]
DATE	24	24	24	24	[illegible]	24	24	24	24	24	24	24
TIME	1605	[illegible]	1605	[illegible]	1605	[illegible]	[illegible]	1650	1707	1725	1730	1740
DEC	.09	.14	.17	.19	.19	[illegible]	.21	[illegible]	.34	.39	[illegible]	.53
DATE	28	28	28	28	[illegible]	28	[illegible]	18	[illegible]	18	[illegible]	[illegible]
TIME	2205	2210	2210	[illegible]	2217	2217	1745	1755	[illegible]	1840	1910	1940
YEAR	[illegible]	[illegible]	.19	.22	.26	.34	[illegible]	.49	[illegible]	.68	.83	[illegible]
MONTH	[illegible]	[illegible]	09	09	08	08	08	08	09	[illegible]	[illegible]	[illegible]

[illegible]

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.37	.43	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.16	[illegible]	.22	.24
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.12	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.13	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2219	[illegible]
SEP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0427	[illegible]
OCT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.09	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NOV	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DEC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	.35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

HONOLULU, HAWAII

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.31	.35	.37	.38	.42	.46	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	06	06	06	[illegible]	[illegible]	[illegible]	06
TIME	[illegible]	1145	1150	1154	1153	1156	1154	[illegible]	[illegible]	[illegible]	[illegible]	1155
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.11	[illegible]	.15	.16	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	03	[illegible]	03	03	[illegible]	03	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0553	[illegible]	[illegible]	[illegible]	[illegible]	0610	0620	[illegible]	0622
MAR	[illegible]	[illegible]	[illegible]	[illegible]	.06	[illegible]	[illegible]	.07	.08	.09	.09	.09
DATE	[illegible]	[illegible]	10	10	10	10	[illegible]	10	10	10	10	14
TIME	[illegible]	[illegible]	[illegible]	1234	1234	1234	1234	1352	1404	[illegible]	[illegible]	1429
APR	[illegible]	.15	.15	.15	.28	.28	[illegible]	.29	[illegible]	.30	.30	.30
DATE	[illegible]	[illegible]	21	[illegible]	21	[illegible]	[illegible]	21	[illegible]	21	21	21
TIME	[illegible]	1313	[illegible]	1313	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1417	1417	[illegible]
MAY	[illegible]	.12	.14	.16	.22	.28	.29	.30	.31	.32	[illegible]	.35
DATE	[illegible]	[illegible]	11	[illegible]	11	11	11	[illegible]	11	11	11	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0421	0448	0448	0448	[illegible]	[illegible]	[illegible]	[illegible]
JUN	.01	[illegible]	[illegible]	.01	[illegible]	.01	[illegible]	.01	[illegible]	.01	.01	.02
DATE	04	04	04	[illegible]	04	04	04	04	[illegible]	04	04	04
TIME	2220	2220	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2220	[illegible]	[illegible]	2220	2220
JUL	[illegible]	.05	.05	.05	.05	.05	.05	.05	[illegible]	[illegible]	[illegible]	.07
DATE	16	[illegible]	16	16	16	16	[illegible]	16	[illegible]	[illegible]	[illegible]	02
TIME	[illegible]	[illegible]	2305	2305	[illegible]	2305	2305	2305	[illegible]	2305	2305	[illegible]
AUG	.03	[illegible]	.04	.04	.04	[illegible]	.04	.04	.04	.04	.04	[illegible]
DATE	[illegible]	02	[illegible]	02	[illegible]	[illegible]	02	02	02	02	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1028	1028	1028	1028	1028	1028	[illegible]	[illegible]	1028
SEP	[illegible]	[illegible]	.15	[illegible]	[illegible]	[illegible]	[illegible]	.21	.21	.21	.21	.21
DATE	[illegible]	29	[illegible]	29	[illegible]	29	29	29	29	29	29	29
TIME	[illegible]	[illegible]	[illegible]	0749	[illegible]	0215	[illegible]	0230	0230	0230	0230	[illegible]
OCT	.13	[illegible]	[illegible]	.35	.38	[illegible]	.44	.52	.52	[illegible]	.55	[illegible]
DATE	[illegible]	[illegible]	[illegible]	14	[illegible]	14	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0628	[illegible]	0626	0649	0713
NOV	.24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.70	[illegible]	[illegible]	[illegible]	.82	[illegible]
DATE	[illegible]	[illegible]	01	01	01	29	29	29	29	29	29	[illegible]
TIME	[illegible]	[illegible]	1629	[illegible]	[illegible]	1750	1801	1818	[illegible]	[illegible]	[illegible]	[illegible]
DEC	.32	[illegible]	.34	.34	[illegible]	.36	[illegible]	.36	[illegible]	.49	.52	.54
DATE	[illegible]	[illegible]	[illegible]	30	[illegible]	[illegible]	01	[illegible]	01	01	01	01
TIME	[illegible]	0604	0604	0604	0604	[illegible]	1956	[illegible]	0257	[illegible]	[illegible]	2210
YEAR	[illegible]	[illegible]	.53	[illegible]	.57	[illegible]	.70	.76	.79	.81	.82	[illegible]
MONTH	12	[illegible]	11	[illegible]	11	[illegible]	11	11	11	[illegible]	11	11

KAHULUI, HAWAII

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.22	.26	.35	.39	.42	.43	[illegible]
DATE	06	06	06	06	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	2159	2201	2203	2226	[illegible]	2304	[illegible]	[illegible]	2358	[illegible]
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.21	[illegible]	[illegible]	.25	[illegible]
DATE	[illegible]	[illegible]	[illegible]	25	[illegible]	[illegible]	[illegible]	25	25	[illegible]	[illegible]	[illegible]
TIME	1851	1855	[illegible]	0155	0205	0220	0234	0254	0314	[illegible]	[illegible]	[illegible]
MAR	.15	[illegible]	.19	.19	.21	[illegible]	.25	.25	[illegible]	[illegible]	.28	.29
DATE	01	01	01	01	01	01	01	[illegible]	[illegible]	01	01	01
TIME	[illegible]	[illegible]	[illegible]	0644	[illegible]	[illegible]	0709	0739	[illegible]	[illegible]	[illegible]	0739
APR	.10	[illegible]	.13	.13	.13	.13	.14	.15	.15	[illegible]	.15	.15
DATE	03	[illegible]	03	03	03	[illegible]	03	[illegible]	03	03	03	03
TIME	2207	[illegible]	2209	2209	2209	2209	2251	2256	[illegible]	2356	2356	2356
MAY	.07	[illegible]	.08	.09	.09	.09	.09	.09	[illegible]	.10	.16	.16
DATE	16	[illegible]	[illegible]	16	16	16	[illegible]	16	16	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0805	0810	[illegible]	[illegible]	0810	0810	[illegible]	0951	1011	[illegible]
JUN	.01	[illegible]	.02	[illegible]	[illegible]	.02	[illegible]	.02	.02	.02	.02	.02
DATE	[illegible]	05	05	05	[illegible]	05	05	05	05	[illegible]	[illegible]	[illegible]
TIME	0340	[illegible]	0340	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0340	[illegible]
JUL	T	T	T	T	.01	.02	.02	.02	.02	.02	[illegible]	.02
DATE					[illegible]	[illegible]	[illegible]	01	01	[illegible]	[illegible]	01
TIME					[illegible]	1930	1930	[illegible]	1930	1930	1930	[illegible]
AUG	T	T	T	T	[illegible]	[illegible]	.01	.01	.01	[illegible]	.01	.01
DATE					07	[illegible]	07	07	07	07	07	[illegible]
TIME					[illegible]	0045	[illegible]	0045	0045	[illegible]	0045	0048
SEP	T	.01	.01	.01	[illegible]	[illegible]	.01	.01	[illegible]	.01	.01	[illegible]
DATE		[illegible]	22	22	22	22	22	[illegible]	[illegible]	[illegible]	22	[illegible]
TIME		2210	0555	0555	0555	0555	[illegible]	0555	[illegible]	[illegible]	[illegible]	[illegible]
OCT	[illegible]	.11	[illegible]	.13	.16	[illegible]	.20	[illegible]	.21	.21	.21	.26
DATE	[illegible]	18	[illegible]	18	[illegible]	[illegible]	[illegible]	18	[illegible]	18	18	18
TIME	0344	[illegible]	0351	0351	[illegible]	0349	0400	[illegible]	[illegible]	[illegible]	0530	0612
NOV	.03	[illegible]	.05	[illegible]	.08	.10	[illegible]	.13	.14	.14	.16	.18
DATE	23	[illegible]	23	23	12	12	23	[illegible]	[illegible]	[illegible]	12	12
TIME	[illegible]	2331	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2348	0543	0543	[illegible]	0612
DEC	.33	.54	[illegible]	.59	.67	[illegible]	1.01	[illegible]	[illegible]	1.16	1.21	1.25
DATE	[illegible]	08	08	08	02	02	[illegible]	02	[illegible]	[illegible]	02	02
TIME	0212	0216	0216	0222	1221	1237	1251	1251	1311	1331	1316	1336
YEAR	.33	[illegible]	.58	.59	[illegible]	.87	[illegible]	1.07	1.13	1.16	1.21	1.25
MONTH	12	12	12	12	12	12	12	12	12	[illegible]	12	[illegible]

HILO, HAWAII

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2350	2350	0200
FEB	[illegible]	[illegible]	.15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2148
MAR	[illegible]	[illegible]	.38	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.78	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0440	[illegible]
APR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10	10
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0534	0600
MAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.44	1.52
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2241	2231
JUN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUL	[illegible]	[illegible]	.27	.27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0105	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.35	[illegible]	[illegible]	.41	[illegible]
DATE	[illegible]	[illegible]	[illegible]	29	[illegible]	[illegible]	[illegible]	05	[illegible]	[illegible]	05	[illegible]
TIME	[illegible]	[illegible]	2334	2339	[illegible]	[illegible]	[illegible]	0457	[illegible]	[illegible]	0522	[illegible]
SEP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.02	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	[illegible]	13	[illegible]
TIME	[illegible]	[illegible]	0705	0707	[illegible]	[illegible]	[illegible]	1718	1718	[illegible]	1802	[illegible]
OCT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	[illegible]
TIME	[illegible]	1932	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1740	1722
NOV	.32	.52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.77	1.84	[illegible]	2.33	2.71
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29	[illegible]	[illegible]	[illegible]	20
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1402	[illegible]	[illegible]	[illegible]	0402
DEC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.03	1.08	[illegible]	[illegible]	1.37
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01	01	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0000	0000	[illegible]	0000	0201
YEAR	.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SAN JUAN, PUERTO RICO

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	.15	.16	.17	.18	.24	.27	.27	[illegible]	.31	.31	.31
DATE	[illegible]	[illegible]	[illegible]	21	21	[illegible]	21	21	21	[illegible]	21	21
TIME	[illegible]	[illegible]	[illegible]	0709	0719	2315	2320	[illegible]	2320	2318	2320	2320
FEB	[illegible]	[illegible]	[illegible]	[illegible]	.19	[illegible]	.19	.19	[illegible]	[illegible]	.19	.19
DATE	[illegible]	[illegible]	07	[illegible]	[illegible]	07	07	07	07	[illegible]	07	[illegible]
TIME	[illegible]	[illegible]	[illegible]	0859	[illegible]	0905	[illegible]	[illegible]	0905	0905	[illegible]	0905
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.11*	[illegible]	2.61	[illegible]	[illegible]	3.07*	3.11
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	09	[illegible]	09	09	[illegible]	09
TIME	[illegible]	[illegible]	0250	[illegible]	[illegible]	[illegible]	0256	[illegible]	[illegible]	0310	0315	[illegible]
APR	[illegible]	[illegible]	.82	1.02	[illegible]	[illegible]	1.91	2.03	2.11	2.12	2.13	2.14
DATE	23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23	23	23	[illegible]	23	23
TIME	[illegible]	1604	1605	1607	1609	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1701
MAY	[illegible]	.16	.16	.16	[illegible]	[illegible]	.16	[illegible]	[illegible]	.16	[illegible]	.16
DATE	[illegible]	[illegible]	[illegible]	13	[illegible]	13	13	[illegible]	[illegible]	13	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1959	1959	[illegible]	1959	1959	1959	1959	1959	[illegible]
JUN	.27	[illegible]	.38	[illegible]	[illegible]	.79	.81	[illegible]	1.25	1.26	1.28	1.28
DATE	[illegible]	[illegible]	28	[illegible]	[illegible]	28	28	28	[illegible]	28	28	28
TIME	[illegible]	[illegible]	1342	1632	1633	[illegible]	1411	1433	1502	1510	[illegible]	1536
JUL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.44	[illegible]	[illegible]	[illegible]	[illegible]	.52	.52
DATE	[illegible]	14	[illegible]	14	14	[illegible]	[illegible]	14	[illegible]	14	14	14
TIME	1218	1220	1221	1219	[illegible]	1232	1232	[illegible]	1232	[illegible]	1232	[illegible]
AUG	[illegible]	[illegible]	.70	.92	1.07	1.17	1.32	1.38	[illegible]	[illegible]	1.68	1.75
DATE	[illegible]	[illegible]	15	[illegible]	[illegible]	15	15	15	[illegible]	15	[illegible]	11
TIME	1555	1557	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1640	1655	[illegible]	[illegible]	[illegible]
SEP	[illegible]	.25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.45	.45	.45	.45	[illegible]
DATE	22	[illegible]	25	25	[illegible]	25	[illegible]	[illegible]	25	[illegible]	[illegible]	25
TIME	[illegible]	[illegible]	[illegible]	1402	[illegible]	[illegible]	1404	[illegible]	[illegible]	1455	1455	1455
OCT	.14	[illegible]	[illegible]	.31	.48	[illegible]	.58	.58	.58	.58	.58	[illegible]
DATE	[illegible]	[illegible]	[illegible]	09	[illegible]	[illegible]	[illegible]	[illegible]	09	09	09	09
TIME	[illegible]	1620	[illegible]	[illegible]	1040	[illegible]	1055	[illegible]	1055	1055	[illegible]	1055
NOV	.22	[illegible]	.39	.42	[illegible]	[illegible]	[illegible]	.73	[illegible]	[illegible]	[illegible]	.75
DATE	[illegible]	[illegible]	10	10	[illegible]	12	12	12	[illegible]	13	[illegible]	[illegible]
TIME	2200	2200	[illegible]	[illegible]	[illegible]	2317	[illegible]	2335	2335	2015	0045	[illegible]
DEC	.20	.24	.24	[illegible]	.36	[illegible]	[illegible]	.42	[illegible]	.52	.78	.78
DATE	[illegible]	[illegible]	03	[illegible]	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]	19	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	1504	[illegible]	[illegible]	[illegible]	[illegible]	1455	[illegible]	[illegible]
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.11*	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

JOHNSTON ISLAND, PACIFIC

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.11	.11	.11	[illegible]	.13	[illegible]
DATE	[illegible]	[illegible]	[illegible]	20	[illegible]	20	[illegible]	28*	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0633	0634	[illegible]	[illegible]	[illegible]	2357	2357	2357	[illegible]	[illegible]
FEB	.09	[illegible]	[illegible]	[illegible]	.11	[illegible]	.11	.11	[illegible]	[illegible]	.20	.21
DATE	[illegible]	[illegible]	[illegible]	08	08	08	08	08	[illegible]	[illegible]	[illegible]	08
TIME	[illegible]	[illegible]	[illegible]	0448	[illegible]	[illegible]	0240	0240	[illegible]	[illegible]	0442	0510
MAR	[illegible]	.17	.26	.31	[illegible]	.64	.79	1.02	1.13	1.27	1.42	1.52
DATE	[illegible]	15	[illegible]	15	[illegible]	15	15	15	[illegible]	15	[illegible]	[illegible]
TIME	[illegible]	1055	1110	[illegible]	[illegible]	[illegible]	[illegible]	1100	[illegible]	[illegible]	1100	[illegible]
APR	[illegible]	[illegible]	[illegible]	.16	.20	.24	[illegible]	[illegible]	.34	[illegible]	.43	.43
DATE	[illegible]	09	[illegible]	09	09	[illegible]	09	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	0228	[illegible]	0238	0238	[illegible]	[illegible]	0239	0252	[illegible]	0236	0252	0252
[illegible]												
DATE												
TIME												
JUN	[illegible]	.16	.18	[illegible]	[illegible]	[illegible]	.22	.22	.22	.22	[illegible]	.22
DATE	21	21	21	[illegible]	21	21	21	[illegible]	21	21	[illegible]	21
TIME	[illegible]	2120	2120	2120	[illegible]	[illegible]	2120	2120	2120	2120	[illegible]	2120
JUL	[illegible]	.11	[illegible]	.11	[illegible]	[illegible]	.11	[illegible]	.11	.11	.11	.11
DATE	[illegible]	16	[illegible]	16	16	16	[illegible]	16	[illegible]	16	16	16
TIME	0602	0602	0602	0602	[illegible]	0602	[illegible]	0602	0602	0602	0602	0602
AUG	.09	.09	[illegible]	.16	.17	[illegible]	.22	.22	[illegible]	.23	.73	.23
DATE	01	01	06	[illegible]	[illegible]	06	06	[illegible]	06	06	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0702	0706	[illegible]	[illegible]	0706	0706	0706	0706	0706	0706
SEP	.19	[illegible]	[illegible]	.49	[illegible]	[illegible]	.93	1.01	1.15	1.19	1.23	1.66
DATE	[illegible]	[illegible]	13	[illegible]	13	13	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]
TIME	0356	0307	0307	[illegible]	0310	0326	0330	[illegible]	[illegible]	0334	0412	0330
OCT	[illegible]	[illegible]	.49	.60	.69	[illegible]	[illegible]	.86	.93	.99	[illegible]	[illegible]
DATE	13	13	[illegible]	[illegible]	13	13	[illegible]	13	[illegible]	13	[illegible]	13
TIME	0340	[illegible]	[illegible]	[illegible]	0357	[illegible]	[illegible]	0436	0456	0516	0546	0546
NOV	[illegible]	[illegible]	[illegible]	.67	[illegible]	[illegible]	1.14	1.19	1.24	1.31	1.48	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	24	26	[illegible]	26	26	26	24	24
TIME	2255	2300	2302	2302	2302	[illegible]	[illegible]	[illegible]	[illegible]	2359	[illegible]	[illegible]
DEC	[illegible]	[illegible]	.86	1.09*	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.85	[illegible]	2.15
DATE	[illegible]	02	02	[illegible]	[illegible]	02	02	[illegible]	[illegible]	02	[illegible]	02
TIME	[illegible]	[illegible]	0906	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0050	1056
YEAR	M	[illegible]	[illegible]	[illegible]	M	M	[illegible]	M	M	[illegible]	[illegible]	M
MONTH												

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	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.53	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0320	0320	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0341	[illegible]	[illegible]
FEB	[illegible]	[illegible]	.75	.78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.14	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1442	1500	[illegible]	[illegible]	[illegible]
APR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.04	1.12	[illegible]	1.15	1.19
DATE	[illegible]	25	25	[illegible]	[illegible]	[illegible]	[illegible]	25	25	[illegible]	25	25
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1527	1532	1530	[illegible]	1550	1650
MAY	[illegible]	.57	.79	[illegible]	[illegible]	[illegible]	[illegible]	1.84	1.85	[illegible]	[illegible]	2.02
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23	23	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0805	0809	[illegible]	[illegible]	[illegible]	0816	0834	0854	[illegible]	[illegible]	[illegible]
JUN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.92	[illegible]	[illegible]	[illegible]	1.00	1.04
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	0058	0100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1211	[illegible]
JUL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0155	[illegible]
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.12	1.26	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1312	1310	[illegible]	[illegible]	[illegible]	[illegible]
SEP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.52	.57	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	10	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2026	0200	[illegible]	[illegible]	[illegible]	[illegible]
OCT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	10	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0030	[illegible]	[illegible]	[illegible]	0113	0132	0150	[illegible]	0240	[illegible]
NOV	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.80
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	21	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1652	0936	0936	0936	[illegible]	0940	1030
DEC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01	[illegible]	[illegible]	[illegible]	[illegible]	01	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0122	0142	[illegible]	[illegible]	0302
YEAR	[illegible]	[illegible]	.84	.95	1.31	[illegible]	1.78	2.16	2.35	[illegible]	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MAXIMUM SHORT DURATION PRECIPITATION

[illegible] IS [illegible], PACIFIC

JAN	[illegible]	[illegible]	[illegible]	.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	26	[illegible]	26	[illegible]	[illegible]	26	26	26	[illegible]	26	26
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.49	.53
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR	[illegible]	[illegible]	.39	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.77	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.13	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	157	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN	[illegible]	[illegible]	[illegible]	.53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.83	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1744	[illegible]	[illegible]	[illegible]	[illegible]
JUL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.35	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.88	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SEP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.22	1.26	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OCT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0920	0920	[illegible]
NOV	[illegible]	[illegible]	.28	.31	.36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DEC	[illegible]	[illegible]	.13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.17	.17	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0742	[illegible]	[illegible]	0638	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	.28	.47	[illegible]	.78	[illegible]	[illegible]	1.17	[illegible]	[illegible]	1.27	[illegible]	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	09	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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JAN	.24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.49	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31	31	[illegible]	[illegible]	31	31	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1854	[illegible]	[illegible]
FEB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.27	.28	.45	[illegible]	.46	.46
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	07	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1332	1345	[illegible]	[illegible]	[illegible]
MAR	.19	[illegible]	[illegible]	.43	[illegible]	.74	[illegible]	[illegible]	[illegible]	1.48	[illegible]	1.70
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01	[illegible]	[illegible]	[illegible]	01
TIME	[illegible]	[illegible]	[illegible]	1326	[illegible]	[illegible]	[illegible]	1420	1440	1500	[illegible]	1546
APR	[illegible]	.57	.62	[illegible]	[illegible]	[illegible]	[illegible]	1.37	1.43	[illegible]	[illegible]	1.85
DATE	[illegible]	[illegible]	[illegible]	27	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	14	14
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0300	[illegible]	[illegible]	0423	0453
MAY	.24	.39	[illegible]	[illegible]	[illegible]	.74	[illegible]	[illegible]	[illegible]	1.37	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN	[illegible]	.49	.61	[illegible]	.87	[illegible]	[illegible]	[illegible]	[illegible]	2.10	2.32	2.46
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1030	[illegible]
JUL	[illegible]	.39	[illegible]	[illegible]	[illegible]	.73	[illegible]	[illegible]	[illegible]	.92	.94	.96
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1439	1456
AUG	[illegible]	[illegible]	.45	[illegible]	[illegible]	.84	[illegible]	[illegible]	[illegible]	[illegible]	2.01	[illegible]
DATE	[illegible]	08	[illegible]	[illegible]	[illegible]	8	08	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	2125	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2129	[illegible]
SEP	.42	.69	[illegible]	.85	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.14	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	17	[illegible]	17	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0856	[illegible]	[illegible]	[illegible]
OCT	[illegible]	[illegible]	1.06	1.31	[illegible]	2.33*	[illegible]	3.39	3.75*	[illegible]	4.37*	4.56
DATE	[illegible]	[illegible]	29	29	29	29	[illegible]	[illegible]	[illegible]	[illegible]	29	29
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1300	[illegible]	[illegible]	[illegible]
NOV	[illegible]	[illegible]	.48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.13	[illegible]	1.15	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	535	[illegible]	0549	[illegible]	[illegible]	[illegible]	615	[illegible]	[illegible]	[illegible]
DEC	[illegible]	.54	[illegible]	.73	[illegible]	[illegible]	[illegible]	.88	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	0608	[illegible]	2005	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2057	[illegible]
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.33*	[illegible]	3.39	3.75*	[illegible]	4.37*	4.56
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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JAN	.13	[illegible]	.28	.38	.49	.67	.74	.74	[illegible]	.74	.74	[illegible]
DATE	[illegible]	[illegible]	20	20	20	20	20	20	[illegible]	20	[illegible]	20
TIME	[illegible]	[illegible]	[illegible]	2345	2336	[illegible]	2359	2359	[illegible]	[illegible]	2359	2359
FEB	[illegible]	[illegible]	.10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.13	[illegible]	[illegible]
DATE	[illegible]	19	19	19	[illegible]	13	[illegible]	[illegible]	13	[illegible]	[illegible]	27
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0738	[illegible]
MAR	.26	[illegible]	[illegible]	[illegible]	[illegible]	.87	[illegible]	[illegible]	1.14	1.16	1.25	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0251	0309	[illegible]	[illegible]	[illegible]
APR	.33	[illegible]	[illegible]	[illegible]	.79	[illegible]	[illegible]	[illegible]	1.30	1.42	[illegible]	1.57
DATE	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	11	[illegible]
TIME	[illegible]	[illegible]	1156	[illegible]	[illegible]	[illegible]	[illegible]	1259	1320	[illegible]	[illegible]	[illegible]
MAY	[illegible]	.67	.87	[illegible]	1.06	[illegible]	[illegible]	1.16	[illegible]	1.16	[illegible]	[illegible]
DATE	[illegible]	04	[illegible]	04	[illegible]	[illegible]	04	04	[illegible]	04	08	09
TIME	[illegible]	[illegible]	[illegible]	1157	1204	[illegible]	[illegible]	[illegible]	[illegible]	1330	[illegible]	[illegible]
JUN	.54	.94	1.23	[illegible]	2.01	[illegible]	[illegible]	2.45	[illegible]	2.45	[illegible]	[illegible]
DATE	[illegible]	19	19	19	[illegible]	[illegible]	19	19	19	[illegible]	19	[illegible]
TIME	1827	[illegible]	[illegible]	[illegible]	1838	[illegible]	[illegible]	1859	1859	[illegible]	1859	[illegible]
JUL	.29	.54	.68	.94	1.26	[illegible]	1.37	1.37	[illegible]	1.37	1.37	[illegible]
DATE	[illegible]	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	13	[illegible]	13	13	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	2335	[illegible]	2349	2349	2349	[illegible]	[illegible]	[illegible]
AUG	.32	[illegible]	[illegible]	[illegible]	[illegible]	1.08	1.16	1.17	1.17	1.27	[illegible]	1.27
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26	[illegible]	[illegible]	26	[illegible]	[illegible]
TIME	[illegible]	[illegible]	2326	2331	[illegible]	[illegible]	[illegible]	[illegible]	1436	1430	1436	1436
SEP	[illegible]	[illegible]	.58	.62	[illegible]	.88	[illegible]	1.03	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	17	17	29	[illegible]	29	[illegible]	[illegible]	29	[illegible]
TIME	[illegible]	[illegible]	1309	[illegible]	1321	1805	1820	1840	[illegible]	[illegible]	[illegible]	[illegible]
OCT	[illegible]	.58	.83	[illegible]	[illegible]	1.38	1.82	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	[illegible]	13	[illegible]	13	[illegible]	13	[illegible]	13	[illegible]	[illegible]	13	[illegible]
TIME	[illegible]	[illegible]	1717	[illegible]	[illegible]	1738	[illegible]	1738	[illegible]	[illegible]	1840	[illegible]
NOV	.37	[illegible]	.82	[illegible]	.90	1.23	[illegible]	1.23	1.26	[illegible]	1.42	[illegible]
DATE	[illegible]	[illegible]	05	[illegible]	[illegible]	[illegible]	05	05	[illegible]	[illegible]	[illegible]	05
TIME	[illegible]	[illegible]	1753	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1940	[illegible]
DEC	[illegible]	[illegible]	.54	.62	.73	.86	.90	.97	[illegible]	[illegible]	1.07	[illegible]
DATE	[illegible]	[illegible]	[illegible]	19	[illegible]	19	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	1639	[illegible]	[illegible]	[illegible]	1658	[illegible]	[illegible]	[illegible]	[illegible]	0959
YEAR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.35	[illegible]	2.45	[illegible]	[illegible]	2.45	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	06	[illegible]	[illegible]	06	[illegible]

TRUK, CAROLINE IS. PACIFIC

JAN	.17	[illegible]	[illegible]	.33	.34	.34	.34	.34	[illegible]	.34	.34	.34
DATE	[illegible]	[illegible]	09	[illegible]	[illegible]	[illegible]	09	09	[illegible]	09	09	09
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0202	[illegible]	[illegible]	[illegible]	[illegible]
FEB	.15	[illegible]	[illegible]	.17	[illegible]	[illegible]	[illegible]	.19	.20	.33	.37	.37
DATE	[illegible]	05	[illegible]	[illegible]	[illegible]	[illegible]	08	08	[illegible]	[illegible]	[illegible]	09
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR	.23	[illegible]	[illegible]	.44	[illegible]	.75	[illegible]	[illegible]	1.37	1.49	[illegible]	[illegible]
DATE	[illegible]	[illegible]	01	01	[illegible]	[illegible]	[illegible]	01	[illegible]	[illegible]	01	[illegible]
TIME	0724	1317	1320	1327	1652	1707	1407	1427	[illegible]	1440	1316	1546
APR	[illegible]	.56	.64	.68	[illegible]	1.05	[illegible]	[illegible]	[illegible]	1.31	1.34	1.35
DATE	[illegible]	[illegible]	[illegible]	18	[illegible]	[illegible]	18	18	[illegible]	[illegible]	[illegible]	18
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0237	[illegible]	[illegible]	[illegible]
MAY	[illegible]	.24	.37	[illegible]	[illegible]	[illegible]	[illegible]	.53	[illegible]	.55	.64	[illegible]
DATE	[illegible]	19	[illegible]	19	[illegible]	19	19	19	[illegible]	[illegible]	19	19
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0325	0345	0405	[illegible]	[illegible]	[illegible]
JUN	.39	.51	.64	[illegible]	.75	[illegible]	[illegible]	[illegible]	[illegible]	1.29	1.32	[illegible]
DATE	[illegible]	28	28	[illegible]	14	14	14	14	14	14	14	14
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1422	1437	1457	[illegible]	[illegible]	[illegible]	[illegible]
JUL	.34	.59	.64	[illegible]	.78	.82	[illegible]	[illegible]	1.16	1.21	1.28	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	05	[illegible]	05	[illegible]	05
TIME	[illegible]	[illegible]	0502	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0249	0308	0339	[illegible]
AUG	[illegible]	.88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.69	[illegible]	2.07	2.22	[illegible]
DATE	[illegible]	15	[illegible]	15	15	15	[illegible]	26	[illegible]	26	26	[illegible]
TIME	[illegible]	0156	[illegible]	[illegible]	[illegible]	0227	0242	2103	[illegible]	2134	2200	[illegible]
SEP	.44	[illegible]	[illegible]	.53	[illegible]	.58	[illegible]	[illegible]	.78	[illegible]	.82	[illegible]
DATE	24	24	24	24	24	24	12	12	[illegible]	12	[illegible]	[illegible]
TIME	0320	[illegible]	[illegible]	0335	[illegible]	0400	0552	[illegible]	[illegible]	[illegible]	0715	[illegible]
OCT	.42	.69	[illegible]	[illegible]	[illegible]	[illegible]	1.53	2.45	[illegible]	[illegible]	2.80	[illegible]
DATE	[illegible]	[illegible]	[illegible]	20	[illegible]	[illegible]	20	20	[illegible]	[illegible]	20	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0213	[illegible]	[illegible]	[illegible]	0247	[illegible]
NOV	[illegible]	[illegible]	[illegible]	.48	.49	[illegible]	.49	[illegible]	.57	.62	[illegible]	[illegible]
DATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	1154	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1332	[illegible]	[illegible]
DEC	[illegible]	[illegible]	[illegible]	.95	[illegible]	[illegible]	[illegible]	1.73	1.94	2.07	[illegible]	[illegible]
DATE	[illegible]	26	[illegible]	26	[illegible]	[illegible]	[illegible]	26	[illegible]	26	26	26
TIME	[illegible]	[illegible]	[illegible]	[illegible]	0422	[illegible]	0435	[illegible]	[illegible]	0525	[illegible]	[illegible]
YEAR	[illegible]	[illegible]	1.08	1.27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.80	[illegible]
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SUNSHINE, AMOUNT AND PERCENT

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible
ALABAMA																										
BIRMINGHAM	136	43	154	[illegible]	179	48	[illegible]	53	184	66	[illegible]	[illegible]	[illegible]	61	[illegible]	[illegible]	241	[illegible]	170	72	173	[illegible]	179	58	2667	[illegible]
MONTGOMERY	153	48	183	59	124	34	[illegible]	53	158	[illegible]	[illegible]	59	275	62	212	[illegible]	141	[illegible]	167	76	184	58	186	63	2516	57
ALASKA																										
ANCHORAGE	112	55	211	84	[illegible]	51	[illegible]	[illegible]	[illegible]	[illegible]	49	[illegible]	315	55	219	[illegible]	145	[illegible]	177	[illegible]	129	[illegible]	61	[illegible]	[illegible]	51
JUNEAU	74	33	103	39	61	17	115	26	134	28	143	[illegible]	86	16	[illegible]	[illegible]	154	41	68	[illegible]	130	55	31	16	1115	29
NOME	91	54	[illegible]	67	287	79	353	77	418	77	421	60	265	43	[illegible]	[illegible]	144	38	68	29	14	17	19	15	2421	53
ARIZONA																										
FLAGSTAFF	228	73	167	58	175	46	296	75	363	84	383	88	317	73	286	69	344	93	271	92	216	69	188	76	3227	75
PHOENIX	268	85	276	77	331	87	368	84	428	95	394	97	412	92	351	91	348	99	349	99	252	74	190	96	3974	88
TUCSON	240	75	211	68	265	71	365	94	414	97	396	93	357	81	355	86	354	87	341	91	261	82	[illegible]	74	3854	87
YUMA	277	81	228	74	308	83	373	95	414	97	383	93	390	89	365	88	340	92	341	91	241	77	236	76	3936	89
ARKANSAS																										
FORT SMITH	130	41	168	55	192	42	158	43	297	69	275	63	312	71	322	77	176	47	223	64	150	48	183	62	2561	58
LITTLE ROCK	202	64	[illegible]	75	245	66	232	62	381	88	380	88	382	87	386	93	282	76	243	69	155	50	140	55	3326	75
CALIFORNIA																										
EUREKA	141	47	172	58	249	67	254	76	296	66	243	54	243	53	234	48	231	64	[illegible]	49	54	19	48	16	2346	53
FRESNO	182	59	163	53	217	58	363	92	379	81	403	92	440	99	394	94	346	98	310	89	165	54	70	23	3465	74
LOS ANGELES	215	68	131	45	208	56			258	60	281	61	352	80	336	81	236	64	279	79	219	70	190	62	–	–
RED BLUFF	162	54	174	58	244	71	382	96	414	93	428	95	448	98	415	98	342	92	280	81	82	27	85	30	3476	78
SACRAMENTO	162	53	152	51	267	72	366	92	455	91	421	95	450	100	417	99	342	92	274	79	106	35	73	25	3435	77
SAN DIEGO	249	78	241	78	247	66	247	63	211	47	229	56	234	54	258	62	196	53	259	73	195	62	234	75	2798	63
SAN FRANCISCO	147	48	118	39	197	53	332	84	328	74	329	74	295	66	233	55	171	46	246	71	82	27	155	52	2631	59
COLORADO																										
DENVER	236	78	240	80	217	59	208	52	267	60	348	78	310	68	328	80	259	69	278	80	173	57	191	65	3062	69
GRAND JUNCTION	198	62	172	57	208	56	253	64	334	75	354	70	342	76	318	73	281	77	262	77	141	47	159	54	3015	68
PUEBLO	186	61	221	73	246	66	303	76	356	81	405	91	371	82	369	87	282	76	315	88	197	65	160	54	3400	76
CONNECTICUT																										
HARTFORD	200	68	198	67	165	45	214	54	224	50	257	56	314	68	266	62	266	71	223	65	140	47	117	41	2584	58
DIST/COLUMBIA																										
WASHINGTON NAT.L	163	54	144	49	145	39	198	50	239	53	290	65	322	71	234	55	231	62	219	63	151	44	117	40	2445	55
FLORIDA																										
APALACHICOLA U	239	74	259	83	282	76	342	88	378	89	382	91	370	86	368	90	326	88	349	93	272	85	251	79	3796	85
JACKSONVILLE	163	50	182	59	[illegible]	51	255	66	287	68	260	62	268	62	209	51	202	54	215	61	231	72	201	63	2662	[illegible]
KEY WEST	246	73	225	71	324	87	329	86	364	89	343	84	328	78	312	78	271	73	269	75	292	89	271	92	3574	81
LAKELAND	207	63	222	71	263	71	313	81	329	78	253	61	249	59	237	58	209	56	259	73	269	83	194	60	3004	68
TAMPA	161	49	190	61	263	71	291	76	336	80	285	68	282	66	252	62	237	64	252	71	235	73	189	58	2974	67
GEORGIA																										
ATLANTA	158	50	167	54	149	40	217	55	297	69	284	66	285	65	238	57	220	59	250	71	220	70	174	56	2657	[illegible]
MACON	164	52	206	67	171	46	238	61	311	73	291	68	304	70	313	76	264	71	281	80	210	67	169	54	2922	66
SAVANNAH	143	45	176	57	180	48	272	70	293	68	179	42	246	57	184	45	174	47	228	64	213	67	163	50	2451	55
HAWAII																										
HILO	179	52	183	57	199	53	168	44	177	44	[illegible]	27	163	40	179	45	182	49	89	25	90	24	191	57	1885	43
HONOLULU	247	72	237	74	299	81	193	51	271	66	219	55	289	70	240	[illegible]	272	74	231	66	128	38	170	51	2902	63
KAHULUI	232	68	225	70	303	81	265	70	305	75	300	75	320	78	278	70	302	82	270	75	193	58	225	67	3217	73
LIHUE	173	51	156	49	182	49	199	53	250	61	206	[illegible]	264	64	244	61	178	49	126	35	131	39	151	45	2261	51
IDAHO																										
BOISE	128	44	178	61	289	78	319	73	367	81	339	75	388	83	358	83	313	93	229	67	54	19	47	17	[illegible]	67
POCATELLO	98	34	156	53	232	63	258	64	359	70	344	75	355	76	344	80	257	69	217	63	59	20	112	40	[illegible]	[illegible]
ILLINOIS																										
CAIRO U	128	42	172	57	172	46	183	48	288	66	321	73	293	66	349	83	190	51	231	66	144	47	79	26	2556	57
CHICAGO MIDWAY	138	47	148	50	178	49	175	44	225	45	321	71	308	67	308	72	240	64	206	60	107	36	73	26	2426	54
MOLINE	141	47	158	53	147	40	194	49	238	53	329	73	290	63	273	64	165	44	191	56	110	37	115	[illegible]	2353	[illegible]
PEORIA	140	47	158	50	137	37	139	35	187	42	261	58	226	49	224	53	172	46	198	55	111	37	101	35	2037	46
SPRINGFIELD	173	57	169	57	175	47	222	56	247	55	340	76	323	71	277	65	206	55	231	67	125	42	94	32	2581	58
INDIANA																										
EVANSVILLE	114	37	154	51	173	47	145	37	248	56	314	71	337	75	341	81	214	57	228	65	129	42	69	23	2465	55
FORT WAYNE	145	49	145	49	174	47	202	51	208	46	328	73	329	72	296	69	243	65	221	64	133	45	111	39	2536	57
INDIANAPOLIS	121	40	132	44	144	39	113	28	174	39	279	62	273	60	241	57	197	53	191	55	96	32	88	30	2048	46
IOWA																										
DES MOINES	161	54	140	47	103	28	218	55	250	56	296	65	283	61	319	75	162	45	224	65	128	43	120	42	[illegible]	54
SIOUX CITY	187	64	134	45	120	33	253	63	305	67	382	84	315	68	324	75	153	41	[illegible]	61	121	34	112	[illegible]	2594	58
KANSAS																										
CONCORDIA	204	68	164	55	123	33	274	69	350	79	389	87	380	84	383	[illegible]	213	57	271	78	172	57	154	53	3078	69
DODGE CITY	156	51	198	65	156	42	293	74	353	80	377	85	373	83	382	91	169	45	286	82	144	47	174	58	[illegible]	69
TOPEKA	148	49	134	45	104	28	216	54	257	58	317	71	319	71	330	78	111	30	239	69	141	47	141	48	2458	55
WICHITA	160	52	161	53	125	34	247	63	344	78	339	77	348	79	359	85	136	37	266	77	149	49	156	52	2790	63
KENTUCKY																										
LOUISVILLE	142	46	154	51	166	45	131	33	172	39	297	67	306	68	206	49	212	57	231	67	155	51	90	30	2262	51
LOUISIANA																										
NEW ORLEANS															171	41	179	48	298	84	255	80	156	49	–	–
SHREVEPORT	137	43	169	53	152	41	163	42	[illegible]	76	[illegible]	56	323	74	322	79	[illegible]	62	228	65	196	62	250	81	2736	62
MAINE																										
PORTLAND	190	66	155	53	119	32	193	48	170	37	183	40	257	55	[illegible]	61	229	61	212	62	157	54	134	49	2161	51
MARYLAND																										
BALTIMORE	186	61	171	57	166	45	188	47	206	46	242	54	287	63	232	55	211	56	221	64	150	50	126	43	2386	54
MASSACHUSETTS																										
BLUE HILL OBS R	188	66	133	47	129	36	[illegible]	53	185	42	196	44	249	56	251	61	[illegible]	65	[illegible]	63	155	55	119	43	[illegible]	[illegible]
BOSTON	181	62	131	44	175	47	235	59	243	54	247	54	294	63	273	64	269	72	211	63	149	50	114	40	2528	57
MICHIGAN																										
ALPENA	145	51	[illegible]	37	124	36	219	54	239	52	234	50	295	63	[illegible]	57	[illegible]	65	158	47	65	22	65	24	2155	48
DETROIT METRO.	148	50	137	46	151	41	198	49	186	41	274	60	313	68	294	69	254	69	177	52	109	37	80	29	[illegible]	[illegible]
GRAND RAPIDS	129	44	105	36	155	41	195	49	179	39	244	53	250	54	281	65	242	65	153	45	86	29	103	36	[illegible]	46
LANSING	127	43	125	42	160	43	[illegible]	[illegible]	[illegible]	44	[illegible]	61	309	67	[illegible]	67	[illegible]	55	148	43	71	24	71	25	2181	49
MARQUETTE U	100	36	67	23	135	37	189	46	198	42	196	42	287	60	232	53	185	49	141	42	44	16	32	12	1800	[illegible]
SAULT STE MARIE	127	45	148	51	190	51	247	61	247	53	212	45	303	63	251	57	210	56	131	39	45	16	107	40	2218	[illegible]

SUNSHINE, AMOUNT AND PERCENT

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible
MINNESOTA																										
DULUTH	137	49	131	45	151	41	166	41	184	39	240	51	297	62	226	51	223	59	139	41	93	33	107	40	2093	47
MINNEAPOLIS	151	53	140	48	159	43	214	53	228	49	327	70	365	77	312	72	218	58	185	54	130	45	129	47	2558	57
MISSISSIPPI																										
JACKSON	145	45	194	63	194	52	190	49	246	57	217	51	224	51	238	58	128	34	221	63	181	57	177	57	2354	53
MISSOURI																										
COLUMBIA REGIONAL	162	53	152	50	146	39	179	45	328	74	348	78	333	74	361	85	121	32	235	68	159	53	126	43	2649	60
KANSAS CITY	205	68	184	61	139	37	217	55	307	69	340	76	347	77	367	87	122	33	212	61	177	59	162	55	2778	62
ST LOUIS	164	54	162	54	153	41	145	37	264	60	334	75	316	70	308	73	157	42	220	63	170	56	119	40	2513	56
SPRINGFIELD	148	48	143	47	143	39	189	48	296	67	310	70	311	69	353	84	160	43	256	73	140	46	120	40	2568	58
MONTANA																										
BILLINGS	118	42	201	69	289	78	163	40	331	72	286	61	374	79	337	77	233	62	186	55	65	23	103	38	2685	60
GREAT FALLS	132	48	181	63	237	64	156	38	331	71	307	64	420	87	340	77	253	67	172	51	81	29	68	26	2677	60
HAVRE	139	51	160	56	302	82	318	77	416	88	394	82	451	93	383	86	298	79	188	56	113	41	74	29	3237	72
HELENA	162	58	188	65	264	71	294	72	380	82	332	70	427	89	319	73	249	66	184	54	74	26	82	31	2954	66
MISSOULA	126	45	172	60	179	48	201	49	321	69	263	55	459	96	363	83	229	61	149	44	25	9	51	19	2539	57
NEBRASKA																										
LINCOLN	173	58	139	47	103	28	242	61	290	65	347	77	302	66	350	82	130	35	235	68	112	37	133	46	2555	57
NORTH PLATTE	190	64	188	63	177	48	237	59	319	71	338	75	282	61	344	81	163	44	244	71	107	36	104	36	2693	60
OMAHA	179	60	126	42	111	30	229	57	288	64	323	71	307	67	354	83	176	47	220	64	121	41	122	43	2555	57
VALENTINE	196	67	191	65	159	43	237	59	346	76	356	78	337	73	352	82	172	46	235	69	117	40	120	42	2820	63
NEVADA																										
ELY	206	68	162	54	185	50	287	72	366	82	371	83	368	81	352	83	331	89	291	84	121	40	134	46	3173	71
LAS VEGAS	213	69	189	62	259	70	343	87	365	84	386	88	412	93	360	86	361	97	333	95	226	73	224	74	3671	83
RENO	178	59	180	60	193	52	376	95	398	89	436	97	445	98	411	97	370	99	333	96	251	83	249	85	3820	86
WINNEMUCCA	143	48	147	49	160	43	304	76	357	80	375	83	392	86	347	81	313	84	242	70	89	30	116	40	2983	67
NEW HAMPSHIRE																										
CONCORD	194	67	158	54	151	41	217	54	173	38	208	45	294	63	283	66	218	58	213	62	151	52	109	39	2369	53
MT WASHINGTON OBS	101	34	121	41	149	40	143	35	90	19	114	24	141	30	125	28	102	27	166	48	62	21	87	31	1403	31
NEW JERSEY																										
ATLANTIC CITY	132	44	140	47	148	40	230	58	202	45	229	51	277	61	253	60	239	64	218	63	164	54	125	43	2356	53
TRENTON U	188	62	171	57	161	43	210	53	169	38	217	48	306	67	219	51	237	63	242	70	166	56	120	41	2406	54
NEW MEXICO																										
ALBUQUERQUE	200	64	155	51	228	61	262	67	310	71	376	87	318	72	335	80	333	90	322	92	246	79	243	80	3128	75
ROSWELL	182	57	179	58	282	76	305	78	340	79	399	93	283	65	347	84	251	68	300	85	213	68	232	75	3313	75
NEW YORK																										
ALBANY	139	47	156	53	161	44	216	54	180	40	243	53	322	69	250	58	214	57	202	59	75	25	86	31	2244	50
BINGHAMTON	149	51	152	51	134	36	203	51	137	30	268	59	329	71	191	44	206	55	149	43	71	24	68	24	2056	46
BUFFALO	119	41	128	43	141	38	190	47	145	32	303	66	297	64	291	68	249	66	188	55	67	23	64	23	2181	49
NEW YORK U	178	59	136	46	143	39	189	47	180	40	218	48	297	65	246	58	223	60	245	71	183	61	139	48	2377	53
ROCHESTER	135	46	134	46	145	39	231	57	170	37	334	73	346	74	302	70	258	69	204	60	72	25	83	30	2412	54
SYRACUSE	121	41	153	52	127	34	174	43	110	24	252	55	324	70	255	59	211	56	166	49	59	20	74	26	2027	45
NORTH CAROLINA																										
ASHEVILLE	189	61	226	74	187	50	181	46	264	61	211	48	213	48	191	46	218	59	216	62	209	68	153	50	2457	55
CAPE HATTERAS R	127	41	156	51	174	47	275	70	299	69	283	65	326	74	251	60	211	57	221	63	206	66	151	50	2679	60
CHARLOTTE	190	61	189	62	188	51	298	76	328	75	302	69	335	76	307	74	288	77	261	74	206	66	175	57	3066	69
GREENSBORO	180	58	167	55	140	38	229	58	248	57	233	53	260	59	238	57	230	62	248	71	205	66	165	54	2543	57
RALEIGH	172	55	158	52	131	35	227	58	287	66	251	58	299	67	250	60	262	70	240	69	194	63	157	52	2628	59
WILMINGTON	172	54	194	63	190	51	301	77	317	73	236	55	293	67	249	60	236	64	270	77	265	85	193	63	2915	66
NORTH DAKOTA																										
BISMARCK	195	70	188	65	225	61	258	63	375	80	349	74	386	81	308	70	232	62	182	54	94	33	120	45	2909	65
FARGO	169	60	133	46	159	43	269	66	319	68	314	66	336	70	284	65	233	62	194	57	100	36	74	28	2582	58
WILLISTON	123	45	150	52	245	66	232	57	320	68	340	71	388	80	314	71	251	66	181	54	102	36	69	26	2713	61
OHIO																										
CINCINNATI ABBE O	144	48	151	50	168	45	87	22	109	25	268	60	252	56	279	66	225	60	166	48	112	37	96	33	2057	46
CLEVELAND	121	41	122	41	149	40	194	48	169	38	273	60	321	70	255	59	241	64	173	50	80	27	75	26	2171	49
COLUMBUS	117	39	106	35	122	33	120	30	157	35	228	51	235	52	182	43	213	57	206	59	83	28	76	26	2025	41
DAYTON	156	52	135	45	148	40	176	44	215	48	294	66	247	54	267	63	224	60	214	62	128	43	118	40	2323	52
TOLEDO	131	44	126	42	160	43	152	38	155	34	236	52	267	58	267	62	237	63	166	48	87	29	73	26	2057	46
OKLAHOMA																										
OKLAHOMA CITY	142	46	142	46	170	46	225	57	302	69	278	64	321	73	338	81	166	45	259	74	127	41	190	62	2660	60
TULSA	139	45	140	46	167	45	228	58	312	71	328	75	344	77	359	86	148	40	264	75	133	43	177	58	2736	61
OREGON																										
PORTLAND	93	33	151	52	198	53	271	67	291	63	226	49	370	78	272	62	226	60	128	38	39	14	42	15	2307	52
PACIFIC AREA																										
GUAM TAGUAC R	208	59	188	57	246	66	230	62	265	67	241	62	207	52	167	43	187	51	161	44	216	63	143	41	2460	56
JOHNSTON	211	61	223	69	288	77	258	69	288	72	276	70	320	79	266	68	260	71	233	64	157	46	249	72	3029	68
KOROR R	250	69	228	69	234	63	219	60	252	65	249	66	228	59	246	64	224	61	181	49	159	45	141	39	2611	59
MAJURO	241	66	214	64	284	76	233	63	218	56	242	64	281	73	272	71	258	71	243	66	234	66	254	70	2974	67
PAGO PAGO	225	56	206	59	241	64	135	38	88	25	97	29	198	56	248	69	285	79	183	47	92	24	196	49	2193	50
PONAPE R	290	80	239	72	274	73	224	61	237	61	188	50	207	53	192	50	178	49	168	45	147	41	110	30	2452	55
TRUK MOEN ISLAND	224	62	189	57	234	62	197	53	184	48	167	44	189	49	195	51	184	51	141	38	176	50	185	51	2265	51
WAKE	246	71	240	75	302	81	313	83	328	81	278	70	233	57	159	40	234	64	138	38	141	42			-	-
YAP R	312	87	247	75	245	66	264	71	274	70	249	65	216	55	246	64	175	48	159	43	196	56	188	52	2772	63
PENNSYLVANIA																										
HARRISBURG	171	57	157	52	177	48	212	53	161	36	236	52	298	65	280	66	237	63	208	60	115	38	95	33	2346	53
PHILADELPHIA	175	58	162	54	147	40	196	49	190	43	253	56	292	64	244	57	226	61	232	67	159	53	105	36	2382	53
PITTSBURGH	120	40	107	36	157	42	129	32	131	29	283	63	259	57	228	54	231	62	154	45	102	34	50	17	1951	44
PITTSBURGH U	101	34	101	34	149	40	128	32	130	29	233	52	247	54	211	49	214	57	142	41	93	31	57	20	1806	41
SCRANTON	184	62	156	52	169	46	178	45	155	34	277	61	326	71	277	65	225	60	205	60	99	33	93	32	2343	53
RHODE ISLAND																										
PROVIDENCE	203	69	168	57	143	39	212	53	202	45	219	48	248	54	256	60	254	68	218	63	154	52	131	46	2409	54
SOUTH CAROLINA																										
CHARLESTON	155	49	200	65	192	52	289	74	348	81	253	59	285	65	253	61	303	82	256	73	215	68	164	53	2913	66
COLUMBIA	169	54	155	50	144	39	275	70	202	47	248	57	289	66	238	57	239	64	234	67	228	73	188	61	2608	59
GRNVLLE SPRTNBRG	191	61	192	63	149	40	213	54	244	56	240	55	244	55	203	49	251	68	249	71	203	65	189	62	2587	58

SUNSHINE, AMOUNT AND PERCENT

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible
SOUTH DAKOTA																										
HURON	190	66	152	52	144	39	240	59	342	75	347	75	338	72	301	69	159	42	188	55	88	31	111	40	2600	58
RAPID CITY	217	75	205	70	219	59	222	55	298	65	317	68	304	65	281	65	200	53	255	75	107	37	117	42	2741	61
TENNESSEE																										
CHATTANOOGA	142	45	143	47	129	35	172	44	257	59	234	54	236	53	279	67	220	59	203	59	171	55	126	41	2311	52
KNOXVILLE	150	48	118	39	150	40	185	47	269	62	306	70	319	72	332	79	285	76	261	75	190	62	128	42	2691	61
MEMPHIS	159	51	197	65	202	54	191	49	294	68	289	67	283	64	332	80	222	62	238	68	164	53	142	[illegible]	2712	61
NASHVILLE	141	45	132	43	180	49	168	43	272	62	278	64	254	57	305	73	196	53	227	65	134	43	99	33	2387	54
TEXAS																										
ABILENE	171	53	180	58	311	84	280	72	355	83	318	74	284	65	331	80	235	63	258	73	170	54	261	84	3153	71
AMARILLO	163	52	194	64	234	63	294	75	368	85	394	91	347	78	371	89	251	67	282	81	193	62	216	71	3307	74
AUSTIN	159	49	135	43	227	61	174	45	277	65	199	47	269	62	241	59	215	58	215	61	169	53	244	77	2522	57
BROWNSVILLE	145	44	128	41	174	47	216	56	310	75	282	68	379	90	280	69	270	73	237	66	216	66	200	61	2836	64
CORPUS CHRISTI	170	52	159	51	185	50	175	46	287	68	276	66	375	88	264	65	186	50	256	72	184	57	214	66	2730	61
EL PASO	244	76	209	67	285	77	368	95	377	88	414	97	330	76	352	85	342	92	332	94	276	87	299	95	3828	86
GALVESTON U	134	41	164	52	138	37	180	47	288	68	246	59	333	78	228	56	197	53	216	61	209	65	196	61	2529	57
HOUSTON INTERCON	129	40	166	53	162	44	173	45	282	67	199	47	305	71	239	59	206	56	203	57	196	61	226	71	2486	56
LUBBOCK	182	58	182	59	287	77	331	85	366	85	406	94	363	83	382	92	288	78	305	87	226	72	260	84	3579	80
PORT ARTHUR	136	42	182	58	154	41	211	54	295	70	248	59	294	68	205	50	247	67	251	71	180	56	184	58	2586	58
SAN ANTONIO	169	52	120	37	239	64	180	47	274	65	209	50	316	74	291	71	187	50	187	53	142	44	252	79	2566	58
UTAH																										
MILFORD	164	54	159	53	167	45	239	60	334	75	355	80	347	77	322	76	317	85	277	80	146	48	155	52	2982	67
SALT LAKE CITY	132	44	158	53	193	52	240	60	358	80	373	83	374	82	369	86	292	79	244	71	144	48	153	53	3028	68
VERMONT																										
BURLINGTON	132	46	148	50	112	30	195	48	178	39	188	41	270	57	195	45	177	47	180	53	53	19	61	22	1887	42
VIRGINIA																										
LYNCHBURG	180	58	151	50	140	38	199	50	288	66	287	65	282	63	260	62	227	61	231	66	174	57	119	40	2536	57
NORFOLK	188	61	199	65	151	41	234	59	257	59	233	53	272	61	263	63	245	66	245	70	242	79			-	-
RICHMOND	176	57	179	59	164	44	262	66	275	63	296	67	334	74	301	72	257	69	255	73	197	64	132	44	2828	64
WASHINGTON																										
QUILLAYUTE	55	20	100	35	72	19	151	37	215	46	123	26	216	45	177	40	169	45	96	29	40	14	31	12	1444	32
SEATTLE TACOMA	64	23	115	40	166	45	273	67	324	69	253	53	348	72	288	65	248	66	138	41	57	20	23	9	2297	51
SPOKANE	147	53	150	52	177	48	288	70	334	71	293	61	440	91	374	85	258	69	125	37	32	11	29	11	2646	59
WALLA WALLA U	126	45	137	47	200	54	290	71	355	76	310	66	431	91	369	84	247	66	178	53	36	13	33	12	2712	61
WEST INDIES																										
SAN JUAN P.R.	168	49	207	64	262	70	256	68	256	64	184	46	224	55	230	58	225	61	221	61	162	48	192	56	2588	59
WEST VIRGINIA																										
PARKERSBURG U	151	50	127	42	262	71	144	36	241	54	310	69	275	61	233	55	280	75	237	69	110	37	126	43	2497	56
WISCONSIN																										
GREEN BAY	152	53	133	45	154	42	191	47	220	48	271	58	337	72	281	65	215	57	186	55	101	35	82	30	2323	52
MADISON	143	49	135	46	144	39	167	41	195	43	290	63	281	60	270	63	179	48	172	50	120	41	91	32	2186	49
MILWAUKEE	156	53	142	48	138	37	203	50	209	46	283	62	296	64	274	64	193	52	183	53	128	44	75	27	2279	51
WYOMING																										
CHEYENNE	170	57	199	67	218	59	223	56	301	67	286	63	272	59	295	69	206	55	232	67	130	44	124	43	2655	60
LANDER	167	57	215	73	253	68	257	64	345	76	304	66	363	78	363	84	250	67	267	78	165	56	147	52	3097	69
SHERIDAN	178	62	212	73	237	64	183	45	358	78	298	64	329	70	314	72	220	58	194	57	126	44	129	47	2778	62

Data from airport unless otherwise specified.
"U" indicates Urban, "R" indicates Rural, sites.

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature							Heating degree days	Cooling degree days	Precipitation						Relative humidity				Wind						Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes									Snow †										Fastest mile (1.6 kilometers)				Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date			Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00am EST	7:00am EST	1:00pm EST	7:00pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date		Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Precipitation 25mm or more	Snow † 25.4mm or more	Thunderstorms	Heavy fog	32.2 °C and above	0 °C and below	0 °C and below	-17.8 °C and below
ALABAMA	°C	°C	°C	°C		°C		Base 18.3 °C	Base 18.3 °C	Mm	Mm		Mm	Mm		%	%	%	%	Mps	Mps		Mps			Tenths											
BIRMINGHAM	22.6	10.8	16.7	35.0	SEP 10	- 10.0	JAN 13	1582	1048	1679	88	DEC 25-26	T	T	DEC [illegible] +	82	86	60	66	3.3	.3	16	25.9	W	MAY 11	6.3	81	111	173	129	0	84	[illegible]	30	3	58	0
HUNTSVILLE	22.1	11.0	16.6	33.9	AUG 30+	- 8.9	DEC 22+	1612	1027	1707	196	MAR 15-16	8	5	JAN 7	82	85	60	55	3.6	.4	16	14.3	29	JUN 27+	6.0	104	111	151	114	0	71	18	35	5	54	
MOBILE	25.9	15.1	20.5	36.1	JUL 17+	- 5.6	JAN 13	[illegible]	1656	1799	97	APR 25-26	91	91	FEB 9	82	85	58	68	3.8	.5	14	15.6	21	JAN 21	6.1	99	119	147	141	1	[illegible]	45	98	0	21	
MONTGOMERY	24.8	12.6	18.7	36.0	JUL 29+	- 6.7	DEC 22+	1171	1371	1485	100	MAR 30-31	79	79	FEB 9	[illegible]	83	54	63	3.[illegible]	[illegible]	[illegible]	15.[illegible]	[illegible]	DEC 26+	6.[illegible]	109	120	136	119	1	81	24	99	[illegible]	47	0
ALASKA																																					
ANCHORAGE	4.2	- 3.4	.4	22.8	JUN 21	- 32.8	JAN 26+	6480	0	271	32	AUG 20-21	1280	185	NOV 21-22	81	72	77	83	2.6	.3	17	14.3	13	FEB 19	7.4	60	75	230	35	16	0	23	5	130	202	50
ANNETTE	9.4	3.4	6.4	25.0	MAY 14	- 7.8	JAN 10+	4297	0	2726	101	OCT 25-26	1692	269	FEB 11-12	75	70	78	81	4.5	2.1	13	17.9	9	NOV 19+	7.9	41	72	253	251	18	2	3	7	12	94	
BARROW	- 8.4	-14.4	-11.4	18.3	JUL 26	- 41.7	JAN 30	10818	0	182	15	AUG 1	1039	86	OCT 11-12	84	92	83					24.6	24	DEC 31		50	118	201	119	16	0	71	0	241	316	158
BARTER ISLAND	- 8.7	-15.0	-11.8	19.4	JUL 24	- 46.1	MAR 12	10967	0	107	10	AUG 9-10	663	94	MAY 1-2	86	81	83	84	5.3	.4	15	29.9	26	NOV 11		41	[illegible]	195	62		1	98	0	230	312	163
BETHEL	1.9	- 6.5	- 2.3	24.4	JUN 23	- 43.3	JAN 21	7474	0	330	26	AUG 19-20	1412	145	JAN 4-5	79	68	74	81	5.4	.7	1	19.7	18	DEC 30	7.4	61	73	231	125	18	1	49	6	139	223	83
BETTLES	- .9	-11.2	- 6.1	26.7	JUN 14	- 53.3	JAN 18	8868	5	318	36	JAN 7-8	2743	551	JAN 27-28		61	65					14.[illegible]	9	DEC 6+	6.4	84	100	181	79	25	2	9	24	184	235	132
BIG DELTA	1.9	- 8.0	- 3.0	27.8	JUL 25	- 47.8	JAN 14	7749	8	317			973			78	69	76												85	14	1	4	25	158	223	105
COLD BAY	5.2	.2	2.7	17.8	AUG 23	- 18.9	JAN 21	5652	0	636	32	OCT 21-22	1646	135	APR 4-5 +	90	84	88	91	8.0	.8	22	27.3	12	NOV 1	9.1	5	32	328	216	17	0	28	0	58	181	3
FAIRBANKS	2.2	- 7.8	- 2.8	28.9	JUL 25	- 46.1	JAN 16	7674	22	232	19	AUG 10-11	1400	196	NOV 10-11	64	52	58	68	2.3	.4	34	11.3	22	AUG 20+	7.2	65	75	225	87	18	5	26	46	159	215	117
JUNEAU	7.1	- .2	3.4	22.8	AUG 20	- 22.2	JAN 15	5364	0	1165	38	AUG 11-12	3279	437	JAN 12-13	82	74	85	88	3.5	2.3	11	16.1	13	DEC 6+	8.4	40	34	291	232	53	0	15	2	71	163	6
KING SALMON	5.2	- 3.2	1.0	26.1	AUG 19	- 36.1	JAN 22	6292	2	431	25	AUG 20-21	800	86	DEC 15-16	77	64	72	78	4.7	.6	10	17.4	9	MAY 4+	7.5	51	75	239	143	14	4	26	12	94	197	48
KODIAK	6.3	.7	3.6	21.1	JUL 7	- 18.9	JAN 25+	5351	0	1377	82	OCT 28-29	1956	345	FEB 11-12	78	70						24.6	32	JAN 19	7.3	72	71	222	186	23	0	14	1	39	160	4
KOTZEBUE	- 2.9	-10.3	- 6.6	22.2	AUG 4+	- 40.0	JAN 25+	9369	0	326	17	AUG 20	2027	254	JAN 1-2	77	73	75					25.9	11	FEB 3					110	28	1	12	2	204	258	122
MC GRATH	1.4	-10.0	- 4.3	26.7	JUL 21+	- 51.7	JAN 21	8203	2	402	24	AUG 5	2581	279	NOV 21-22	73	60	68	77	2.1	.4	31	13.9	19	SEP 30	7.2	71	58	236	129	31	11	13	31	153	232	117
NOME	- .8	- 8.2	- 4.4	25.0	JUN 23	- 39.4	JAN 21	8291	0	435	25	JUL 24-25	1864	170	JAN 1-2	79	76	77	81	4.9	1.1	8	19.7	26	NOV 10+	6.7	94	63	208	139	16	0	13	2	183	253	88
ST. PAUL ISLAND	3.1	- 1.5	.8	12.8	JUL 23	- 17.8	JAN 20	6353	0	624	32	MAR 10-11	2705	315	MAR 10-11	89	85	88	89	8.2	.8	1	29.9	17	FEB 3	8.8	11	67	287	228	31	0	72	0	92	209	1
SUMMIT	- .4	- 8.4	- 4.4	21.1	JUN 21+	- 38.3	JAN 15	8253	0	359	27	OCT 30-1	3708	414	JAN 28-29	77	68													120	39	0	3	2	176	254	90
TALKEETNA	5.1	- 7.1	- 1.0	27.2	JUN 17	- 42.8	JAN 25	7002	0	554			3510			76	61	73					13.0	2	JAN 12					125	39	6	2	24	131	247	89
YAKUTAT	6.8	- .6	3.2	25.0	MAY 14	- 20.0	FEB 11	5484	0	2904	65	AUG 22-23	5966	333	MAR 2-3	82	75	85	88	2.7	1.7	10	21.9	22	JAN 24	8.1	49	45	271	241	53	3	12	2	59	163	8
ARIZONA																																					
FLAGSTAFF	15.6	- 1.4	7.1	36.1	JUL 5	- 24.4	JAN 5	4102	79	501	29	NOV 18-19	4267	320	MAR 21-22	43	43	67	74	3.4	1.1	22	15.2	NE	DEC 24	4.4	165	108	92	89	41	43	30	7	23	210	6
PHOENIX	29.9	14.4	22.2	46.1	JUL 2+	- .6	JAN 21	758	2236	153	32	JUL 11-12	0	0		31	21	29	51	3.1	.6	14	30.8	SW	JUL 12	3.0	231	68	66	35	0	20	2	172	0	3	0
TUCSON	26.7	11.5	19.1	41.7	JUL 5+	- 3.3	JAN 21	1158	1492	183	27	FEB 21-22	T	T	JAN 22 +	31	24	43	53	3.8	1.2	18	17.0	SW	JUL 11	3.3	220	83	62	50	0	28	1	135	0	18	0
WINSLOW	21.1	3.6	12.3	40.0	JUN 28	- 12.8	DEC 21+	2651	528	194	21	NOV 18-19	693	142	FEB 21-22	39	32	54	64	3.1	1.5	23	19.7	22	MAY 31	4.3	171	99	95	60	9	25	7	69	6	136	0
YUMA	30.4	14.9	22.7	45.0	JUL 10+	- 1.1	JAN 7	577	2230	48	16	MAR 11	0	0		32	22	42	53	3.3	.5	24	26.8	SE	AUG 19	2.5	254	67	44	16	0	8	0	177	0	2	0
ARKANSAS																																					
FORT SMITH	21.8	9.5	15.7	37.2	AUG 24	- 13.3	JAN 12	1877	967	1456	176	NOV 23-24	157	112	JAN 6-7	81	86	57	58	3.4	.1	2	17.9	W	JUN 18+	6.0	103	108	154	126	3	81	22	55	6	72	0
LITTLE ROCK	22.4	11.5	17.0	37.2	AUG 20	- 9.4	JAN 12	1582	1161	1890	109	APR 22-23	66	66	JAN 7	80	84	60	63	3.5	.6	21	25.9	N	APR 24	5.9	108	102	155	125	1	77	13	60	7	56	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Temperature							Heating degree days	Cooling degree days	Precipitation						Relative humidity				Wind						Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes									Snow †										Fastest mile (1.6 kilometers)				Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date			Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	0C am EST	700am EST	100pm EST	700pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date		Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow † 25.4mm or more	Thunderstorms	Heavy fog	32.2°C and above	0°C and below	0°C and below	-17.8°C and below
CALIFORNIA	°C	°C	°C	°C		°C		Base 18.3°C	Base 18.3°C	Mm	Mm		Mm	Mm		%	%	%	%	Mps	Mps		Mps			Tenths											
BAKERSFIELD	26.1	12.7	19.4	43.9	JUN 28	- 2.8	JAN 7+	1049	1496	173	22	MAR 20+	T	T	JAN 4	52	39	59	68	3.4	1.1	26	17.0	36	MAR 11	3.8	200	78	87	37	0	3	18	123	0	4	0
BISHOP	22.4	3.4	12.9	41.1	JUL 4	- 15.6	JAN 5	2507	591	196	57	JAN 18	216	99	JAN 8-9	35														32	5			92	0	140	0
BLUE CANYON	14.0	5.3	9.7	31.7	JUN 27	- 10.0	JAN 4+	3362	261	2306	116	JAN 11-12	8418	541	DEC 30-1	50							19.2	18	JAN 16	5.1	159	61	145	115	62			0	21	125	0
EUREKA	14.1	8.2	11.2	24.4	SEP 9	- .6	JAN 4	2575	1	1245	48	MAR 19-20	T	T	MAR 19								19.2	[illegible]	DEC 11	7.1	64	97	204	144	0			0	0	2	0
FRESNO	24.3	9.9	17.2	42.2	JUN 28+	- 4.4	JAN 7+	1424	1051	322	28	FEB 11	T	T	MAR 3	62	45	70	85	2.7	.7	31	16.1	NW	APR 1	4.2	192	60	113	62	0	8	34	106	0	11	0
LONG BEACH	22.8	12.1	17.4	42.2	JUN 20	- .6	JAN 5	814	549	341	39	FEB 10-11	0	0		57	52	70	74	2.8	.9	23	16.1	32	APR 1	4.9	136	132	97	40	0	2	20	22	0	1	0
LOS ANGELES	20.8	12.7	16.7	36.7	SEP 27	2.8	JAN 5	787	259	328	46	FEB 6-7	0	0		63	65	79	81	3.4	1.6	24	20.6	N	JAN 19	5.3	119	127	119	31	0	1	24	6	0	0	0
LOS ANGELES	23.3	14.3	18.3	41.1	JUN 20	2.8	JAN 5	592	638	443	70	JAN 16	0	0									14.8	NW	APR 1					32	0			21	0	0	0
MT SHASTA	16.7	3.3	10.0	36.1	JUL 27+	- 12.2	JAN 7+	3221	239	1251	99	NOV 30	3167	323	DEC 20-21	57	47	64												111	31			31	2	127	0
OAKLAND	17.4	10.3	13.9	34.4	JUN 20+	.0	JAN 7	1649	76	746	68	NOV 5-6	0	0		78	72	85	88	4.2	1.8	27	13.9	17	OCT 22+	4.9	153	95	117	82	0	1	7	4	0	1	0
RED BLUFF	23.3	10.3	16.8	43.9	JUL 25	- 5.0	JAN 7+	1547	1061	804	52	NOV 30	122	122	JAN 8	55	43	63	72	4.1	.4	19	20.6	[illegible]	MAY 18	4.8	166	57	142	90	1	9	14	99	0	11	0
SACRAMENTO	23.2	9.6	16.4	41.7	JUL 4	- 3.3	JAN 7+	1420	751	673	46	FEB 27-28	0	0		61	46	70	77	3.4	1.5	20	13.9	SW	DEC 29+	4.3	179	74	112	82	0	8	31	79	0	14	0
SANDBERG	17.3	7.3	12.3	36.7	JUL 25	- 6.7	JAN 5	2672	536	522	95	FEB 10-11	716	155	MAR 20	51				5.9	1.8	33	24.1	32	APR 14					50	9			20	0	81	0
SAN DIEGO	21.0	13.8	17.4	33.9	SEP 27	3.3	JAN 5	632	352	190	18	MAR 11	0	0		60	60	70	72	3.4	1.6	27	14.8	[illegible]	FEB 11	5.5	116	113	136	42	0	3	20	5	0	0	0
SAN FRANCISCO	18.2	8.4	13.8	36.7	JUN 8	- .6	JAN 7	1684	72	797	66	DEC 30-1	T	T	MAR 21	72	65	81	86	4.5	2.7	28	17.4	29	APR 17	4.9	152	88	125	78	0	2	8	6	0	[illegible]	0
SAN FRANCISCO	16.7	10.4	13.6	33.9	JUN 20	3.9	JAN 7	1756	59	808	71	JAN 8-9																		82				3			
SANTA MARIA	19.7	7.4	13.6	38.9	JUN 20	- 5.6	JAN 5	1749	66	501	52	FEB 10-11	0	0		66	65									4.6	156	128	81	50	0			11	0	14	0
STOCKTON	23.4	9.9	16.7	43.3	JUN 21	- 3.9	JAN 7+	1371	828	600	35	DEC 26-27	0	0		61	46	68	77	4.0	1.5	28	15.6	15	JAN 18	4.6	[illegible]	73	122	81	0	5	64	80	0	9	0
COLORADO																																					
ALAMOSA	13.8	- 5.3	4.3	32.2	JUL 2	- 31.1	FEB 3+	5092	29	213	21	MAR 27	1755	290	MAR 27	45	40	71	80							4.5	151	136	78	37	19			0	48	229	65
COLORADO SPRINGS	15.5	2.2	8.9	36.1	JUL 6	- 22.2	JAN 9	3644	246	358	43	MAY 5-6	1234	135	APR 1-2	39	38	55	59	4.8	1.5	2	18.3	35	DEC 24+	5.3	127	114	124	91	19	56	22	17	29	168	5
DENVER	17.5	2.4	9.9	39.4	JUL 6	- 21.7	DEC 31+	3348	351	583	90	MAY 5-6	2499	300	DEC 23-24	39	40	59	64	4.2	.5	20	21.9	NW	DEC 12	5.5	121	115	129	112	20	38	14	33	21	158	[illegible]
GRAND JUNCTION	17.4	3.7	10.6	39.4	JUL 6+	- 24.4	JAN 8+	3424	648	202	19	MAY 5-6	780	170	JAN 5	45	38	54	61	3.8	.7	12	21.0	NW	JUN 28	5.2	138	99	128	68	12	29	13	59	34	130	19
PUEBLO	19.8	3.1	11.4	40.6	JUL 6	- 25.6	DEC 31	3009	569	335	29	AUG 11	655	117	DEC 18	43	37	62	74	4.2	.9	2	28.6	NW	DEC 12	4.9	136	126	103	74	8	40	10	62	14	148	5
CONNECTICUT																																					
BRIDGEPORT	16.2	7.7	11.9	[illegible]	JUL 9	- 14.4	FEB 12	2823	556	1394	59	OCT 29-30	173	107	JAN 28-29	72	73	59	65	6.0	1.6	29	22.4	7	OCT 29+	6.1	100	105	160	119	2	24	39	10	28	89	0
HARTFORD	16.9	5.6	11.3	36.7	AUG 30+	- 18.3	FEB 18+	3081	577	1297	79	DEC 20-21	605	295	JAN 28-29	75	76	52	62	4.0	1.1	28	15.2	NW	NOV 3+	6.9	68	110	187	[illegible]	8	28	40	[illegible]	[illegible]	113	[illegible]
DELAWARE																																					
WILMINGTON	18.9	[illegible]	[illegible]	[illegible]	AUG 28	- 12.2	FEB 17	2314	797	1195	56	JUN 29	185	107	DEC 16-17	75	77	56	65	4.2	.9	30	18.8	30	NOV 1	6.4	88	104	173	121	2	27	35	24	10	76	0
DIST OF COLUMBIA																																					
WASHINGTON DULLES	18.9	6.8	12.9	35.0	AUG 29+	- 15.0	FEB 17	2594	676	1054	59	SEP 14	[illegible]	218	DEC 16-17	84	86	57	69	3.6	.7	27	13.9	24	MAR 18	6.5	84	[illegible]	177	[illegible]	4	23	33	29	11	[illegible]	[illegible]
WASHINGTON NATIONAL	22.2	10.2	15.2	36.7	AUG 29	- 12.8	FEB 17	2029	948	888	95	AUG 20-21	282	241	DEC 16-17	71	73	53	59	3.8	.6	28	[illegible]	W	APR [illegible]	6.3	92	109	164	[illegible]	2	26	9	37	7	56	[illegible]
FLORIDA																																					
APALACHICOLA	24.7	16.8	20.8	35.0	JUL 9+	- 1.1	DEC 12	653	1611	1325	88	APR 31-1	T	T	FEB 10								15.2	E	SEP 4+	5.6				116	0	69	33	47	0	5	0
DAYTONA BEACH	26.8	16.7	21.7	35.6	MAY 28	- 1.1	DEC 22	449	1746	1123	50	SEP 13	0	0		82	84	59	72	3.9	.5	11	15.6	9	OCT [illegible]	[illegible]	86	145	134	118	0	76	32	66	0	6	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature							Heating degree days	Cooling degree days	Precipitation						Relative humidity				Wind						Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes									Snow†										Fastest mile (1.6 kilometers)				Sunrise to sunset							Max temp.		Min. temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date			Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00am EST	7:00am EST	1:00pm EST	7:00pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date		Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow† 25.4mm or more	Thunderstorms	Heavy fog	32.2°C and above	0°C and below	0°C and below	-17.8°C and below
FLORIDA	°C	°C	°C.	°C		°C		Base 18.3°C	Base 18.3°C	Mm	Mm		Mm.	Mm.		%	%	%	%	Mps	M.ps		M.ps			Tenths											
FORT MYERS	29.0	17.9	23.5	36.1	MAY 31+	.0	DEC 23	222	2164	1126	141	SEP 11	0	0		88	90	56	73	3.6	.9	8	14.3	31	FEB 10	5.4	105	159	101	95	0	79	25	121	0	1	0
JACKSONVILLE	26.4	14.2	20.3	35.6	JUL 17+	-3.9	DEC 22	706	1502	1792	210	APR 3-4	T	T	FEB 10	88	89	57	76	3.4	.1	7	21.5	W	APR 25	5.9	88	146	131	122	0	85	38	81	0	15	0
KEY WEST	27.9	22.9	25.4	33.3	JUL 8	10.6	FEB 12+	43	2697	832	65	AUG 29-30	0	0		78	79	68	74	5.1	2.7	9	20.1	W	FEB 9	5.8	84	162	119	111	0	70	1	15	0	0	0
LAKELAND U	27.2	17.2	22.2	34.4	JUL 17+	-1.1	DEC 22+	357	1818	1153	67	MAR 25	0	0												5.4	105	161	99	119	0			83	0	2	0
MIAMI	27.8	21.1	24.5	32.8	MAY 10	3.9	DEC 22	111	2408	1352	69	AUG 30-31	0	0		80	84	63	71	4.1	1.7	9	17.9	11	SEP 6	6.1	62	171	132	141	0	71	7	13	0	0	0
ORLANDO	28.3	17.6	22.9	37.2	MAY 29	-.6	DEC 22	312	2067	1406	156	SEP 26-27	0	0		84	86	54	69	3.9	.3	8	15.6	19	APR 1	5.8	88	155	122	117	0	85	27	113	0	2	0
PENSACOLA	25.4	16.0	20.7	35.6	AUG 21+	-3.9	DEC 22+	738	1686	1839	123	JUL 28	48	48	FEB 9-10	82	84	62	71	3.9	.4	10	15.6	20	APR 7	5.9	99	116	150	122	1	84	36	92	0	15	0
TALLAHASSEE	26.4	13.4	19.9	35.0	AUG 21+	-8.3	DEC 23	872	1508	2230	120	APR 3-4	10	10	FEB 10	90	91	58	72	3.0	.3	11	13.0	29	MAY 26	5.9	88	139	138	122	0	105	38	87	0	32	0
TAMPA	27.7	17.3	22.6	35.0	MAY 30	-1.1	DEC 18+	366	1967	1263	81	MAR 25	0	0		82	85	56	68	3.9	.6	9	13.0	29	FEB 10	5.8	90	147	128	107	0	91	16	96	0	6	0
WEST PALM BEACH	28.6	19.7	24.2	34.4	MAY 25	2.2	DEC 22	140	2339	1390	71	JUL 21-22	0	0		76	77	58	69	4.2	1.4	10	14.8	29	JAN 29	6.4	65	155	145	136	0	92	9	70	0	0	0
GEORGIA																																					
ATHENS	22.3	10.5	16.4	35.0	SEP 9+	-9.4	DEC 22	1562	935	1279	114	MAY 28	137	69	JAN 7-8	83	89	58	69	3.1	.4	28	13.0	26	NOV 21	5.8	114	105	146	116	3	63	46	31	3	51	0
ATLANTA	21.7	10.8	16.3	33.3	SEP 9+	-8.9	FEB 17+	1614	930	1401	99	JAN 7-8	25	25	JAN 7	79	84	57	65	4.0	.3	27	18.8	W	MAY 19	6.2	95	101	169	105	1	58	38	16	5	55	0
AUGUSTA	24.2	10.7	17.4	36.1	JUL 30	-12.8	FEB 12	1381	1112	1108	68	APR 7	366	348	FEB 9-10	82	84	51	66	3.0	.4	27	15.6	30	NOV 21	5.9	103	112	150	119	2	77	31	62	0	56	0
COLUMBUS	24.2	12.4	18.3	36.1	JUL 4	-11.7	FEB 11	1209	1265	1519	86	DEC 25-26	356	356	FEB 9-10	87	90	56	66	3.2	.4	3	16.5	31	NOV 21+	5.7	109	107	149	115	2	62	23	70	0	42	0
MACON	25.1	12.1	18.6	37.2	JUL 30+	-12.8	FEB 11	1171	1338	1231	77	JAN 31-1	419	419	FEB 9-10	84	88	56	65	3.4	.1	29	22.8	NW	NOV 21	6.0	102	102	161	106	2	52	32	96	0	42	0
ROME	22.3	9.6	16.0	35.0	SEP 9+	-11.1	JAN 13	1776	980	1578	101	MAY 27-28	15	15	DEC 20															118	0			55	3	77	0
SAVANNAH	25.1	13.7	19.4	36.1	JUL 29	-7.2	FEB 12	946	1399	1153	84	JUN 10-11	81	81	FEB 10	85	87	56	70	3.4	.3	25	17.9	W	MAR 17	6.1	95	116	154	107	1	58	40	52	0	26	0
HAWAII																																					
HILO	27.7	19.1	23.4	31.7	OCT 4	14.4	FEB 6+	0	1891	2742	171	NOV 12-13	0	0		84	69	85	89	3.0	.1	18	13.4	NW	DEC 8	7.4	24	134	207	290	0	6	0	0	0	0	0
HONOLULU	29.1	21.1	25.1	32.8	OCT 5+	12.8	JAN 1	0	2523	362	47	NOV 28-29	0	0		70	54	68	74	5.7	4.8	6	14.8	NE	MAR 9+	5.9	66	197	102	110	0	8	0	10	0	0	0
KAHULUI	28.3	19.1	23.7	35.6	OCT 5	10.0	FEB 5	0	2021	261	43	DEC 1-2	0	0		71	54	71	78	6.1	5.2	5	16.1	NE	MAR 9+	4.9	150	124	91	86	0	3	0	2	0	0	0
LIHUE	27.3	21.2	24.3	30.6	SEP 6+	12.8	JAN 1	1	2220	896	209	NOV 19-20	0	0		79	67	79	82	5.5	4.5	5	14.8	NE	DEC 10	6.5	34	195	136	201	0	7	0	0	0	0	0
IDAHO																																					
BOISE	17.9	5.3	11.6	39.4	JUL 10+	-11.7	JAN 27	2884	494	289	29	APR 13-14	546	124	NOV 25-26	46	38	55	62	4.2	.1	14	21.0	SE	JUN 22	5.8	120	81	164	93	7	7	10	49	9	93	0
LEWISTON	18.2	5.8	12.0	41.7	JUN 22	-18.3	JAN 8	2784	545	314	28	OCT 31	478	109	FEB 10	57	45		73				21.5		DEC 24+	6.4	100	70	195	88	5			55	9	84	1
POCATELLO	15.0	1.1	8.1	38.3	JUL 10	-25.6	JAN 4	3952	268	347	23	SEP 1-2 +	1252	140	MAR 11	51	42	58	67	4.5	2.2	23	21.0	SW	DEC 30	6.1	106	88	171	102	15	15	18	31	34	160	11
ILLINOIS																																					
CAIRO U	19.7	11.1	15.4	35.6	JUL 3	-13.9	DEC 21	1984	999	1490	75	NOV 23-24	122	69	DEC 19-20								26.8	SW	JUN 2					133	2			33	15	54	0
CHICAGO O HARE	15.4	6.2	10.8	35.0	AUG 27+	-17.8	JAN 10	3193	526	968	55	SEP 24-25	818	170	DEC 15-16	80	83	63	68	4.6	.8	23	16.5	27	MAY 10	6.7	75	94	196	142	10	40	24	13	34	100	1
CHICAGO MIDWAY	15.9	6.8	11.3	36.1	AUG 27+	-18.9	DEC 22	3118	639	965	44	OCT 12-13	1074	211	DEC 19	76	80	61	65	4.3	.7	21	18.8	SE	APR 19	6.8	78	96	191	146	15	47	14	29	33	95	2
MOLINE	15.8	5.8	10.8	36.1	JUN 16	-26.1	FEB 17	3222	553	1432	148	APR 20-21	554	117	FEB 14-15	79	81	62	66	4.6	.7	23	25.5	SE	JUN 18	6.5	87	93	185	136	8	45	19	21	39	107	10
PEORIA	16.2	6.1	11.2	34.4	AUG 27+	-24.4	DEC 21	3103	554	1276	54	JUL 19-20	620	259	DEC 18-19	81	84	65	69	4.2	.7	20	24.1	NW	JUN 16	6.8	82	78	205	142	8	56	25	12	38	104	8
ROCKFORD	14.9	5.2	10.1	34.4	AUG 27	-23.9	FEB 17	3399	460	1435	141	APR 20-21	848	168	DEC 13	85	87	67	70	4.6	.3	23	16.5	36	JUN 16	6.7	83	85	197	144	10	43	27	13	33	109	11
SPRINGFIELD	17.5	7.1	12.3	35.6	AUG 27+	-27.2	DEC 21	2816	678	1125	89	OCT 2-3	734	277	DEC 19	82	86	64	68	4.9	1.1	21	20.1	SW	DEC 4+	6.4	99	80	186	133	6	54	25	23	31	93	4

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Temperature							Heating degree days	Cooling degree days	Precipitation						Relative humidity				Wind						Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes									Snow †										Fastest mile (1.6 kilometers)				Sunrise to sunset							Max temp.		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date			Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00am EST	7:00am EST	1:00pm EST	7:00pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date		Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow † 25.4mm or more	Thunderstorms	Heavy fog	32.2°C and above	0°C and below	0°C and below	-17.8°C and below
INDIANA	°C	°C	°C	°C		°C		Base 18.3°C	Base 18.3°C	Mm	Mm		Mm	Mm		%	%	%	%	Mps	Mps		Mps			Tenths											
EVANSVILLE	19.4	8.9	14.2	35.6	JUL 3	-17.2	DEC 22+	2327	871	1173	67	AUG 12-13	328	145	DEC 14-15	81	84	62	65	3.7	.7	22	19.7	SW	JUN 4	6.4	89	93	183	131	2	46	11	39	21	86	0
FORT WAYNE	16.1	5.8	11.0	33.9	JUL 13	-24.4	FEB 17	3124	516	877	39	MAR 16-17	1146	318	MAR 16-17	81	83	63	68	4.7	1.2	24	21.0	W	JUN 26	7.0	75	76	214	138	12	42	21	17	37	115	3
INDIANAPOLIS	17.7	7.1	12.4	33.9	JUL 3	-20.6	DEC 22	2727	642	1075	106	JUL 20-21	833	292	DEC 19-20	82	85	63	68	4.4	.9	21	19.7	SW	MAR 11	6.8	71	100	194	138	6	49	18	17	28	100	1
SOUTH BEND	16.1	6.9	11.5	35.6	AUG 28	-18.3	FEB 17	2966	543	884	51	APR 21-22	1171	282	DEC 19-20	79	82	63	67	4.6	1.3	22	15.6	24	JAN 4+	7.2	56	97	212	152	16	42	23	14	30	94	1
IOWA																																					
BURLINGTON	16.0	6.2	11.1	33.9	JUN 16	-21.7	DEC 21	3114	555	1273	96	MAY 26-27	366	25	FEB 14+	79	82	65	68	4.3	.6	23	19.2	34	JUL 4	6.5	[illegible]	91	184	122	5	49	24	10	37	105	8
DES MOINES	15.6	6.1	10.9	35.0	JUN 8	-23.3	JAN 9	3291	640	1148	78	SEP 27-28	1133	264	APR 8-9	77	80	64	64	4.6	.2	24	21.9	SW	JUN 16	6.5	93	86	186	129	13	54	22	23	49	107	13
DUBUQUE	13.7	4.6	9.1	33.9	AUG 27	-25.0	FEB 17	3666	381	1005	69	JUL 3-4	917	371	APR 8-9		77	63												138	11			8	56	119	14
SIOUX CITY	15.7	4.7	10.2	37.2	AUG 26	-26.7	DEC 31	3464	571	708	64	JUL 9	587	119	JAN 21	74	79	59	58	5.0	.2	5	23.2	N	JUN 18	6.3	93	96	176	99	7	36	24	32	49	125	12
WATERLOO	14.2	3.9	9.1	34.4	JUL 12+	-27.2	FEB 17+	3775	460	977	73	MAY 27-28	803	157	APR 9	75	79	61	63	5.1	.1	19	17.0	34	JUN 16	6.7	80	91	194	115	8	40	23	16	55	132	18
KANSAS																																					
CONCORDIA	17.4	6.2	11.8	39.4	JUN 24	-22.8	JAN 9	2994	693	1128	81	SEP 25-26	587	114	JAN 2-3	80	87	64	63	5.3	.6	17	20.6	S	APR 19	5.5	129	87	149	110	8	57	22	43	29	107	6
DODGE CITY	18.8	5.9	12.4	41.1	AUG 25	-20.0	JAN 9	2947	847	823	65	MAR 10	709	109	DEC 4	69	74	51	50	5.9	.7	21	25.0	NW	MAY 27	5.4	122	106	137	101	8	53	32	67	21	120	4
GOODLAND	17.2	2.9	10.1	41.1	JUL 6	-23.9	DEC 31	3412	465	532	43	SEP 11-12	1527	183	MAR 30-31	56	55	78	85	5.9	.9	26	24.1	32	MAY 27	5.4	126	112	127	97	16	44	35	47	28	167	8
TOPEKA	18.1	6.8	12.5	36.1	JUL 18+	-22.8	JAN 9	2778	713	1547	106	JUL 18-19	775	229	DEC 30	82	86	64	65	4.4	.4	20	19.2	NE	JUL 2+	6.1	111	93	161	116	7	59	21	36	23	99	5
WICHITA	19.1	7.3	13.2	40.0	AUG 25	-21.7	JAN 9	2651	862	1066	80	OCT 10-11	734	152	JAN 21	79	85	60	61	5.5	.7	19	21.0	N	JUL 24	5.6	119	103	143	102	7	53	17	61	18	100	6
KENTUCKY																																					
COVINGTON	17.6	7.3	12.4	33.3	AUG 30	-15.6	FEB 17+	2658	581	1256	68	JUL 3-4	297	56	MAR 17	84	86	65	71	3.8	1.2	22	17.9	21	DEC 26	6.8	76	93	196	146	5	58	28	9	22	94	0
LEXINGTON	18.9	8.4	13.7	33.9	SEP 4+	-16.1	FEB 17	2334	705	1293	78	JUN 27	185	56	DEC 15	80	84	63	68	4.0	1.3	20	14.3	21	DEC 26+	6.8	78	96	191	140	2	53	21	16	18	80	0
LOUISVILLE	19.3	9.4	14.4	34.4	SEP 4+	-13.3	FEB 17	2228	858	1371	136	JUL 21-22	224	46	DEC 14-15	77	81	60	62	3.9	1.0	21	20.1	SW	DEC 26	6.6	82	96	187	143	3	52	7	27	19	77	0
LOUISIANA																																					
ALEXANDRIA	24.2	12.6	18.4	35.6	JUL 19	-7.8	JAN 13	1164	1260	1930	116	MAR 23-24	61	36	JAN 11	91		61	73	3.1	.4	18	12.1	19	DEC 12+	5.6	119	102	144	130	2	74	39	54	1	34	0
BATON ROUGE	25.9	14.8	20.4	36.1	JUL 16	-5.0	JAN 13	844	1651	2007	160	SEP 12	61	46	FEB 9	83	86	58	65	3.7	.6	13	15.6	32	MAY 24	5.9	98	117	150	121	1	80	34	90	0	21	0
LAKE CHARLES	24.8	15.1	19.9	35.0	JUL 20	-4.4	DEC 21	842	1493	1906	200	SEP 4-5	102	10	JAN 11-12	89	91	65	74	4.2	1.2	12	19.7	6	APR 17	5.8	105	104	156	123	1	96	42	44	0	17	0
NEW ORLEANS	25.6	15.4	20.5	35.6	JUL 17	-6.1	JAN 13	803	1659	2014	132	MAR 23-24	18	15	FEB 9	83	86	63	69	4.1	.5	12	24.6	36	MAY 24	5.8	110	104	151	136	0	75	16	70	0	18	0
SHREVEPORT	24.1	12.4	18.2	35.6	AUG 21	-7.8	DEC 21	1167	1197	1477	88	JUL 7	15	15	JAN 11	82	86	58	63	3.1	.6	19	15.6	27	MAY 7	5.9	103	105	157	111	0	62	24	57	3	32	0
MAINE																																					
CARIBOU	9.7	-.4	4.7	31.1	JUL 25+	-35.6	JAN 10	5083	171	1083	71	DEC 16-17	2946	246	APR 5-6		82	64	72							7.5	54	68	243	163	27			0	80	175	35
PORTLAND	13.2	3.6	8.4	33.9	SEP 3+	-24.4	JAN 9	3826	279	1328	134	APR 1-2	665	201	JAN 28-29	82	80	61	74	3.8	.9	29	17.0	SE	DEC 9	6.7	85	93	187	140	7	16	59	8	33	131	7
MARYLAND																																					
BALTIMORE	18.4	7.9	13.2	37.2	AUG 28	-13.3	FEB 18	2488	677	1164	46	APR 25-26	241	175	DEC 16-17	75	79	58	63	3.8	1.1	28	20.6	W	MAR 17	6.2	103	96	166	120	3	24	26	27	11	84	
MASSACHUSETTS																																					
BLUE HILL OBS R	14.8	5.6	10.2	33.3	AUG 30+	-18.9	JAN 8	3263	369	1312	84	DEC 16-17	318	74	JAN 4	78	82	65	71				29.9	S	DEC 21					123	6			9	25	107	3
BOSTON	15.8	7.5	11.7	37.2	AUG 30	-17.2	JAN 8	2855	502	1086	70	DEC 16-17	163	43	JAN 4	70	70	56	64	4.9	1.6	28	21.9	SW	SEP 6	6.4	86	103	176	125	3	17	29	19	21	76	0
WORCESTER	14.2	4.4	9.3	32.2	AUG 31+	-20.6	JAN 30+	3551	343	1454	90	OCT 29-30	645	353	JAN 28-29	74	74	59	67	4.6	2.1	28	17.9	30	JAN 20	6.6	67	122	176	119	4	24	95	5	31	128	8

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature							Heating degree days	Cooling degree days	Precipitation						Relative humidity				Wind						Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes									Snow †										Fastest mile (1.6 kilometers)				Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date			Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00am EST	7:00am EST	1:00pm EST	7:00pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date		Clear, 0-.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow † 25.4mm or more	Thunderstorms	Heavy fog	32.2°C and above	0°C and below	0°C and below	– 7.8°C and below
MICHIGAN	°C	°C	°C	°C		°C		Base 18.3°C	Base 18.3°C	Mm	Mm		Mm	Mm.		%	%	%	%	Mps	Mps		M.ps			Tenths											
ALPENA	12.1	1.4	6.8	33.9	AUG 29+	- 27.2	FEB 17	4327	187	879	68	AUG 1-2	1643	211	MAR 17-18	82	83	62	69	3.2	.4	26	14.8	SW	APR 16+	7.0	65	105	195	147	20	34	42	8	61	166	19
DETROIT	14.9	6.8	10.8	35.6	AUG 28	- 17.2	FEB 17	3193	544				838			72	75	60	63	4.8	1.1	25	15.6	20	OCT 2+						13	29	10	14	41	105	[illegible]
DETROIT METRO.	15.2	5.5	10.4	35.6	AUG 28	- 20.0	FEB 17	3257	432	866	38	JUL 20	1064	241	DEC 19-20	82	85	64	69	4.9	1.1	26	38.9	SW	JUN 26	6.9	72	109	184	121	12	33	22	9	39	113	3
FLINT	14.2	4.8	9.5	34.4	AUG 27	- 25.6	FEB 17	3474	326	848	44	SEP 17-18	1372	320	MAR 17	81	84	63	68	4.6	1.3	24	14.3	2	MAR 17	7.1	55	111	199	135	14	30	16	9	43	119	3
GRAND RAPIDS	14.6	4.6	9.6	35.0	AUG 26	- 28.3	FEB 17	3526	427	875	43	SEP 17	1377	216	MAR 16-17	80	82	62	66	4.5	.8	22	19.7	SW	JAN 4+	7.5	52	87	226	140	19	36	28	14	48	124	5
HOUGHTON LAKE	12.3	2.2	7.3	33.3	AUG 27	- 31.1	FEB 17	4183	219	679	49	MAY 25	1405	157	APR 9-10	84	86	66	70	4.0	.8	27	13.4	22	APR 16	7.2	63	92	210	135	20	37	32	2	66	149	17
LANSING	14.4	3.8	9.1	37.2	AUG 28	- 24.4	FEB 17	3647	365	808	40	NOV 14-15	1748	394	MAR 16-17	83	85	64	70	4.4	1.2	24	18.8	SW	JAN 4	7.1	62	105	198	135	17	34	24	14	47	130	8
MARQUETTE U	10.4	3.0	6.7	36.7	AUG 27+	- 19.4	JAN 10	4373	216	804	61	MAY 1-2	1750	198	DEC 4-5								16.5	SW	APR 15	7.4	56	88	221	156	23			7	73	143	4
MUSKEGON	13.6	4.8	9.2	31.7	SEP 3+	- 25.6	FEB 17	3576	318	797	43	AUG 17	1857	196	APR 9-10	80	83	65	69	5.0	.8	22	18.3	33	MAR 17	7.2	70	70	225	135	24	36	29	0	49	124	3
SAULT STE MARIE	10.0	.8	5.4	33.9	AUG 28	- 26.7	FEB 16	4768	122	926	43	MAY 1-2	1969	206	NOV 8-9	86	87	72	76	4.0	.2	35	17.0	NW	OCT 15+	7.4	61	80	224	163	28	29	71	1	71	158	22
MINNESOTA																																					
DULUTH	9.1	- .8	4.2	32.8	JUL 6	- 35.0	JAN 7	5198	97	814	74	OCT 9-10	1064	102	JAN 3	83	86	69	70	4.2		26	19.2	W	OCT 13	6.8	71	105	189	133	17	38	72	2	99	188	36
INTERNATIONAL FALLS	10.3	- 1.7	4.3	35.6	JUL 6	- 41.1	FEB 16	5224	186	717	86	SEP 31-1	658	122	DEC 8-9	71	75	59	58	4.0	.3	24	15.6	31	JUL 7+	6.7	78	97	190	112	7	35	26	7	96	193	51
MINNEAPOLIS	13.1	3.3	8.2	36.7	JUN 10	- 31.1	DEC 31	4063	427	537	43	NOV 19-20	1100	175	JAN 3	73	78	60	60	4.6	.1	28	19.7	NE	APR 9	6.6	83	97	185	110	14	40	12	13	67	138	19
ROCHESTER	12.5	2.3	7.4	33.9	JUN 10+	- 31.1	DEC 31	4238	311	1039	64	AUG 22-23	1234	216	JAN 3	82	85	68	72	5.8	.6	23	19.2	13	JUN 19	.7	78	95	192	124	13	41	28	6	69	150	26
ST CLOUD	12.3	.5	6.4	34.4	JUN 9	- 32.8	FEB 16	4517	246	640	51	OCT 9-10	523	89	JAN 3		85	62	65							6.7	87	88	190	112	8			6	73	171	32
MISSISSIPPI																																					
JACKSON	24.7	12.7	18.7	36.7	AUG 11	- 10.6	JAN 13	1198	1414	1398	126	APR 15-16	8	8	DEC 20	82	87	57	64	3.3	.7	16	18.8	NW	NOV 4	5.6	116	108	141	117	0	76	24	83	0	40	0
MERIDIAN	25.1	12.3	18.7	35.0	JUL 23	- 8.3	JAN 13	1137	1322	2007	207	DEC 25-26	5	5	DEC 20	80	84	53	64	2.3	.3	14	13.0	27	MAY 23	5.9	100	118	147	108	0	75	31	73	1	37	0
MISSOURI																																					
COLUMBIA REGIONAL	17.7	7.7	12.7	36.7	AUG 25	- 21.7	DEC 31	2690	709	1283	54	JUL 20-21	800	284	DEC 30	78	82	64	67				22.4	W	MAY 7	6.5	88	87	190	131	6	64	26	26	28	83	6
KANSAS CITY	17.3	7.7	12.5	36.1	AUG 25	- 22.2	DEC 31+	2755	684	1404	125	OCT 10-11	521	127	DEC 30 +	79	62	62	74	4.5	.7	19	31.3	NW	JUL 2	5.9	114	84	167	114	7	54	24	26	29	90	6
ST JOSEPH	18.0	7.0	12.5	36.7	JUN 25	- 25.0	JAN 9	2785	726	1412						74	77	58	59	4.1		27	15.6	30	AUG 11	6.0	115	77	173	101				44	27	101	8
ST LOUIS	18.7	7.8	13.3	35.0	AUG 25+	- 21.1	DEC 21	2541	775	1011	54	JUN 18-19	810	305	DEC 19	86	91	66	69	4.4	1.0	21	19.2	N	JUN 18	6.3	92	105	168	134	6	52	16	42	24	88	2
SPRINGFIELD	19.7	7.7	13.7	37.2	AUG 24	- 20.6	JAN 12	2371	741	1509	114	NOV 24	465	130	JAN 7	81	84	61	64	4.6	1.4	19	17.4	S	DEC 4+	5.9	105	101	159	136	5	68	27	39	14	82	5
MONTANA																																					
BILLINGS	14.2	2.5	8.4	38.3	JUL 10	- 28.3	JAN 4	3891	328	410	32	SEP 31-1	1969	244	APR 19-20	50	43	56	63	5.2	2.2	26	19.2	NW	NOV 12	6.4	91	99	175	96	22	15	16	28	38	150	10
GLASGOW	13.3	.2	6.8	38.9	AUG 16+	- 31.1	DEC 30	4456	299	284	52	JUN 30	533	79	DEC 22-23	55	48	67	74				16.1	29	OCT 18	6.2	82	115	168	80	8	21	18	26	69	175	28
GREAT FALLS	14.3	1.7	8.0	40.6	JUL 10	- 27.8	JAN 8	4011	317	309	43	APR 19-20	1692	427	APR 20	45	40	53	60	5.9	3.6	23	21.5	SW	OCT 13	7.1	61	91	213	92	14	11	11	29	44	152	20
HAVRE	14.3	- .4	6.9	40.6	JUL 10	- 28.9	JAN 8	4327	257	298	41	APR 19-20	1321	376	APR 19-20	49	45	62	70				23.2	NW	AUG 13	6.4	92	92	181	72	15	26	7	34	50	176	34
HELENA	13.2	- .7	6.3	38.9	JUL 10	- 31.1	JAN 10+	4506	173	159	18	MAY 24-25	1011	183	OCT 31	48	40	56	65	3.6	2.1	27	19.7	NW	JUN 18	6.8	76	85	204	68	10	15	5	18	46	190	19
KALISPELL	13.7	- .3	6.7	38.9	JUL 10	- 29.4	JAN 9+	4321	143	301	23	JUN 14-15	1191	150	FEB 10-11	54	47	67	75	2.9	.6	20	15.6	24	NOV 16+	7.0	78	63	224	120	17	12	24	28	42	183	13
MILES CITY	14.7	1.7	8.2	39.4	AUG 17+	- 29.4	JAN 9	4019	402	448			528			55	50	67	76	4.8	.9	31								81	8	19	8	29	46	158	16
MISSOULA	14.4	.6	7.6	40.6	JUL 10	- 28.3	JAN 10	4066	193	229	30	JUN 14-15	978	185	DEC 27-28	59	48	67	79	3.1	.7	30	20.1	SW	AUG 13	6.9	80	69	216	102	11	9	16	32	37	184	7
NEBRASKA																																					
GRAND ISLAND	15.8	4.4	10.1	41.1	JUN 24	- 28.9	DEC 31	3522	592	806	65	SEP 28-29	1163	188	DEC 18-19	75	80	58	58	5.4	.4	26	20.6	17	APR 19	5.9	121	85	159	113	14	43	25	43	43	135	14
LINCOLN	16.3	4.5	10.4	38.3	JUL 1+	- 28.9	DEC 31	3406	586	996	69	MAY 26-27	861	264	DEC 18-19	83	62	63	79	4.5	.2	35	22.8	NW	JUL 1	6.1	111	78	176	114	11	49	15	35	38	130	14

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Temperature							Heating degree days	Cooling degree days	Precipitation						Relative humidity				Wind						Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes									Snow†										Fastest mile (1.6 kilometers)				Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Monthly	Highest*	Date	Lowest*	Date			Total	Greatest in 24 hours	Date(s)	Total	Greatest in 24 hours	Date(s)	1:00am EST	7:00am EST	1:00pm EST	7:00pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date		Clear, 0.0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow† 25.4mm or more	Thunderstorms	Heavy fog	32.2°C and above	0°C and below	0°C and below	-17.8°C and below
NEBRASKA	°C	°C	°C	°C		°C		Base 18.3°C	Base 18.3°C	Mm	Mm		Mm	Mm		%	%	%	%	Mps	Mps		Mps			Tenths											
NORFOLK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DEC 31+	3636	557	743	[illegible]	MAY 26-27	706	117	JAN [illegible]		[illegible]	[illegible]	60							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	48	[illegible]	[illegible]
NORTH PLATTE	[illegible]	1.6	8.9	[illegible]	[illegible]	[illegible]	JAN 9	[illegible]	[illegible]	552	60	MAY 25-26	658	147	DEC 24	76	81	55	[illegible]	4.3	.5	[illegible]	[illegible]	NW	MAY [illegible]	5.9	[illegible]	[illegible]	48	[illegible]	8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OMAHA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JAN 6	[illegible]	614	974	117	[illegible] 25-26	953	142	JAN 3	[illegible]	85	64	64	[illegible]		34	[illegible]	N	MAY 9	6.1	113	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	110	[illegible]
SCOTTSBLUFF	[illegible]	[illegible]	8.6	[illegible]	[illegible]	[illegible]	JAN [illegible]	3837	356	[illegible]	58	JUN 19-20	[illegible]	[illegible]	NOV 2-3	49	47	70	78	3.9	[illegible]	[illegible]	[illegible]	[illegible]	MAY [illegible]	[illegible]	[illegible]	96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
VALENTINE	[illegible]	[illegible]	[illegible]	41.1	[illegible]	[illegible]	JAN [illegible]	[illegible]	[illegible]	591	63	MAY 26-27	752	168	NOV 3-4 +								[illegible]	[illegible]	FEB [illegible]	[illegible]	[illegible]	[illegible]	138	[illegible]	9			[illegible]	[illegible]	[illegible]	[illegible]
NEVADA																																					
ELKO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JAN [illegible]	3852	[illegible]	231	16	APR 28-29	1011	135	DEC 26-27	43	[illegible]	52	51	[illegible]	[illegible]	26	14.3	[illegible]	JUN 17	5.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	174	[illegible]
ELY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JAN [illegible]	4421	111	[illegible]	23	AUG 3-4	1859	160	NOV 2-3	43	39	56	64	4.5	1.8	21	[illegible]	SW	NOV [illegible]	5.8	[illegible]	[illegible]	148	91	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LAS VEGAS	[illegible]	[illegible]	18.8	[illegible]	[illegible]	[illegible]	JAN [illegible]	1511	1753	119	13	FEB 6	8	8	JAN 9	28	22	33	39	4.5	1.5	24	[illegible]	NW	APR 17	[illegible]	[illegible]	88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36	[illegible]
RENO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JAN [illegible]	3241	212	234	23	DEC 30-1	[illegible]	183	FEB 10-11	43	32	53	69	3.1	.8	27	[illegible]	SW	MAY [illegible]	[illegible]	[illegible]	[illegible]	118	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	180	[illegible]
WINNEMUCCA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JAN 8+	[illegible]	[illegible]	[illegible]	17	MAY 31	742	99	JAN 20-21	47	36	58	68	3.7	[illegible]	26	[illegible]	SW	DEC 11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4	[illegible]	11	[illegible]	[illegible]
NEW HAMPSHIRE																																					
CONCORD	[illegible]	1.8	[illegible]	[illegible]	JUN 11	[illegible]	FEB 1	[illegible]	358	1068	94	AUG 2	[illegible]	[illegible]	JAN 28-29	85	84	58	69	[illegible]	1.1	[illegible]	14.3	NW	APR 6+	6.6	75	[illegible]	183	[illegible]	9	[illegible]	[illegible]	[illegible]	44	[illegible]	[illegible]
MT WASHINGTON	[illegible]	[illegible]	-1.9	[illegible]	JUL 8	[illegible]	JAN 31	[illegible]	[illegible]	3083	165	JUN [illegible]	9192	658	MAR 18-19	86	84	84	87	15.1			[illegible]	NW	JAN 7	8.2	42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
NEW JERSEY																																					
ATLANTIC CITY	[illegible]	[illegible]	[illegible]	[illegible]	AUG 28	[illegible]	FEB 18+	2486	591	[illegible]	99	SEP 14-15	13	10	FEB 16	79	79	55	70	4.7	1.2	27	[illegible]	[illegible]	MAR 17	[illegible]	81	[illegible]	159	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NEWARK	[illegible]	[illegible]	[illegible]	[illegible]	AUG [illegible]	[illegible]	FEB [illegible]	[illegible]	814	1176	77	OCT 29	102	43	DEC [illegible]	71	[illegible]	52	60	4.5	1.4	28	[illegible]	[illegible]	NOV 1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]
TRENTON	[illegible]	[illegible]	[illegible]	[illegible]	AUG [illegible]	[illegible]	FEB 17	[illegible]	695	1210	80	OCT 28-29	[illegible]	91	DEC 16-17								21.5	NW	NOV 1	[illegible]	[illegible]	[illegible]	168	114	[illegible]			24	15	[illegible]	[illegible]
NEW MEXICO																																					
ALBUQUERQUE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DEC [illegible]	2697	706	276	28	MAR 29-30	871	272	MAR 29-30	38	30	51	64	4.1	.2	32	[illegible]	NW	APR 18	[illegible]	169	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CLAYTON	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DEC 31	2959	[illegible]	331	42	APR 24-25	[illegible]	229	MAR 29-30	43	42		72							[illegible]	[illegible]	97	103	76	[illegible]			[illegible]	15	[illegible]	[illegible]
ROSWELL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DEC [illegible]	1911	816	[illegible]	36	MAR 9-10	404	119	FEB 22	40	31	52	65	4.2	.8	22	[illegible]	NW	MAR 13	[illegible]	[illegible]	[illegible]	68	44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NEW YORK																																					
ALBANY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-29.4	FEB 18	[illegible]	418	984	81	JUN 29-30	1087	239	DEC 17	81	82	57	69	[illegible]	1.2	26	15.6	NW	JAN 29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14
BINGHAMTON	13.2	[illegible]	8.6	[illegible]	[illegible]	[illegible]	FEB [illegible]	3742	278	847	40	DEC 4-5	1425	340	DEC 21-22	79	83	64	70	4.2	1.6	24	18.3	[illegible]	MAR 17	7.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BUFFALO	[illegible]	[illegible]	[illegible]	[illegible]	SEP 4+	-20.6	FEB 17	3469	[illegible]	936	42	NOV 15	[illegible]	[illegible]	MAR 17-18	78	[illegible]	62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	W	DEC [illegible]	[illegible]	38	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	46	[illegible]	4
NEW YORK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-13.9	FEB 17	2454	716	1454	93	OCT 29	142	58	DEC 16-17	70	73	[illegible]	61	3.6	.8	[illegible]	14.8	NE	APR 26					[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
NEW YORK KENNEDY	[illegible]	[illegible]	[illegible]	[illegible]	AUG 28	[illegible]	FEB [illegible]	2522	513	1068	57	JUN 29-30	53	20	FEB 16-17+	74	75	59	69	6.1	1.4	28	[illegible]	16	MAY 28	[illegible]	94	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44	[illegible]	[illegible]	[illegible]	[illegible]
NEW YORK LA GUARDIA	[illegible]	[illegible]	[illegible]	[illegible]	AUG 28	[illegible]	FEB [illegible]	2486	683	1269	93	JUN 21-22	104	51	DEC 16-17	69	[illegible]	55	51	[illegible]	[illegible]	[illegible]	17.9	NE	DEC 9+	6.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ROCHESTER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	FEB [illegible]	[illegible]	[illegible]	[illegible]	40	NOV 15-16	1544	191	DEC 16-17	82	81	58	69	4.4	1.8	26	[illegible]	SW	JUN 6	7.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SYRACUSE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	FEB [illegible]	3486	442	[illegible]	56	JUN 12-13	2040	340	DEC 17-18	85	85	65	74	[illegible]	[illegible]	[illegible]	[illegible]	W	OCT 14	7.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NORTH CAROLINA																																					
ASHEVILLE	19.8	7.4	13.6	[illegible]	[illegible]	[illegible]	JAN [illegible]	2186	538	1649	126	MAY 27-28	[illegible]	180	JAN 7-8	88	91	59	[illegible]	3.8	.7	[illegible]	[illegible]	34	[illegible]	[illegible]	[illegible]	116	[illegible]	[illegible]	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CAPE HATTERAS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	FEB 19	[illegible]	1018	1195	90	DEC 20-21	132	81	FEB 9-10	84	84	65	79	[illegible]	1.3	[illegible]	[illegible]	[illegible]	FEB [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CHARLOTTE	[illegible]	[illegible]	15.4	[illegible]	[illegible]	[illegible]	FEB 12	1851	852	1121	74	FEB 1-2	[illegible]	[illegible]	JAN [illegible]	[illegible]	85	57	63	3.8	.3	25	[illegible]	SW	MAR [illegible]	6.1	[illegible]	[illegible]	[illegible]	116	[illegible]	45	[illegible]	[illegible]	4	[illegible]	[illegible]
GREENSBORO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JAN 9	2178	746	1188	78	MAY 27-28	401	170	DEC 16-17	83	86	58	67	3.2	.5	[illegible]	[illegible]	SW	APR 9	[illegible]	97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
RALEIGH	[illegible]	[illegible]	15.4	[illegible]	JUN 17	-14.4	FEB 12	1814	821	[illegible]	87	JUN 28-29	[illegible]	145	JAN 8	82	86	56	69	[illegible]	.4	24	[illegible]	29	MAY 28	[illegible]	[illegible]	[illegible]	163	[illegible]	[illegible]	[illegible]	41	[illegible]	[illegible]	[illegible]	[illegible]

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Temperature							Heating degree days	Cooling degree days	Precipitation						Relative humidity				Wind						Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes									Snow †										Fastest mile (1.6 kilometers)				Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date			Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00 am EST	7:00 am EST	1:00 pm EST	7:00 pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date		Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow † 25.4mm or more	Thunderstorms	Heavy fog	32.2 °C and above	0 °C and below	0 °C and below	-17.8 °C and below
NORTH CAROLINA	°C	°C	°C	°C		°C		Base 18.3 °C.	Base 18.3 °C	Mm	Mm		Mm.	Mm		%	%	%	%	M.p.s	M.p.s		M.p.s.			Tenths											
WILMINGTON	23.7	12.1	17.9	35.6	AUG 14	- 9.4	FEB 12	1242	1139	1553	132	JUN 9-10	376	297	FEB 9-10	86	85	58	75	3.6	.3	23	18.8	N	FEB 10	5.9	109	101	155	136	3	53	25	42	0	41	0
NORTH DAKOTA																																					
BISMARCK	12.7	- 1.1	5.8	42.8	JUL 11	- 33.9	DEC 31+	4731	228	280	38	SEP 2-3	549	119	DEC 13-14	79	86	58	57	4.1	.5	33	20.1	NW	DEC 8	6.1	102	106	157	75	8	27	13	23	75	180	31
FARGO	11.2	- .2	5.5	35.6	AUG 27	- 35.0	JAN 5	4850	249	547	57	SEP 23-24	587	117	DEC 12-13	81	86	66	64	5.4	.1	36	23.2	S	OCT 11+	6.5	87	110	168	101	8	33	18	12	90	181	35
WILLISTON	12.6	- .7	6.0	37.8	AUG 16	- 33.3	DEC 30+	4698	259	308	45	SEP 3-4	462	71	NOV 18-19	74	82	57	54	4.3	.7	30	22.8	SW	DEC 8	6.1	105	91	169	82	6	21	12	19	77	188	39
OHIO																																					
AKRON	16.4	6.3	11.4	34.4	AUG 28	- 22.2	FEB 17	2927	457	934	42	JUL 20-21	932	272	MAR 17-18	75	78	60	66	4.4	1.3	23	15.6	21	APR 16	7.1	61	97	207	162	11	40	33	10	30	105	1
CINCINNATI ABBE OB.	18.3	8.6	13.4	35.0	SEP 3	- 16.7	FEB 17	2423	703	1236	91	JUL 20-21											13.0	SW	APR 9					153				18	23	83	0
CLEVELAND	16.0	6.8	11.4	33.9	SEP 4+	- 18.3	FEB 17	2914	467	1048	50	JUN 15-16	1450	269	FEB 15-16	78	80	63	69	4.5	1.4	23	17.9	W	MAR 17	7.1	61	94	210	170	14	40	18	11	32	94	2
COLUMBUS	17.3	7.4	12.4	34.4	AUG 28	- 17.8	FEB 17	2688	579	1175	55	AUG 30	554	160	APR 12	77	80	60	64	4.4	1.0	21	18.8	SW	AUG 30	7.0	62	105	198	149	7	46	15	17	26	99	1
DAYTON	17.4	7.1	12.3	35.6	SEP 2	- 19.4	FEB 17	2793	651	977	45	NOV 24-25	650	175	DEC 30-31	78	82	62	67	4.6	1.3	21	21.0	S	DEC 26	6.8	78	91	196	150	7	48	18	21	26	101	1
MANSFIELD	16.5	6.8	11.7	33.3	SEP 4+	- 20.6	FEB 17	2882	517	1051	57	JUL 20-21	711	157	DEC 30-31	80	84	64	71	4.9	1.9	22	17.9	23	JUN 3	7.1	63	98	204	153	8	48	33	9	30	99	1
TOLEDO	15.7	4.7	10.2	35.6	AUG 28+	- 24.4	FEB 17	3296	412	830	36	NOV 27-28	828	170	DEC 19-20	77	79	58	65	4.3	1.1	25	19.2	SW	JUN 26	7.0	62	103	200	134	11	47	20	16	41	122	3
YOUNGSTOWN	14.8	5.4	10.1	33.9	AUG 28	- 23.3	FEB 17	3274	354	932	42	JUL 20	958	211	MAR 17-18	83	86	67	71	4.3	1.2	23	16.1	22	DEC 26	7.3	56	88	221	164	11	30	25	6	40	115	5
OKLAHOMA																																					
OKLAHOMA CITY	20.8	9.4	15.1	37.8	AUG 24	- 18.3	JAN 12	2044	937	1061	84	SEP 26-27	231	135	JAN 6-7	79	84	60	60	5.2	.9	18	21.5	W	MAY 27	5.4	129	105	131	103	3	64	21	53	12	68	2
TULSA	21.1	10.1	15.6	36.7	JUL 20	- 18.3	JAN 12	1964	1017	1775	82	NOV 19-20	218	56	FEB 17-18+	80	86	61	61	4.6	1.4	18	21.9	SW	APR 19	5.7	114	114	137	115	4	70	12	52	12	64	1
OREGON																																					
ASTORIA	14.4	5.9	10.2	31.7	SEP 10+	- 7.2	JAN 7	2938	7	1655	72	NOV 8-9	T	T	DEC 13 +	76	70	80	82	3.8	.9	22	13.4	18	DEC 20+	7.7	39	86	240	194	0	4	35	0	1	40	0
BURNS U	15.5	1.2	8.3	35.0	JUL 31+	- 15.0	JAN 27	3802	226	259	14	MAY 3-4	1006	119	DEC 28-29	57	45		70							6.0	109	92	164	89	13			26	14	181	0
EUGENE	17.3	5.4	11.4	37.2	JUL 14	- 5.6	JAN 8	2616	131	1405	58	NOV 15-16	66	38	NOV 5	75	61	84	91	3.6	.7	22	13.0	20	DEC 11+	7.3	61	80	224	143	2	1	52	16	3	47	0
MEACHAM	11.2	1.8	6.5	31.7	SEP 5+	- 22.2	JAN 8	4379	123	900	36	NOV 23-24	4282	274	NOV 20			72								6.6	100	50	215	140	46			0	51	176	4
MEDFORD	20.6	5.7	13.2	41.1	SEP 4	- 6.7	JAN 8	2306	469	480	49	NOV 5-6	69	53	JAN 5	60	43	64	76	2.5	.8	32	13.4	14	OCT 22	6.0	115	70	180	111	1	6	30	72	0	58	0
PENDLETON	18.1	5.8	11.9	39.4	JUN 22	- 20.6	JAN 9+	2728	462	373	24	DEC 6-7	655	150	FEB 10	46	41	52	58	4.0	1.7	26	15.6	27	JUN 14+	6.3	110	72	183	95	7	2	31	45	14	72	4
PORTLAND	17.4	7.2	12.3	37.2	JUL 28	- 5.6	JAN 7	2352	224	1058	67	NOV 15-16	10	10	JAN 5	69	56	73	82	3.4	.3	15	20.6	E	JAN 9	7.3	62	81	222	151	0	7	21	18	2	27	0
SALEM	17.4	5.0	11.2	38.3	JUL 14	- 7.2	JAN 7	2678	128	1213	62	NOV 15-16	30	18	JAN 5	68	56	73	80	3.1	.8	22	13.4	19	DEC 11	7.0	70	81	214	144	0	3	26	19	0	59	0
SEXTON SUMMIT R	12.9	3.6	8.3	31.7	JUL 28	- 7.8	JAN 7+	3764	151	1485	120	NOV 5-6	3452	394	DEC 12-13	70	59	72	74				24.1	19	DEC 11+					141	40			0	25	126	0
PACIFIC AREA																																					
GUAM TAGUAC R	29.7	22.3	26.1	31.7	MAY 24+	14.4	JAN 29	0	2865	1698	125	OCT 4-5	0	0		75	89		76				13.0	E	APR 21+					271	0			0	0	0	0
JOHNSTON	27.3	23.8	25.6	30.0	SEP 24+	19.4	NOV 26+	0	2690	638	87	NOV 23-24	0	0		77	72	76	78	7.6	7.1	8	19.2	E	FEB 21	6.2	60	181	124	166	0	4	0	0	0	0	0
KOROR R	31.3	24.3	27.8	33.3	DEC 9+	22.2	OCT 11+	0	3512	3135	115	OCT 2	0	0		75	86		79				13.0	W	OCT 3+	8.7	1	76	288	261	0	27	0	111	0	0	0
KWAJALEIN	30.3	25.2	27.8	32.2	MAR 26+	22.2	MAY 14+	0	3503	1793	83	JUL 9-10	0	0		82	74	78	82	6.2	5.9	7	17.0	8	OCT 26	8.1	26	89	250	233	0	2	0	5	0	0	0
MAJURO	29.4	24.9	27.2	31.1	APR 3	22.2	DEC 17+	0	3270	3149	168	APR 24	0	0		83	76	79	81				17.0	E	DEC 18	8.1	13	118	234	259	0			0	0	0	0
PAGO PAGO	29.9	24.2	27.1	32.8	MAR 28+	19.4	OCT 14+	0	3236	3331	222	JAN 29-30	0	0		87	76	83	87	4.3	2.7	9	25.5	NE	JAN 1	7.8	9	136	220	271	0	25	0	20	0	0	0
PONAPE R	30.8	23.8	27.3	32.8	OCT 21+	20.0	FEB 5	0	3323	4421	135	OCT 29-30	0	0		77	85		77				15.6	NE	DEC 31	8.6	3	77	285	299	0	14	0	56	0	0	0
TRUK MOEN ISLAND	30.4	24.9	27.7	32.8	AUG 14	20.0	SEP 20	0	3452	3099	132	DEC 25-26	0	0		77	83		77				12.1	S	OCT 25+	9.3	1	33	331	263	0	10	0	7	0	0	0
WAKE	30.6	23.9	27.3	32.2	AUG 20+	18.3	DEC 17	0	3309	2388	103	SEP 15-16	0	0		82	65	71	80	6.6	5.8	8	16.5	NE	FEB 21	5.3	108	173	84	201	0	9	0	29	0	0	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA

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State and Station	Temperature							Heating degree days	Cooling degree days	Precipitation						Relative humidity				Wind						Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes									Snow †										Fastest mile (1 6 kilometers)				Sunrise to sunset							Max temp.		Min temp.	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date			Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	100am EST	700am EST	100pm EST	700pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date		Clear, 0-03	Partly cloudy, 04-07	Cloudy, 08-1.0	Precipitation 25mm or more	Snow † 25 4mm or more	Thunderstorms	Heavy fog	32 2°C and above	0°C and below	0°C and below	-17.8°C and below
PACIFIC AREA	°C	°C	°C	°C		°C		Base 18 3°C	Base 18 3°C	Mm	Mm		Mm	Mm		%	%	%	%	M.p.s	M.p.s		M.p.s.			Tenths											
YAP R	29.8	23.2	26.5	32.8	SEP 1	19.4	FEB 20+	0	3038	706	39	AUG 24-25	0	0		74	86		77				11.6	SE	AUG 4	7.6	14	142	209	231	0	14	0	9	0	0	0
PENNSYLVANIA																																					
ALLENTOWN	16.8	6.3	11.6	36.1	AUG 28	- 16.7	FEB 17	2938	546	1224	87	JUN 29	262	157	DEC 16-17	78	80	56	64	4.1	1.3	28	17.9	30	NOV 1	6.3	93	108	164	123	4	32	25	17	20	101	0
ERIE	13.8	5.4	9.6	31.7	AUG 8+	- 24.4	FEB 17	3376	276	966	64	JUN 12-13	996	140	MAR 17-18	81	83	70	74	5.4	1.8	22	15.6	28	NOV 1+	7.3	62	87	216	163	16	41	9	0	42	111	3
HARRISBURG	17.5	7.4	12.5	37.8	AUG 28	- 15.0	FEB 17	2693	628	1113	110	SEP 14	533	282	DEC 16-17	73	76	55	61	3.2	.8	30	18.8	SW	MAR 17	6.3	90	114	161	123	4	28	18	24	16	95	0
PHILADELPHIA	18.4	8.7	13.6	37.2	AUG 28	- 13.3	FEB 17	2460	778	1170	117	JUN 29	117	97	DEC 16-17	80	81	58	66	4.5	1.1	27	21.0	SW	MAR 17	6.2	103	103	159	122	1	25	14	28	14	76	0
PITTSBURGH	16.3	6.4	11.4	33.3	SEP 1+	- 21.7	FEB 17	2933	105	1009	59	MAY 23-24			MAR	77	82	62	64	4.3	1.3	25	15.6	27	NOV 1	7.1	63	92	210	158	7	38	27	16	30	101	1
PITTSBURGH	17.1	7.8	12.4	35.0	SEP 2+	- 20.0	FEB 17	2666	105	900	36	SEP 22-23			DEC															153	2			17	22	93	1
SCRANTON	14.8	4.8	9.8	33.9	AUG 28	- 23.0	FEB 17	3397	361	991	92	JUN 28-29	686	203	DEC 21	74	78	61	63	4.1	.9	25	19.2	SW	MAR 17	7.0	66	101	198	147	5	31	23	6	37	120	3
WILLIAMSPORT	15.3	5.2	10.3	36.1	AUG 28	- 23.3	FEB 18	3262	384	1264	72	SEP 14	721	254	DEC 17	83	84	62	69	3.3	.8	29	17.0	28	MAR 17	7.1	64	92	209	152	5	39	57	12	29	109	2
RHODE ISLAND																																					
BLOCK ISLAND	14.3	7.6	10.9	32.8	AUG 31	- 13.9	JAN 8	2922	298	1179	93	AUG 14-15	147	51	APR 8															98	3			1	19	67	0
PROVIDENCE	16.4	6.3	11.4	35.0	JUN 11	- 16.7	FEB 18	2960	491	1225	107	AUG 15	157	51	JAN 4	79	79	58	69	4.4	1.2	29	14.8	5	MAR 27	6.6	78	96	191	117	2	14	40	17	19	95	[illegible]
SOUTH CAROLINA																																					
CHARLESTON	24.6	13.2	18.9	36.1	JUN 17	- 11.1	FEB 12	1106	1382	1833	257	JUN 10-11	180	150	FEB 9-10	83	84	56	71	4.1	.3	24	26.4	W	MAY 29	5.8	106	116	143	114	2	58	29	60	1	36	0
COLUMBIA	24.4	11.1	17.8	37.2	JUL 30	- 15.0	FEB 12	1325	1183	1716	138	JUN 15-16	462	399	FEB 9-10	83	87	53	67	3.0	.4	26	13.9	27	MAR 17	5.8	112	96	157	112	3	67	34	64	[illegible]	62	0
GRNVLLE-SPRTNBRG	21.6	9.6	15.6	34.4	JUL 10+	- 11.1	DEC 22	1789	851	1397	158	SEP 13-14	117	117	JAN 7-8	80	84	55	66	2.6	.3	31	16.1	W	APR 12	5.7	116	105	144	126	2	46	29	24	2	61	0
SOUTH DAKOTA																																					
ABERDEEN	14.1	1.2	7.6	42.2	JUL 11	- 31.7	DEC 31	4273	423	352	40	SEP 2-3	607	160	DEC 13-14	79	85	61	60	5.0	.5	1	25.9	32	JUL 1	6.1	97	106	162	73	7	39	29	35	67	174	23
HURON	14.1	1.9	8.0	39.4	AUG 26	- 30.6	DEC 31	4074	384	441	32	OCT 9	856	163	JAN 20-21	77	83	61	58	4.6		19	20.6	NW	JUL 1	6.2	92	116	157	83	8	29	21	27	61	151	20
RAPID CITY	15.4	1.4	8.4	43.3	JUL 6	- 27.8	DEC 31	3889	333	384	53	MAR 13-14	1031	378	MAR 13-14	48	48	66	69	5.1	1.9	34	25.0	NW	MAR 14	5.9	104	120	141	84	10	35	28	22	45	166	15
SIOUX FALLS	14.4	2.8	8.6	42.2	AUG 26	- 32.2	DEC 31	3967	484	716	115	OCT 9	632	160	DEC 24	77	81	59	60	5.2	.2	31	18.3	30	MAY 23+	6.3	95	103	167	93	4	38	28	34	57	152	19
TENNESSEE																																					
BRISTOL	19.6	8.0	13.8	34.4	AUG 29	- 14.4	JAN 13	2196	612	1165	85	MAR 15-16	221	94	JAN 7-8	83	86	60	66	2.5	.6	27	16.5	27	MAR 17	6.5	80	108	177	135	4	41	41	[illegible]	14	79	0
CHATTANOOGA	21.3	9.4	15.4	35.6	SEP 8	- 11.7	JAN 13	1955	949	1818	166	MAR 15-16	64	58	JAN 7	81	84	59	63	2.9	.4	22	17.0	SW	JUN 15	6.4	92	101	172	125	1	60	35	31	10	72	0
KNOXVILLE	20.4	9.8	15.1	34.4	SEP 1	- 11.7	JAN 13	1905	803	1474	123	MAR 15-16	328	218	JAN 7-8	80	86	61	63	3.0	.8	30	17.0	W	DEC 13	6.7	67	114	184	128	4	48	39	10	7	60	0
MEMPHIS	22.1	12.1	17.1	36.1	JUN 25+	- 9.4	JAN 12	1634	1242	1630	72	APR 19-20	41	36	JAN 7	77	83	60	62	4.2	1.0	18	17.9	16	MAR 10	5.9	112	97	156	115	1	62	7	57	9	51	[illegible]
NASHVILLE	21.4	10.2	15.8	35.6	AUG 29	- 13.3	JAN 13	1840	983	1518	95	NOV 26-27	191	122	JAN 7-8	82	86	60	64	4.0	1.0	20	16.5	SW	DEC 26	6.4	94	102	169	123	2	58	20	37	10	59	0
OAK RIDGE R	20.1	9.0	14.6	33.9	SEP 1	- 12.2	JAN 13	2041	743	1939	134	NOV 26-27	244	191	JAN 7-8								20.6		MAY 28	6.9	80	85	200	124	2			14	12	80	0
TEXAS																																					
ABILENE	23.5	10.8	17.2	39.4	AUG 23	- 18.3	JAN 12	1541	1181	612	84	SEP 5-6	419	191	JAN 10-11	73	82	56	52	5.7	2.1	19	20.1	SW	MAR 10	4.8	152	101	112	77	6	54	14	82	8	55	1
AMARILLO	21.1	6.8	13.9	39.4	AUG 24	- 16.7	JAN 11+	2344	809	458	58	MAR 9-10	490	81	APR 7	67	75	48	44	6.1	1.7	22	29.1	SW	MAR 13	4.4	168	102	95	76	8	48	33	66	13	87	0
AUSTIN	25.1	14.2	19.7	37.2	AUG 23+	- 7.8	JAN 12	929	1474	1028	171	SEP 26-27	43	23	FEB 8-9	79	86	60	56	4.1	.6	16	17.0	NW	JAN 28	5.5	121	107	137	96	0	48	31	99	3	18	0
BROWNSVILLE	27.5	17.9	22.7	37.2	MAY 27	- 3.3	FEB 10	392	2061	752	86	JUN 21	T	T	FEB 9	88	90	63	71	4.7	2.1	14	18.8	SE	MAR 13	6.0	97	126	142	83	0	32	38	98	0	10	0
CORPUS CHRISTI	27.3	16.9	22.2	37.2	MAY 27	- 7.8	DEC 21	538	1995	1106	156	OCT 11-12	33	28	FEB 8-9	87	91	65	69	5.6	2.5	11	19.2	SE	APR 15	5.9	102	119	144	97	1	33	27	132	0	13	0
DALLAS-FT WORTH	23.9	12.8	18.4	37.2	AUG 23+	- 13.3	JAN 12	1246	1336	1286	81	JUL 14-15	58	58	JAN 10-11	80	87	62	61	3.8	1.2	18	17.9	19	JUL 14	4.6	108	79	117	88	2	52	6	82	4	20	0
DALLAS	24.1	13.6	18.8	38.3	AUG 14	[illegible]	JAN 12	1152	1412	1218	86	SEP 26-27				72	81	59	56	5.0	1.6	17	19.7	14	OCT 10	5.4	125	[illegible]	[illegible]	[illegible]		48	7	86	4	27	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature							Heating degree days	Cooling degree days	Precipitation						Relative humidity				Wind						Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes									Snow †										Fastest mile (1.6 kilometers)				Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest†	Date			Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	00am EST	700am EST	100pm EST	700pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date		Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow † 25.4mm or more	Thunderstorms	Heavy fog	32.2°C and above	0°C and below	0°C and below	-17.8°C and below
	°C	°C	°C	°C		°C		Base 18.3°C	Base 18.3°C	Mm	Mm		Mm	Mm		%	%	%	%	Mps	Mps		Mps			Tenths											
TEXAS																																					
DEL RIO	26.9	14.0	20.4	40.6	MAY 20	-6.7	JAN 12	812	1657	507	82	OCT 4-5	69	69	FEB 8	67	81	55	45	4.6	2.2	11	16.5	30	JAN 20	5.3	129	111	125	68	1	37	15	124	1	10	0
EL PASO	25.4	7.8	16.6	42.2	JUN 30	-12.2	DEC 22	1576	1007	191	42	JUL 14-15	251	117	FEB 21-22+	34	26	45	58	3.9	.9	27	24.1	SW	APR 18	3.4	212	99	54	48	3	22	3	108	0	73	0
GALVESTON	23.7	18.4	21.1	32.2	AUG 22+	-2.2	JAN 12	632	1683	1536	206	MAR 23-24	104	64	JAN 11	79	81	71	73				20.6	NE	SEP 4					118	2			6	0	7	0
HOUSTON INTERCON	25.8	13.9	19.8	36.7	JUL 30	-7.2	JAN 12	868	1475	1782	168	JUN 11-12	122	51	JAN 10-11	93	94	64	71	3.3	.8	12	20.1	30	JUN 5	6.0	100	116	149	130	3	72	29	68	0	24	0
LUBBOCK	22.2	8.1	15.2	38.3	AUG 24	-17.8	JAN 11	1986	886	327	46	MAR 9-10	490	168	FEB 22	63	74	47	39	5.1	.9	21	22.8	22	MAR 13	4.0	188	99	78	57	9	56	19	61	9	84	1
MIDLAND	23.7	8.9	16.3	38.3	JUN 18	-11.7	DEC 20	1624	965	287	39	MAR 9-10	173	56	FEB 22	63	73	43	36	5.6	1.3	18	20.1	30	NOV 24	3.9	188	105	72	57	4	37	21	81	6	59	0
PORT ARTHUR	24.9	14.4	19.7	34.4	AUG 21+	-6.7	DEC 21+	888	1446	2004	256	APR 17	86	76	JAN 11	92	94	69	77	4.2	1.0	14	21.9	NW	DEC 19	5.7	107	117	141	133	1	75	32	68	2	25	0
SAN ANGELO	25.5	10.8	18.2	40.6	AUG 23	-12.8	JAN 12	1292	1314	468	61	SEP 5-6	343	124	JAN 25	72	83	49	46	4.5	1.7	20	16.5	8	MAY 12	4.7	153	113	99	64	5	42	9	95	4	53	0
SAN ANTONIO	26.1	14.3	20.2	36.1	AUG 23	-8.3	DEC 21	843	1581	1328	185	SEP 26-27	74	53	FEB 8-9	77	83	59	55	4.3	.9	11	21.0	N	MAR 28	5.8	107	117	141	107	1	37	24	96	1	29	0
VICTORIA	26.9	15.9	21.4	36.1	JUL 31+	-6.1	JAN 12	634	1830	1160	109	JUN 12-13	56	30	JAN 11	87	90	61	67	4.5	1.2	12	24.1	NW	OCT 30	6.2	99	102	164	105	2	49	40	106	0	15	0
WACO	24.3	13.3	18.8	38.3	AUG 23	-15.6	JAN 12	1178	1418	1142	114	JUL 14-15	66	66	JAN 10-11	79	86	60	58	4.7	1.6	17	19.7	23	JUN 1	5.4	127	108	130	96	2	50	16	89	4	29	0
WICHITA FALLS	23.8	10.3	17.1	41.7	AUG 23	-12.8	JAN 12	1573	1180	780	82	JUN 2	229	74	FEB 17	81	88	57	58	5.1	1.1	17	23.7	1	SEP 4	4.7	162	99	104	77	4	57	12	91	9	56	0
UTAH																																					
MILFORD	16.9	-.3	8.3	38.9	JUL 5	-30.6	JAN 7	3916	332	266	27	APR 17-18	1908	284	APR 17-18								25.0	SW	NOV 12	5.2	136	109	120	81	19			54	25	190	19
SALT LAKE CITY	17.1	4.3	10.7	40.0	JUL 10+	-25.0	JAN 4	3288	582	518	38	SEP 1-2	2167	208	MAR 13	47	44	61	66	4.2	1.0	16	18.8	NW	NOV 12+	5.9	112	93	160	108	26	41	22	59	29	116	8
WENDOVER	16.3	5.6	10.9	38.3	JUL 10	-15.6	JAN 7	3277	647	155	18	MAR 11	312	64	FEB 11	45	37	50	58											64	4			46	30	123	0
VERMONT																																					
BURLINGTON	12.7	3.0	7.8	34.4	JUL 8	-29.4	FEB 18	4109	361	1176	48	DEC 20-21	1659	325	DEC 17-18					3.9	.7	22	17.0	W	OCT 14	7.4	49	90	226	154	15	42	21	4	54	138	24
VIRGINIA																																					
LYNCHBURG	19.3	8.0	13.7	35.6	AUG 29	-15.6	JAN 9	2297	646	1289	81	JUL 16-17	409	152	DEC 16-17		81	55	66				15.2	W	MAR 17	5.9	111	97	157	115	5			13	11	87	0
NORFOLK	20.8	11.2	16.1	35.0	JUL 9	-11.1	JAN 9	1741	973	1156	58	JUL 10-11	386	231	JAN 8-9	75	76	57	67	4.8	.2	27	20.6	34	JUL 10+	5.7	118	97	150	121	3	36	16	29	8	48	0
RICHMOND	21.2	8.8	15.0	35.6	AUG 12	-16.1	DEC 18	2013	858	1029	57	DEC 8-9	406	124	DEC 11	83	85	54	69	3.3	.4	24	18.8	NW	JUL 11	6.2	94	115	156	110	5	40	29	32	7	80	0
ROANOKE	19.4	8.1	13.8	35.6	AUG 29	-13.9	FEB 18	2264	671	1220	101	MAY 27-28	442	140	MAR 21	76	79	55	62	3.6	1.1	29	20.6	32	MAR 17	6.1	99	105	161	125	7	29	25	26	12	85	0
WASHINGTON																																					
OLYMPIA	15.6	3.6	9.6	33.3	JUL 28+	-13.9	JAN 7	3179	37	1266	50	NOV 8-9	188	66	DEC 26-27	76	61	84	92	3.1	1.4	20	14.3	18	DEC 11	7.6	43	86	236	163	3	5	69	3	2	93	0
QUILLAYUTE	13.6	4.4	9.0	32.8	JUL 13	-10.0	JAN 7	3361	7	2585	98	DEC 14-15	152	74	NOV 4	79	72	88	91	3.0	.6	19	16.5	SE	NOV 27	7.9	37	73	255	212	3	7	53	1	1	59	0
SEATTLE-TACOMA	14.9	6.9	10.9	32.2	JUL 28	-9.4	JAN 6	2733	78	890	39	NOV 10-11	102	66	JAN 4-5	72	60	73	81	3.3	.8	18	18.3	SE	DEC 11	7.5	53	80	232	156	1	4	22	1	3	17	0
SEATTLE U	15.3	7.3	11.3	31.1	MAY 14	-8.9	JAN 8	2567	73	889	38	NOV 8-9	94	64	JAN 4								20.6	SSE	DEC 11					155	2			0	2	15	0
SPOKANE	14.7	3.6	9.2	37.8	JUN 22	-18.9	JAN 7	3585	294	435	28	SEP 19-20	1118	229	NOV 4	58	47	61	71	4.6	1.8	20	20.1	SW	NOV 12	6.3	103	91	171	106	9	5	46	29	27	131	2
STAMPEDE PASS R	6.9	.6	3.8	28.3	AUG 12+	-18.3	JAN 7	5281	17	1815	60	JAN 12-13	10013	536	DEC 24	81	75		89							7.7	58	55	252	212	86			0	97	193	1
WALLA WALLA U	18.1	7.4	12.8	38.9	AUG 12+	-17.8	JAN 8	2512	544	447	26	OCT 31	864	231	FEB 10								22.4	W	OCT 6	6.3	105	77	183	111	8			44	11	56	1
YAKIMA	18.2	2.8	10.5	39.4	JUL 15	-17.8	JAN 8+	3121	325	228	20	NOV 8-9	1013	257	DEC 26-27	49	41	63	72	3.3	1.6	29	15.6	20	JUN 22+	6.0	113	82	170	64	13	1	19	48	12	138	3
WEST INDIES																																					
SAN JUAN P.R.	30.4	24.1	27.3	34.4	JUN 2+	20.0	DEC 14+	0	3314	1132	162	APR 22-23	0	0		76	73	60	70	4.3	3.2	9	21.0	SE	SEP 4	5.3	82	217	66	172	0	35	0	73	0	0	0
WEST VIRGINIA																																					
BECKLEY	16.3	6.1	11.2	31.7	SEP 2	-20.0	FEB 17	2864	319	1104	46	NOV 26-27	1166	178	DEC 21-22	83	85	62	71	4.3	1.5	22	17.9	27	JUN 27+	7.3	51	93	221	173	15	39	45	0	22	104	2
CHARLESTON	19.2	7.4	13.3	35.0	SEP 3+	-16.7	FEB 17	2377	628	1253	60	NOV 27-28	470	102	DEC 20-21	82	85	58	64	2.8	.9	23	16.5	24	DEC 5+	7.1	55	107	203	159	7	51	114	22	18	93	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature: Averages: Daily maximum	Temperature: Averages: Daily minimum	Temperature: Averages: Annual	Temperature: Extremes: Highest	Temperature: Extremes: Date	Temperature: Extremes: Lowest	Temperature: Extremes: Date	Heating degree days	Cooling degree days	Precipitation: Total	Precipitation: Greatest in 24 hours	Precipitation: Date (s)	Precipitation: Snow †: Total	Precipitation: Snow †: Greatest in 24 hours	Precipitation: Snow †: Date (s)	Relative humidity: 100am EST	Relative humidity: 700am EST	Relative humidity: 100pm EST	Relative humidity: 700pm EST	Wind: Average speed	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear, 0-0.3	Number of days: Sunrise to sunset: Partly cloudy, 0.4-0.7	Number of days: Sunrise to sunset: Cloudy, 0.8-1.0	Number of days: Precipitation 25mm or more	Number of days: Snow † 25.4mm or more	Number of days: Thunderstorms	Number of days: Heavy fog	Number of days: Max temp: 32.2 °C and above	Number of days: Max temp: 0 °C and below	Number of days: Min temp: 0 °C and below	Number of days: Min temp: -17.8 °C and below
WEST VIRGINIA	°C	°C	°C	°C		°C		Base 18.3 °C	Base 18.3 °C	Mm	Mm		Mm	Mm		%	%	%	%	Mps	Mps		Mps			Tenths											
ELKINS	16.7	3.8	10.3	31.7	AUG 29	- 25.0	FEB 18	3110	238	1088	32	SEP 29-30	1529	279	DEC 8-9		83	58	69											170	17			0	22	133	4
HUNTINGTON	19.1	8.2	13.7	35.6	SEP 2+	- 15.0	FEB 17+	2360	720	973	58	NOV 27-28	259	51	MAR 21	80	85	61	63	2.8	.9	22	15.6	24	JUN 5	7.4	51	94	220	151	3	46	64	30	19	89	0
PARKERSB R	18.3	7.9	13.2	36.1	SEP 3+	- 16.1	FEB 17	2458	645	988	74	JUL 10	381	109	APR 12								21.0	W	MAR 25					147	5			21	23	91	0
WISCONSIN																																					
GREEN BAY	13.2	3.3	8.2	35.6	AUG 27	- 25.6	DEC 31	3967	354	886	83	MAY 27-28	914	132	DEC 15	81	84	65	69	4.5	.7	29	21.5	NE	APR 9	6.9	68	92	205	141	10	29	34	12	54	138	15
LA CROSSE	14.1	3.8	8.9	37.2	JUL 12	- 30.0	JAN 6	3787	437	1120			1095			85	88	65	68	3.0	.2	22								123	12	35	19	19	53	130	16
MADISON	14.2	3.1	8.7	35.0	JUL 8	- 26.7	FEB 17	3792	341	902	64	MAR 6-7	958	328	APR 9	84	87	64	70	4.3	.5	25	21.0	SE	SEP 21	6.9	76	86	203	146	10	39	23	13	46	132	17
MILWAUKEE	13.2	4.9	9.1	37.2	AUG 27	- 28.0	JAN 6+	3699	385	857	77	APR 20-21	1201	295	APR 9	79	81	66	69	5.3	1.1	26	25.0	SW	JUN 16	6.9	78	90	197	142	17	29	36	15	47	117	6
WYOMING																																					
CASPER	13.6	- .1	6.7	37.2	JUL 6	- 31.1	JAN 9	4380	222	383	51	SEP 1-2	3005	419	APR 19-20	51	48	68	75	6.2	3.1	23	24.1	21	DEC 1	6.0	101	112	152	95	32	29	7	22	49	184	15
CHEYENNE	13.3	1.[illegible]	7.2	36.7	JUL 6	- 25.0	JAN 9+	4168	163	447	87	JUL 18-19	1981	396	MAR 13-14	42	44	59	62	5.5	2.8	30	25.0	NW	NOV 12	5.8	101	114	150	87	21	34	18	9	41	169	11
LANDER	[illegible]	- 1.5	5.3	36.7	JUL 11	- 32.2	JAN 5	4919	229	490	56	SEP 1-2	5077	516	MAR 13-14	53	50	60	68	2.9	.8	25	20.1	SW	JUL 6+	5.8	108	111	146	89	39	33	11	16	70	196	31
SHERIDAN	14.6	- .5	7.1	37.2	JUL 6	- 33.3	JAN 8	4264	209	384	29	APR 19-20	2578	307	APR 19-20	50	49	66	72	3.5	1.5	31	26.4	NW	AUG 18	6.2	93	111	164	96	30	24	2	22	38	193	21

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in columns headed Greatest in 24 hours are computed on a 24-hour basis without regard to calendar days; data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind direction under Resultant direction are in tens of degrees.

Values entered in column Fastest Mile is the highest observed 1 minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which Fastest Mile data can be evaluated.

Data in this table are obtained by conversion from data in the English Units table.

* Includes all forms of frozen precipitation [illegible]

+ And also on earlier dates [illegible]

[illegible] Number of days maximum 21 [illegible]

§ Peak gust.

[illegible] Sun below horizon November [illegible]

[illegible] Sun below horizon November 21 - [illegible] 17 [illegible]

NORMALS, MEANS AND EXTREMES

State and Station	Elevation Ground (Meters)	Temperature (°C) Normal (1941-1970) January Daily Maximum	Temperature Normal January Daily Minimum	Temperature Normal July Daily Maximum	Temperature Normal July Daily Minimum	Temperature Normal Annual	Temperature Extremes Length (Yrs)	Temperature Extremes Record Highest	Temperature Extremes Record Lowest	Normal Heating Degree Days (1941-1970) January	Normal Heating Degree Days Seasonal	Precipitation (Millimeters) Normal (1941-1970) Wettest Month	Precipitation Normal Driest Month	Precipitation Normal Annual	Precipitation Extremes Wettest Month	Precipitation Extremes Driest Month	Precipitation Extremes Maximum In 24 Hours	Snow @ Mean Total January	Snow @ Mean Total Seasonal	Snow @ Extreme Maximum In 24 Hours	Relative Humidity (Percent) January 7.00 a.m. EST	Relative Humidity January 1.00 p.m. EST	Relative Humidity January 7.00 p.m. EST	Relative Humidity July 7.00 a.m. EST	Relative Humidity July 1.00 p.m. EST	Relative Humidity July 7.00 p.m. EST	Wind Speed (m.p.s.) Mean Speed January	Wind Speed Mean Speed July	Wind Speed Fastest Mile (1.6 Kilometers)	Sunshine (% of Possible) January	Sunshine (% of Possible) July	Annual Mean Number of Days Sunrise to Sunset Clear	Sunrise to Sunset Partly Cloudy	Sunrise to Sunset Cloudy	Precipitation .25mm or More	Snow Sleet Hail 25.4mm or More	Thunderstorms	Heavy Fog	Temperature Max ≥ 32.2 C	Temperature Min ≤ 0 °C	Temperature Min ≤ 17.8 C
ALABAMA							90	44.4	-31.1							0	516																								
BIRMINGHAM	188	12.4	1.2	32.4	20.8	16.9	10	38.9	-20.0	363	1579	157	66	1352	449	0	179	13	33	213	80	61	65	88	62	67	3.8	2.6	29.1	41	60	100	112	153	118	1	58	8	41	63	*
HUNTSVILLE	190	10.3	-0.4	32.3	20.4	16.0	6	38.3	-16.1	415	1834	147	65	1325	375	20	196	36	79	61	83	66	70	89	61	66	4.2	2.7	20.6			105	102	158	118	1	57	20	43	67	0
MOBILE	64	16.2	5.2	32.5	22.6	19.7	12	38.9	-13.3	250	935	225	65	1701	490	1	339	3	13	91	82	64	71	89	61	72	4.9	3.2	28.2			101	119	145	123	*	80	38	86	20	0
MONTGOMERY	55	14.4	2.8	32.5	21.9	18.2	10	38.9	-15.0	308	1260	153	57	1266	542	1	224	3	5	79	82	61	64	90	61	67	3.5	2.6	26.8	47	63	106	110	149	108	*	62	22	73	40	0
ALASKA							90	37.8	-62.2							0	359																								
ANCHORAGE PK 2/ 1966	25	-6.4	-15.4	18.1	9.7	1.8	44	30.0	-38.9	906	6035	65	11	374	150	0	52	272	1509	450															113	21			12	201	41
ANCHORAGE	34	-6.7	-15.8	18.7	10.1	1.7	9	29.4	-34.4	916	6061	94	14	374	117	0	42	236	1631	417	70	70	70	80	74	62	2.6	3.1	27.3	44	43	68	62	235	112	20	1	27	11	192	43
ANNETTE	33	3.3	-1.7	17.8	10.9	7.6	13	32.2	-17.2	542	3917	453	128	2903	886	14	193	371	1455	361	77	77	73	87	77	68	5.5	3.6	26.8			42	59	264	223	17	1	16	24	82	0
BARROW	9	-22.2	-29.6	6.8	0.6	-12.6	53	25.6	-48.9	1372	11257	26	4	124	71	0	25	58	744	381	65	66	65	94	91	87	5.1	5.2	25.9			X58	X54	X86	74	8	*	65	*	324	169
BARTER ISLAND	11	-22.5	-29.9	7.5	1.4	-12.2	24	23.9	-50.6	1381	11106	33	6	179	125	0	57	147	1151	432	69	69	68	93	89	86	6.4	4.7	36.2			V51	V68	V193	92	13	*	75	*	311	167
BETHEL	38	-10.9	-16.6	16.6	8.6	-1.8	15	30.0	-43.3	1031	7334	101	11	402	148	1	51	145	1262	165	77	77	76	92	86	67	6.3	5.1	27.7			64	60	241	136	17	2	59	12	227	80
BETTLES	196	-20.7	-29.5	20.1	8.6	-5.9	23	33.3	-55.5	1346	8846	70	16	360	150	0	49	307	1974	551	67	61	67	87	70	53	2.6	3.0	17.9			86	89	190	105	28	5	7	35	248	140
PIG DELTA	386	-16.4	-24.6	20.4	10.0	-2.5	32	33.3	-52.8	1203	7609	63	7	291	157	0	54	155	1046	254	70	70	71	79	73	58	4.8	2.7	33.1			60	91	214	94	16	3	10	35	225	98
COLD BAY	29	0.3	-4.6	12.4	7.6	3.3	29	25.6	-25.0	633	5480	109	39	844	253	1	124	226	1311	290	84	85	82	91	89	81	8.0	6.9	32.6			11	48	306	210	17	*	26	*	163	2
FAIRBANKS	132	-19.0	-29.8	22.1	9.8	-3.5	10	35.6	-51.7	1324	7968	56	8	285	157	0	87	277	1773	511	67	68	68	79	69	50	1.2	2.9	17.9			67	83	215	102	22	5	20	51	226	122
GULKANA	479	-16.7	-26.9	20.1	7.6	-2.9	30	32.8	-53.9	1244	7742	47	6	282	110	0	52	190	1194	269	67	68	66	84	70	46	2.3	3.7	23.2			68	88	209	89	17	5	18	30	239	107
HOMER	20	-2.2	-9.6	15.6	6.9	2.5	30	26.7	-29.4	751	5757	86	23	586	218	0	77	269	1435	622	64	73	69	90	78	70	3.3	2.5	15.6			71	71	223	141	22	1	9	2	196	13
ILIAMNA 1969	56						27	41.1	-43.9						280	0	67	277	1636	399	73	74	72	87	79	64	6.6	3.7				81	68	216	137	22	0	12	10	196	45
JUNEAU	3	-1.6	-7.9	17.6	8.7	4.6	30	30.0	-30.0	714	5003	199	74	1389	338	7	118	638	2720	787	80	79	76	90	81	70	3.8	3.4	25.9	33	30	45	39	281	220	29	*	21	19	152	11
KING SALMON	14	-6.1	-14.6	16.9	8.0	0.7	10	29.4	-41.1	888	6433	88	23	502	185	0	51	165	1138	241	71	71	69	85	80	63	4.7	4.5	31.7			56	65	244	149	15	2	33	10	207	54
KODIAK	4	1.4	-3.2	15.1	9.5	4.8	25	30.0	-24.4	596	4921	160	90	1440	320	5	82	447	2332	452	80	79	77	88	81	77	5.5	2.9	24.6			65	78	222	185	25	1	13	6	144	2
KOTZEBUE	3	-16.0	-23.7	14.8	8.4	-6.2	31	29.4	-46.7	1183	8909	57	7	223	132	0	45	157	1217	254	71	71	71	87	85	77	6.6	5.7	41.6			90	71	204	110	16	*	19	4	252	119
MC GRATH	104	-17.5	44.0	19.8	9.3	-3.8	31	32.2	-55.0	1272	8047	83	17	425	159	0	61	363	2286	386	69	68	69	85	74	56	1.2	2.6	33.5			67	66	232	134	28	7	14	29	231	114
NOME	3	-10.3	-16.9	13.2	6.9	-3.6	7	30.0	-43.3	1016	7957	91	18	418	199	0	60	244	1384	213	71	70	70	81	76	71	5.3	4.5	24.6	39	32	84	68	213	128	17	*	25	5	250	86
ST. PAUL ISLAND	6	-1.1	-5.6	9.7	5.6	1.4	56	17.8	-32.2	669	6176	87	28	623	237	2	49	325	1501	351	86	87	85	96	96	91	9.3	5.8	36.7			22	63	280	205	20	*	55	0	191	5
SHEMYA 1972	37	1.1	-1.9	9.6	6.4	3.6	27	17.2	-13.9	580	5381	70	34	693	221	4	134	290	1448	389	82	82	82	95	96	92	9.6	6.1	40.2			5	62	298	212	19	*	82	0	129	0
SUMMIT	731	-13.4	-15.1	15.7	6.6	-3.6	33	31.7	-42.8	1091	7981	84	17	510	171	0	71	361	3053	711	68	68	69	89	78	61	6.8	3.5	21.5			65	76	224	138	43	6	13	9	251	86
TALKEETNA	105	-7.2	-17.6	19.7	9.0	0.4	34	32.8	-44.4	957	6503	124	28	727	303	1	79	465	2626	914	68	69	63	89	75	60	2.8	1.7	17.0			78	76	211	131	33	4	5	31	229	68
UNALAKLEET	4	-12.1	-15.8	15.8	8.6	-3.1	27	30.6	-45.6	1061	7792	99	10	360	205	0	39	135	1029	356	60	66	65	87	80	73	8.0	4.8	25.0			86	69	210	105	13	2	15	6	236	83
YAKUTAT	8	-0.4	-8.3	15.2	8.6	3.8	9	28.3	-31.1	702	5295	496	144	3364	1115	13	181		5646	823	77	78	75	97	87	80	3.5	3.1	33.5			42	45	278	230	50	2	32	4	195	20
ARIZONA							79	52.8	-40.0							0	290																								
FLAGSTAFF	2135	5.2	-9.8	27.1	10.2	7.4	24	36.1	-30.0	638	4067	67	14	490	250	0	87	381	2205	693	73	52	48	69	33	39	3.5	2.8	17.9	73	77	169	94	102	74	21	51	10	2	214	10
PHOENIX	340	18.2	3.1	40.4	25.3	21.3	13	46.7	-7.2	237	862	31	3	179	141	0	78	0	0	15	67	44	30	46	28	20	2.2	3.1	33.5	78	85	212	82	71	34	0	23	2	163	14	0
PRESCOTT 1964	1528	10.6	-4.9	32.7	16.2	13.2	22	39.4	-20.6	480	2423	68	6	311	244	0	78	150	424	315	71	49	44	59	30	31	3.2	3.7	32.2	73	74	184	99	82	60	6	46	4	48	130	*
TUCSON	787	17.5	3.4	36.8	23.4	16.9	33	43.9	-8.9	245	951	60	4	281	201	0	100	8	36	173	62	39	32	57	33	28	3.5	3.7	31.7	82	77	195	90	80	50	1	40	1	140	21	0
WINSLOW	1491	7.6	-6.9	34.2	17.2	12.9	14	42.8	-26.1	557	2629	38	7	186	142	0	54	63	282	432	77	60	49	56	28	26	3.2	4.0	28.2			180	94	91	53	4	36	5	72	139	5
YUMA	59	19.7	6.3	41.1	27.4	23.2	9	46.7	-4.4	171	561	11	0	68	68	0	61	0	0		55	37	26	49	32	22	3.3	4.2	26.8	84	90	247	68	50	15	0	7	1	168	2	0
ARKANSAS							83	48.9	-33.9							0	305																								
FORT SMITH	136	9.9	-2.2	34.3	21.4	16.3	9	43.3	-17.8	447	1853	139	60	1074	356	0	181	46	130	142	80	59	62	87	55	52	3.7	2.9	25.9	48	70	123	95	147	95	3	57	15	71	79	*
LITTLE ROCK	78	10.1	-1.7	33.7	21.2	16.1	14	42.2	-20.0	439	1863	135	76	1232	367	0	196	58	137	287	81	61	64	88	58	61	4.0	3.1	29.1	46	71	118	100	147	103	2	57	16	73	64	*
TEXARKANA 1968	119	12.7	1.8	34.1	22.2	17.9	3	38.3	-12.8	347	1407	135	69	1249	423	0	166	38	69	190	79	62	62	90	60	62	3.7	2.8				126	95	144	98	1	62	18	64	44	0
CALIFORNIA							89	56.7	-42.8							0	663																								
BAKERSFIELD	144	14.2	3.0	37.3	20.4	18.3	10	45.0	-4.4	301	1216	26	0	145	117	0	43	0	0		83	75	61	47	31	19	2.3	3.2	19.7			200	82	83	36	0	3	22	110	13	0
BISHOP	1252	12.0	-6.4	36.4	13.2	13.3	26	42.8	-21.1	480	2395	30	2	145	227	0	92	97	206	457		47	34		19	14	0.0	0.0				203	88	74	29	2	13	*	96	144	*
BLUE CANYON m	1609	6.1	-1.2	25.3	14.8	10.1	30	35.0	-16.1	492	3168	93	3	1717	1146	0	237		6175	978		60			32		4.8	3.2	31.3			175	62	128	90	41	12	68	1	101	0
BURBANK 1965	220	18.3	5.7	30.1	16.3	17.6	2	41.1	0.0	203	914	82	0	369	352	0	197	5	5	119	62	45	37	82	50	38	2.0	2.6				187	102	76	38	*	4	28	49	1	0
FUREKA U	13	11.9	5.1	15.8	11.2	11.2	63	29.4	-6.1	305	2599	188	4	1010	421	0	148	5	5	76							3.1	3.0	25.0	41	52	78	100	187	118	*	5	49	0	5	0
FRESNO	99	12.7	2.1	36.8	17.2	16.8	10	43.9	-6.1	339	1472	47	0	260	217	0	66	3	5	38	92	85	68	64	39	22	2.4	3.2	19.2	50	96	201	70	94	44	*	6	41	110	28	0
LONG BEACH	7	18.4	6.2	28.2	16.4	17.4	14	43.9	-3.9	188	892	57	0	260	285	0	174	0	0		71	56	50	81	61	52	2.6	3.0	19.7			154	124	87	29	0	4	55	22	1	0
LOS ANGELES	29	17.5	7.4	23.8	16.7	16.5	15	43.3	-1.1	183	1010	64	0	294	281	0	157	0	0		67	53	58	86	68	68	3.0	3.4	27.7			143	115	107	35	0	3	45	5	*	0
LOS ANGELES U	82	19.2	8.2	28.3	17.5	18.2	33	43.3	-2.2	148	691	76	0	357	379	0	155	0	0	8	63	51	50	84	54	53	3.0	2.4	21.9	71	82	187	104	74	34	0	6	17	20	*	0
MT SHASTA R	1080	5.4	-3.7	29.4	10.3	9.8	31	39.4	-20.6	540	3271	169	8	952	447	0	150	889	2896	950	82	75	70	67	40	29	0.0	0.0				163	85	117	91	21	13	7	22	135	*
OAKLAND	1	12.5	5.9	20.9	13.6	14.1	10	37.2	-3.3	282	1615	102	0	475	287	0	138	0	0	25	83	78	73	86	75	67	3.0	4.2	21.9			145	115	105	64	*	2	17	2	1	0
RED BLUFF	104	12.0	2.6	36.7	19.2	17.1	29	48.3	-6.7	341	1493	114	1	560	289	0	102	30	58	251	81	72	59	49	30	18	4.1	3.6	30.4	52	96	176	70	119	71	1	10	18	98	23	0
SACRAMENTO	5	11.7	2.8	33.8	14.2	15.7	13	46.1	-6.7	342	1579	95	0	437	321	0	142	0	0		91	87	71	76	47	28	3.6	4.2	31.3	45	98	191	70	104	58	0	5	35	81	19	0
SACRAMENTO U 1964	5	12.4	3.5	32.2	14.4	15.9	32	44.4	-5.6	320	1437	91	0	458	310	0	129	0	0																58				66	10	0
SANDBERG R	1376	8.0	1.1	29.5	17.2	12.8	41	38.9	-16.1	427	2459	62	1	304	289	0	174	196	676	978	46	55	53	41	26	28	7.6	5.7	34.4			208	79	78	39	7	4	79	20	59	0

NORMALS, MEANS AND EXTREMES

State and Station	Elevation Ground (Meters)	Temperature (°C) Normal (1941–1970) January Daily Maximum	Temperature Normal January Daily Minimum	Temperature Normal July Daily Maximum	Temperature Normal July Daily Minimum	Temperature Normal Annual	Temperature Extremes Length (Yrs)	Temperature Extremes Record Highest	Temperature Extremes Record Lowest	Normal Heating Degree Days (1941–1970) January	Normal Heating Degree Days Seasonal	Precipitation (Millimeters) Normal (1941–1970) Wettest Month	Precipitation Normal Driest Month	Precipitation Normal Annual	Precipitation Extremes Wettest Month	Precipitation Extremes Driest Month	Precipitation Extremes Maximum In 24 Hours	Snow @ Mean Total January	Snow @ Mean Total Seasonal	Snow @ Extreme Maximum In 24 Hours	Relative Humidity (Percent) January 7.00 a.m. EST	Relative Humidity January 1:00 p.m. EST	Relative Humidity January 7 00 p.m. EST	Relative Humidity July 7:00 a.m. EST	Relative Humidity July 1 00 p.m. EST	Relative Humidity July 7 00 p.m. EST	Wind Speed (m.p.s.) Mean Speed January	Wind Speed Mean Speed July	Wind Speed Fastest Mile (1 6 Kilometers)	Sunshine (% of Possible) January	Sunshine (% of Possible) July	Annual Mean Number of Days Sunrise to Sunset Clear	Sunrise to Sunset Partly Cloudy	Sunrise to Sunset Cloudy	Precipitation 25mm or More	Snow Sleet, Hail 25.4mm or More	Thunderstorms	Heavy Fog	Temperature Max ≥ 32.2 °C	Temperature Min ≤ 0 °C	Temperature Min ≤ -17.8 °C
CALIFORNIA																																									
SAN DIEGO	3	18.1	7.7	24.1	17.7	17.2	13	43.9	- 0.6	174	837	48	0	240	193	0	78	0	0		68	54	55	82	69	66	2.5	3.1	22.8	71	68	152	114	99	42	0	3	28	3	*	0
SAN FRANCISCO	2	12.9	5.1	21.6	12.2	13.8	14	41.1	- 4.4	287	1689	111	0	496	312	0	116	0	0	38	86	79	67	88	66	60	3.2	6.1	25.9			161	104	100	62	*	2	17	4	4	0
SAN FRANCISCO U	15	13.3	7.6	17.7	11.8	13.7	37	38.3	- 1.1	242	1710	115	0	525	291	0	93	0	0		81	72	63	92	73	74	3.0	5.0	21.0	56	66				67	0	2		1	*	0
SANTA CATALINA 1968	477	15.4	8.6	25.5	15.2	16.1	5	39.4	1.1	196	1139	80	1	365	190	0	107	0	0								0.0	0.0				173	94	98	42	0	4	158	15	0	0
SANTA MARIA	71	17.1	3.5	22.1	11.3	13.8	10	38.9	- 6.1	250	1695	61	1	311	246	0	78	0	0		81	64	60	88	65	62	3.0	2.9				178	108	79	46	0	2	87	6	23	0
STOCKTON	6	11.6	2.4	34.8	14.8	15.9	14	45.6	- 7.2	351	1558	74	0	360	204	0	76	0	0		90	87	70	64	40	25	3.0	3.6	20.6			187	75	103	52	0	3	44	87	24	0
COLORADO							86	47.8	-51.1							0	281																								
ALAMOSA	2296	1.7	-17.4	27.8	8.8	5.3	28	33.9	-45.6	823	4782	30	6	176	89	0	46	104	927	401	77	60	58	84	39	37	0.0	0.0				146	140	79	68	13	44	15	1	227	48
COLORADO SPRINGS	1872	5.0	- 8.8	29.1	13.9	9.1	13	37.2	-29.4	626	3595	79	7	400	203	0	78	114	1019	457	56	40	45	71	39	43	4.5	4.3	26.8			130	119	116	87	12	60	21	14	162	7
DENVER	1610	6.4	- 8.8	30.8	14.8	10.1	14	39.4	-31.7	604	3341	67	11	394	186	0	90	213	1521	493	62	44	48	72	37	36	4.2	3.8	25.0	72	70	115	133	117	88	18	41	10	32	165	10
GRAND JUNCTION	1476	2.6	- 8.6	33.9	17.9	11.5	10	40.6	-26.1	661	3113	27	12	214	88	0	40	188	665	231	76	65	61	47	28	21	2.5	4.2	29.5	59	77	139	107	119	71	9	35	9	63	138	7
PUEBLO	1427	7.5	- 9.6	32.8	16.4	11.6	9	40.6	-28.3	601	2996	50	7	303	157	0	96	145	823	427	63	46	43	72	38	36	3.6	3.8	35.8	74	76	135	128	102	70	10	42	9	61	152	8
CONNECTICUT							86	40.6	-35.6							0	308																								
BRIDGEPORT	2	2.7	- 4.8	27.5	18.9	11.1	8	37.8	-19.4	599	3033	97	65	981	450	2	175	173	678	424	69	58	62	77	60	69	5.9	4.4	30.0			101	110	154	117	7	22	29	6	105	*
HARTFORD	51	0.8	- 8.8	28.9	16.2	9.5	14	38.9	-32.2	692	3527	110	77	1102	555	9	308	284	1387	381	72	57	62	80	51	62	4.3	3.5	23.7	58	61	79	112	174	127	14	22	33	20	137	7
NEW HAVEN 1969	1	2.8	- 5.6	26.9	17.3	10.1	25	37.8	-22.2	609	3275	117	81	1169	278	3	141	236	942	437	76	63		81	66		3.7	2.8	25.5	55	68	100	109	156	128	11	27	28	3	113	1
DELAWARE							81	43.3	-27.2							0	199																								
WILMINGTON	22	4.6	- 4.6	29.7	18.9	12.2	26	38.9	-20.0	568	2744	109	66	1022	307	4	158	142	526	396	75	60	69	80	54	67	4.4	3.4	25.9			97	104	164	116	6	31	40	19	102	*
DIST.OF COLUMBIA																																									
WASHINGTON DULLES	88	5.1	- 5.0	30.2	17.8	12.1	11	39.4	-22.2	566	2783	108	66	1019	462	0	302	147	643	391	80	58	68	87	56	69	3.6	2.8	20.6			96	104	165	110	7	26	37	26	116	2
WASHINGTON NATIONAL	3	6.4	- 2.4	31.2	20.6	14.1	13	38.3	-16.1	506	2339	119	62	988	363	0	183	119	439	366	69	54	58	76	53	61	4.5	3.7	34.9	49	62	103	103	159	111	5	29	13	37	78	0
FLORIDA							84	42.8	-18.9							0	983																								
APALACHICOLA U	3	16.2	7.9	30.8	24.0	20.3	44	38.9	-10.6	204	756	229	68	1453	573	0	297	0	0	30	87	69	80	85	72	76	3.8	3.0	30.0	59	64	132	125	108	106	*	69	27	21	5	0
DAYTONA BEACH	9	20.6	8.7	32.0	22.4	21.4	30	38.9	- 6.1	133	501	180	50	1276	505	0	236	0	0		88	60	78	88	66	79	4.1	3.4	25.9			94	136	135	115	0	79	32	55	5	0
FORT MYERS	4	23.7	11.3	32.8	23.2	23.3	14	36.7	- 3.3	71	253	226	33	1370	472	0	276	0	0		88	59	74	88	60	75	3.8	3.1	41.1			105	157	103	114	0	95	22	103	1	0
JACKSONVILLE	7	18.1	6.9	32.2	22.2	20.2	32	40.6	-11.1	193	737	200	45	1384	492	0	258	0	0	38	87	57	74	87	58	75	3.8	3.5	36.7	56	60	99	127	139	116	*	62	34	84	12	0
KEY WEST INTL AP	1	24.2	18.8	31.8	26.7	25.7	21	35.0	7.8	8	35	186	39	1016	548	0	226	0	0		83	69	77	77	66	72	5.4	4.5	54.5	70	75	102	163	100	112	0	62	1	46	0	0
LAKELAND U	65	21.4	10.6	32.4	22.6	22.3	33	38.3	- 6.7	104	376	205	41	1256	398	0	257	0	0								3.3	2.5		62	60	101	159	106	120	0	100	19	82	2	0
MIAMI BEACH 1964	2	23.4	17.7	30.6	25.3	24.6	24	36.7	1.7	31	78	187	42	1175	458	0	212	0	0								5.2	4.9	54.5	67	63	147	121	97	123	0			14	0	0
MIAMI INTL AP	2	24.2	14.8	31.7	24.2	24.2	9	35.6	1.1	29	114	229	42	1519	620	0	253	0	0		84	60	70	86	65	73	4.2	3.5	33.1			77	168	120	128	0	75	7	31	0	0
ORLANDO	32	21.8	9.7	33.2	22.8	22.5	10	37.2	- 4.4	108	391	211	40	1301	497	0	246	0	0		87	57	70	89	58	73	4.0	3.4	28.6			95	148	122	114	0	79	28	102	2	0
PENSACOLA 1/	34	16.2	6.1	32.1	23.3	20.0	10	37.8	-11.7	237	876	207	80	1631	394	0	255	0	5	48	82	54	73	87	64	70	4.0	3.0	26.4	48	57	97	117	151	117	*	74	36	51	15	0
TALLAHASSEE	16	17.9	5.0	32.6	22.0	19.8	13	37.8	-12.2	226	868	227	71	1564	511	0	241	0	0	10	87	50	73	93	61	75	3.6	2.6	25.9			96	136	133	118	0	84	52	91	35	0
TAMPA	5	21.4	10.1	32.3	23.2	22.3	10	36.1	- 5.0	112	398	214	45	1254	523	0	308	0	0		87	60	73	87	62	72	4.0	3.4	30.0	65	61	97	143	125	108	0	87	24	80	4	0
WEST PALM BEACH	4	23.9	13.3	32.0	23.4	23.6	9	37.2	- 1.7	46	166	250	56	1576	631	1	387	0	0		83	59	73	84	65	75	4.4	3.4	38.4			75	153	137	131	0	78	8	59	1	0
GEORGIA							82	44.4	-27.2							0	457																								
ATHENS	244	11.8	0.8	31.9	20.4	16.4	30	40.6	-18.3	372	1652	145	69	1285	380	0	252	18	51	127	81	58	65	91	60	70	3.8	2.9	23.2			112	106	147	111	1	51	37	50	53	*
ATLANTA	307	10.8	0.8	30.3	20.8	16.0	13	36.7	-19.4	389	1719	148	63	1228	399	0	144	18	41	211	79	60	64	90	63	70	4.7	3.3	31.3	48	62	109	110	146	115	1	50	30	20	60	*
AUGUSTA	41	14.2	1.1	32.7	21.1	17.4	9	40.0	-15.0	333	1414	129	55	1083	290	0	152	5	30	348	83	54	67	89	58	72	3.1	2.6	27.7			108	105	152	106	*	56	27	62	61	0
COLUMBUS	117	14.3	2.2	32.7	21.3	17.9	28	40.0	-16.1	317	1321	153	50	1294	336	0	143	0	13	356	85	60	71	89	59	70	3.3	2.4	24.6			112	102	151	111	*	58	19	74	46	0
MACON	107	14.8	2.7	33.4	21.5	18.4	9	40.0	-16.1	301	1244	131	59	1129	299	0	136	5	25	419	83	58	64	89	58	69	3.7	3.1	31.3	54	64	112	105	148	112	*	56	25	83	53	0
ROME	194	11.2	- 1.1	32.4	19.5	15.7	27	41.1	-20.6	411	1856	157	74	1336	441	0	191	18	51	208	81	58	73	88	54	67	0.0	0.0				105	117	143	123	1	61	26	63	81	*
SAVANNAH	14	16.2	3.7	32.7	21.8	18.8	9	38.9	-12.8	268	1084	200	49	1299	511	1	179	0	8	91	84	55	69	89	59	74	3.9	3.3	29.5	54	65	103	116	146	111	*	63	39	58	39	0
HAWAII							69	37.8	- 7.8							0	965																								
HILO	8	26.4	17.1	28.3	19.7	23.0	27	34.4	11.7	0	0	400	168	3393	1291	9	399	0	0		84	80	67	88	81	68	3.4	3.1	13.4	44	41	31	124	210	282	0	9	0	1	0	0
HONOLULU U 1964	3						42	34.4	13.9	0	0	98	16	609	475	2	442	0	0																147	0			0	0	0
HONOLULU	2	26.3	18.5	30.4	23.0	24.8	4	32.8	11.7	0	0	112	8	582	528	0	434	0	0		79	78	62	68	65	51	4.5	6.1	30.0	63	75	93	169	103	102	0	8	0	6	0	0
KAHULUI	14	26.4	17.7	30.2	21.1	24.0	9	35.6	8.9	0	0	91	5	468	347	0	148	0	0		87	86	65	81	71	55	5.1	7.2	19.2	65	75	119	150	96	96	0	6	0	23	0	0
LIHUE																		0	0		84	83	68	80	75	65	4.6	5.6	32.6	51	61	52	171	142	202	0	10	0	*	0	0
IDAHO							81	47.8	-51.1							0	182																								
BOISE	865	2.5	- 5.9	32.5	14.7	10.5	34	43.9	-30.6	619	3240	37	4	292	102	0	57	196	549	330	81	74	71	53	33	21	3.9	3.8	27.3	41	89	125	90	150	91	8	15	19	43	125	2
IDA FALLS 42NW R1966	1459	- 3.1	-17.7	31.7	9.6	5.4	16	39.4	-41.7	888	4866	31	8	178	128	0	45	0	0								2.1	3.6	22.4						66				30	219	41
IDA FALLS 46W R 1966	1503	- 2.5	-16.0	31.1	10.1	5.8	17	38.3	-40.0	854	4707	28	7	192	112	0	44	163	678	216							2.5	3.5	22.8						68	10	13	14	25	212	33
LEWISTON	430	3.3	- 4.2	31.8	14.2	10.9	27	46.1	-30.0	582	3035	46	13	336	122	0	44	193	467	325	80	75	72	60	36	23	0.0	0.0	32.2			96	74	195	103	6	16	21	39	96	2
POCATELLO	1357	0.2	-10.0	31.6	12.3	8.2	10	40.0	-33.3	719	3923	33	9	274	101	0	42	262	998	257	75	71	66	62	33	22	5.0	4.2	32.2	37	83	110	98	157	93	13	24	15	33	174	10

NORMALS, MEANS AND EXTREMES

State and Station	Elevation Ground (Meters)	Temperature (°C) Normal (1941-1970) January Daily Maximum	Temperature Normal January Daily Minimum	Temperature Normal July Daily Maximum	Temperature Normal July Daily Minimum	Temperature Normal Annual	Temperature Extremes Length (Yrs)	Temperature Extremes Record Highest	Temperature Extremes Record Lowest	Normal Heating Degree Days (1941-1970) January	Normal Heating Degree Days Seasonal	Precipitation (Millimeters) Normal (1941-1970) Wettest Month	Precipitation Normal Driest Month	Precipitation Normal Annual	Precipitation Extremes Wettest Month	Precipitation Extremes Driest Month	Precipitation Extremes Maximum In 24 Hours	Snow @ Mean Total January	Snow @ Mean Total Seasonal	Snow @ Ex-treme Maximum In 24 Hours	Relative Humidity (Percent) January 7 00 a.m. EST	Relative Humidity January 1 00 p.m. EST	Relative Humidity January 7 00 p.m. EST	Relative Humidity July 7 00 a.m. EST	Relative Humidity July 1 00 p.m. EST	Relative Humidity July 7 00 p.m. EST	Wind Speed (m.p.s.) Mean Speed January	Wind Speed Mean Speed July	Wind Speed Fastest Mile (1.6 Kilometers)	Sunshine (% of Possible) January	Sunshine July	Annual Mean Number of Days Sunrise to Sunset Clear	Sunrise to Sunset Partly Cloudy	Sunrise to Sunset Cloudy	Precipitation 25mm or More	Snow Sleet Hail 25.4mm or More	Thunderstorms	Heavy Fog	Temperature Max ≥ 32.2 °C	Temperature Min ≤ 0 °C	Temperature Min ≤ -17.8 °C
ILLINOIS							84	47.2	-37.2							0	420																								
CAIRO U	95	6.5	-1.8	32.1	22.0	15.2	31	40.0	-20.6	494	2129	132	68	1197	380	0	192	74	246	267	80	67		84	59		4.4	2.9	28.2	45	74	114	104	147	115	3	53	7	48	66	*
CHICAGO O HARE	200	-0.5	-9.6	28.4	15.9	9.4	15	37.2	-28.9	724	3609	105	33	806	291	3	117	259	991	460	77	67	72	82	58	58	5.1	3.5	25.9			87	107	171	124	11	37	17	15	132	13
CHICAGO MIDWAY	185	-0.3	-8.3	29.1	18.3	10.3	10	38.3	-26.7	701	3403	104	40	875	360	5	158	241	1011	503	71	64	66	77	55	55	5.1	3.7	26.8	44	69	93	104	168	122	12	38	13	22	117	7
MOLINE	177	-1.1	-10.6	29.6	17.7	9.9	14	37.8	-32.2	749	3552	116	33	909	360	0	160	188	732	417	73	65	69	85	58	60	4.8	3.4	34.4	48	71	103	99	164	111	9	47	20	22	135	17
PEORIA	198	-0.1	-9.1	29.7	18.1	10.4	14	38.9	-28.9	709	3387	111	38	891	332	1	129	140	589	259	77	68	71	86	59	60	5.1	3.6	33.5	46	68	100	97	168	111	8	49	21	17	132	12
ROCKFORD	220	-1.7	-11.4	29.0	16.3	8.9	10	37.2	-30.0	771	3802	112	33	933	300	0	141	201	838	277	77	69	74	87	57	58	4.6	3.6	24.1			95	101	169	114	11	42	24	13	139	16
SPRINGFIELD	179	1.6	-7.4	30.3	18.7	11.5	14	41.1	-30.0	659	3087	106	44	890	252	4	130	119	551	277	77	67	71	83	56	58	5.9	3.8	33.5	46	72	109	93	163	113	7	50	17	28	120	8
INDIANA							87	46.7	-37.2							0	267																								
EVANSVILLE	116	5.3	-4.6	31.6	19.3	13.3	13	40.0	-27.8	557	2571	119	64	1064	343	0	154	86	335	269	77	56	68	85	57	59	4.2	2.9	26.4	42	75	102	102	161	115	4	46	14	40	106	4
FORT WAYNE	241	0.3	-7.8	28.7	16.9	9.9	13	38.3	-28.3	683	3449	99	52	909	247	4	117	165	767	345	79	71	75	83	56	58	5.1	3.7	29.1	41	72	77	106	182	131	9	41	20	14	133	11
INDIANAPOLIS	241	2.2	-6.8	29.7	18.1	11.3	15	37.2	-28.9	638	3098	106	60	984	322	4	106	124	531	317	79	67	70	87	60	62	5.0	3.4	40.2	41	70	91	100	174	122	7	44	20	16	120	8
SOUTH BEND	235	-0.3	-8.6	28.2	16.5	9.5	10	36.7	-28.3	706	3589	102	49	919	248	1	119	401	1666	396	80	73	75	84	57	60	5.4	3.8	28.2			73	103	189	141	22	43	24	10	125	7
IOWA							101	47.8	-43.9							0	424																								
BURLINGTON	210	-0.2	-9.9	30.1	18.1	10.4	76	43.9	-32.8	724	3415	120	32	880	384	2	160	180	645	330	79	69	73	85	58	60	5.1	3.6	23.2	53	77	100	106	159	104	9	51	18	31	128	11
DES MOINES	285	-2.5	-11.5	29.4	18.5	9.4	13	37.8	-31.1	785	3727	124	27	784	360	1	140	216	828	503	78	71	72	83	59	58	5.3	4.0	34.0	51	70	100	98	167	106	10	50	18	19	137	17
DUBUQUE	321	-3.3	-12.6	27.8	16.3	8.1	8	36.1	-33.3	814	4042	134	32	1023	393	0	225	213	1046	394	75	68	73	85	61	63	0.0	0.0				91	99	175	114	13	45	28	6	147	22
SIOUX CITY	333	-2.1	-13.5	30.4	17.7	9.1	14	40.0	-32.2	809	3862	117	17	654	262	0	140	160	798	290	78	70	72	87	60	57	5.0	4.0	40.7	58	75	106	102	157	99	10	47	19	22	149	23
WATERLOO	264	-3.5	-13.9	28.7	16.4	8.0	14	37.2	-36.7	838	4119	127	23	857	320	0	236	173	800	376	77	70	73	87	60	61	5.0	3.8	24.1			94	101	170	97	10	41	23	13	159	29
KANSAS							87	49.4	-40.0							0	320																								
CONCORDIA	448	2.7	-9.0	32.1	18.9	11.7	12	42.2	-25.6	664	3126	127	17	701	359	1	139	102	561	335	82	67	70	84	54	51	5.5	5.1	30.4	61	76	132	95	138	92	7	60	19	46	130	7
DODGE CITY	786	5.9	-7.2	33.0	19.4	12.7	10	41.7	-23.3	588	2803	85	13	523	232	0	116	104	480	325	77	58	59	77	46	40	6.1	5.8	34.9	67	78	135	106	124	78	6	54	23	62	126	4
GOODLAND	1113	5.3	-10.2	32.5	16.1	10.3	7	42.2	-25.6	643	3399	74	9	423	205	0	89	140	856	386	77	57	59	84	48	42	5.5	5.3	29.5			141	123	101	76	11	50	28	44	160	7
TOPEKA	267	3.5	-7.9	31.8	19.6	12.4	9	40.6	-28.9	637	2912	147	25	880	386	0	140	137	538	386	77	64	66	86	61	59	4.7	4.0	36.2	54	67	113	97	155	94	7	58	14	33	121	5
WICHITA	402	5.2	-6.0	33.2	20.9	13.7	21	45.0	-24.4	580	2603	114	22	777	266	0	126	109	399	343	80	64	66	79	50	46	5.6	5.1	29.5	59	73	124	98	143	84	5	55	17	63	113	2
KENTUCKY							85	45.6	-36.7							0	264																								
COVINGTON	264	4.3	-5.3	30.3	18.1	12.2	12	38.9	-28.3	583	2816	105	55	992	309	5	132	157	599	249	77	64	67	84	56	60	4.8	3.2	17.9			80	99	186	128	7	44	25	21	108	5
LEXINGTON	294	5.2	-4.2	30.2	18.8	12.9	10	36.7	-23.9	552	2627	123	54	1130	423	6	149	135	404	241	78	65	68	85	59	64	5.2	3.4	20.6			94	106	165	129	5	47	19	17	97	3
LOUISVILLE	145	5.6	-4.2	30.7	19.1	13.1	13	38.3	-28.9	546	2580	128	60	1095	379	6	177	132	460	330	76	63	63	86	58	60	4.3	3.0	27.3	42	66	96	102	167	124	5	45	10	25	94	2
LOUISIANA							83	45.6	-26.7							0	559																								
ALEXANDRIA	28	14.8	2.6	33.0	21.3	18.3	14	40.0	-15.0	303	1222	142	83	1373	332	2	157	10	18	185	88	66	74	96	61	69	3.3	2.2	20.6			106	111	148	105	*	68	40	72	44	0
BATON ROUGE	19	16.4	4.7	32.9	22.6	19.7	15	38.9	-12.2	250	927	165	67	1373	369	2	307	0	5	46	85	65	67	91	63	70	4.2	2.8	25.9			100	119	146	106	*	70	37	85	24	0
LAKE CHARLES	2	16.4	6.1	32.9	23.1	20.2	9	37.2	-6.7	230	832	166	88	1409	507	0	358	8	8	10	89	70	78	93	64	71	4.6	2.9	25.9			94	124	147	94	*	74	49	73	14	0
N.O. AUDUBON PK 1964	1	18.2	7.9	33.0	23.2	20.8	3	36.1	-8.3	191	696	206	80	1599	258	0	102	0	58	114	80	68	72	96	72	80	2.4	1.4	11.6	37	47	99	129	137	115	1	79	18	84	14	0
NEW ORLEANS INTL AP	1	16.8	6.4	32.4	22.9	20.2	27	37.8	-10.0	223	813	171	57	1442	485	0	250	0	5	69	86	67	73	91	66	73	4.2	2.9	30.8			111	122	132	113	*	68	31	69	13	0
SHREVEPORT	77	13.7	3.2	34.2	22.7	18.8	21	41.7	-16.1	306	1203	132	68	1136	315	0	182	10	33	102	83	63	64	89	56	56	4.5	3.5	19.7	49	74	119	99	147	96	*	53	20	91	34	0
MAINE							86	40.6	-44.4							0	204																								
CARIBOU	190	-6.8	-16.9	24.2	12.3	3.8	34	35.6	-40.6	934	5350	101	52	910	215	3	158	564	2824	462	74	67	72	83	58	70	5.5	4.4				58	102	205	160	31	20	27	2	190	43
PORTLAND	13	-0.4	-11.3	26.2	13.8	7.2	33	37.8	-39.4	749	4165	123	66	1036	312	7	196	452	1915	579	77	62	71	80	59	75	4.1	3.4	34.0	55	65	108	100	157	127	18	18	53	5	160	15
MARYLAND							78	42.8	-40.0							0	375																								
BALTIMORE U 1964	4	6.7	-0.9	30.8	21.5	14.2	94	41.7	-21.7	477	2283	117	76	1123	449	1	199	155	577	622	72	58	66	71	52	65	4.6	3.9	29.5	48	65	121	123	121	122	6	32	15	26	71	*
BALTIMORE INTL AP	45	5.5	-3.9	30.4	19.2	12.8	23	38.9	-21.7	544	2627	107	71	1028	466	0	199	132	579	394	72	57	62	81	53	64	4.5	3.7	35.8	52	65	109	108	148	112	8	28	30	32	100	*
MASSACHUSETTS							86	41.1	-36.7							0	461																								
BLUE HILL OBS	191	0.9	-7.4	26.9	16.5	9.3	88	38.3	-29.4	668	3519	129	75	1189	477	2	252	391	1539	716	76	62	68	81	58	74	7.8	5.8	41.1	45	57				135	16			5	132	4
BOSTON	4	2.2	-5.3	27.4	18.4	10.7	9	37.2	-20.0	616	3122	115	70	1080	434	9	213	305	1062	493	66	57	60	73	56	66	6.4	4.9	29.1	54	65	100	105	160	128	11	19	23	11	100	1
NANTUCKET 1969	13	4.0	-2.9	23.5	16.5	9.7	4	32.2	-16.7	551	3272	115	69	1109	328	0	166	221	884	511	79	67	75	87	76	91	6.6	4.9	32.6	42	60	86	93	186	125	8	20	98	1	108	0
PITTSFIELD 1968	356	-0.8	-10.5	26.2	13.6	7.2	29	35.0	-31.7	743	4209	124	64	1128	262	11	108	483	1981	432							0.0	0.0				57	127	181	152	24	28	45	3	163	14
WORCESTER	300	-0.6	-8.8	26.3	16.0	8.4	18	34.4	-28.3	712	3804	118	81	1149	264	21	122	399	1935	610	74	59	66	74	56	66	5.7	3.9	34.0			92	108	165	128	19	21	86	3	147	7
MICHIGAN							87	44.4	-46.1							0	248																								
ALPENA	210	-2.8	-12.9	26.1	11.1	5.6	15	36.7	-33.3	812	4731	83	34	701	213	4	81	536	2195	409	78	68	72	83	52	60	3.5	2.8	19.7	40	68	70	109	186	147	26	33	27	6	184	27
DETROIT CITY AP	188	-0.2	-7.1	28.4	17.4	9.9	40	40.6	-26.7	680	3459	87	46	786	204	3	94	201	805	254	79	69	73	75	51	55	5.2	3.7	20.6	32	70	80	108	177	131	11	32	11	15	125	2
DETROIT METRO. AP	192	-0.1	-8.2	28.6	16.2	9.5	15	37.2	-25.6	695	3565	87	44	805	196	4	94	196	914	262	78	69	73	82	53	58	5.1	3.8	38.9	40	66	75	106	184	131	12	33	23	11	139	6
DETROIT W R 1968	216	0.8	-6.8	30.0	16.9	10.0	7	37.2	-25.0	661	3476	88	49	779	221	6	121	183	831	221	78	70	72	82	49	52	5.4	3.9	26.8			78	107	180	125	12	33	28	15	143	7
FLINT	235	-1.2	-9.7	27.3	14.6	8.2	10	36.1	-30.0	735	3911	87	40	756	220	2	153	269	1092	503	75	68	71	83	56	59	5.3	3.7	36.2			67	107	191	131	14	33	19	5	138	8

NORMALS, MEANS AND EXTREMES

State and Station	Elevation Ground (Meters)	Temperature (C) Normal (1941-1970) January Daily Maximum	January Daily Minimum	July Daily Maximum	July Daily Minimum	Annual	Extremes Length (Yrs)	Record Highest	Record Lowest	Normal Heating Degree Days (1941-1970) January	Seasonal	Precipitation (Millimeters) Normal (1941-1970) Wettest Month	Driest Month	Annual	Extremes Wettest Month	Driest Month	Maximum In 24 Hours	Snow Mean Total January	Snow Mean Total Seasonal	Snow Extreme Maximum In 24 Hours	Relative Humidity (Percent) January 7 00 a m EST	January 1 00 p m EST	January 7 00 p m EST	July 7 00 a m EST	July 1 00 p m EST	July 7 00 p m EST	Wind Speed (m p s) Mean Speed January	Mean Speed July	Fastest Mile (1 6 Kilometers)	Sunshine (% of Possible) January	July	Annual Mean Number of Days Sunrise to Sunset Clear	Partly Cloudy	Cloudy	Precipitation 25mm or More	Snow Sleet Hail 25.4mm or More	Thunderstorms	Heavy Fog	Temperature Max ≥ 32 2 C	Min ≤ 0 C	Min ≤ 17 8°C
MICHIGAN																																									
GRAND RAPIDS	238	-0.9	-8.9	28.5	15.3	8.8	10	37.8	-28.3	719	3778	87	38	823	209	4	83	554	1994	384	81	72	77	81	54	56	5.3	3.8	26.8	36	64	66	97	202	143	25	36	29	11	147	8
HOUGHTON LAKE	350	-3.4	-12.8	26.0	12.0	5.9	9	35.6	-31.7	819	4636	85	30	721	169	8	66	500	2189	297	82	73	78	85	55	59	4.6	3.4	17.9			69	98	198	145	28	39	31	2	174	25
LANSING	256	-1.2	-9.3	28.1	15.1	8.6	10	37.8	-31.1	729	3835	88	41	772	202	4	110	279	1288	518	82	74	77	83	56	60	5.5	3.8	28.2	36	70	75	[illegible]	181	139	15	34	23	11	151	11
MARQUETTE	206	-4.0	-11.1	24.1	14.1	5.9	37	38.9	-29.4	802	4639	88	39	783	259	5	118	526	2667	409	75	68	72	76	63	66	4.0	3.2	26.4	34	66	61	101	203	158	31	28	17	5	160	11
MUSKEGON	190	-1.1	-7.9	26.9	15.3	8.5	14	37.2	-25.6	706	3827	85	45	801	217	3	92	749	2370	511	80	75	77	82	58	59	5.7	3.8	[illegible]			79	88	198	142	31	37	24	3	139	[illegible]
SAULT STE MARIE	219	-5.6	-14.2	23.9	11.4	4.4	33	36.7	-33.3	874	5106	98	38	805	198	4	130	640	2723	363	83	76	81	88	62	67	4.6	3.7	21.0	34	63	66	90	209	164	35	30	47	1	179	29
MINNESOTA							87	45.6	-50.6							0	275																								
DULUTH	435	[illegible]	-17.4	24.7	12.6	3.7	13	35.0	-39.4	972	5419	113	22	767	262	3	103	429	1979	645	74	68	68	83	58	59	5.4	4.4	[illegible]	50	66	76	[illegible]	187	135	22	34	55	1	188	52
INTERNATIONAL FALLS	359	-10.7	-12.7	25.7	11.9	2.5	34	36.7	-43.3	1086	5858	101	18	652	286	3	124	259	1468	432	73	68	69	87	57	58	4.2	3.6	23.2			82	101	182	133	18	41	14	4	198	68
MINNEAPOLIS	254	-6.0	-16.0	28.0	16.3	6.7	14	37.2	-36.7	909	4532	100	19	659	204	0	105	218	1143	411	73	67	68	83	56	55	4.7	4.2	41.1	50	70	98	103	164	113	14	36	11	14	158	35
ROCHESTER	395	-5.6	-15.6	27.1	15.3	6.4	14	36.1	-35.6	897	4570	118	17	698	212	1	83	231	1148	287	77	73	74	86	61	62	5.3	4.6	23.7			92	95	178	117	13	42	35	5	163	36
ST CLOUD	313	-7.1	[illegible]	27.7	14.8	5.4	34	39.4	-40.0	966	4926	118	19	682	[illegible]	0	117	198	1082	368	75	68	70	87	55	56	3.7	3.1				96	101	168	118	13	36	20	11	177	45
MISSISSIPPI							85	46.1	-28.3							0	398																								
JACKSON	94	14.7	[illegible]	[illegible]	21.4	18.3	10	39.4	-13.9	316	1277	143	56	1249	302	0	177	5	28	135	87	64	71	93	59	66	4.1	2.8	[illegible]	47	63	107	108	150	110	*	63	26	84	49	
MERIDIAN	88	14.7	1.9	33.6	21.1	18.1	9	39.4	-14.4	319	1326	158	55	1259	427	0	207	10	36	381	87	61	70	91	58	65	3.2	[illegible]	17.9			114	110	141	[illegible]	*	58	24	75	54	1
VICKSBURG U 1966	71	14.1	4.7	32.4	22.9	18.8	29	38.3	-16.7	284	1133	146	52	1257	421	0	253	23	41	254	83	62	70	93	62	71	4.2	3.0	25.0	45	67	111	114	140	[illegible]	1	62	12	65	23	0
MISSOURI							86	47.8	-40.0							0	462																								
COLUMBIA MUN'L 1969	237	4.1	-5.9	32.1	19.8	12.8	30	45.0	-27.8	597	2803	119	43	939	338	2	111	112	493	262	79	65	68	85	55	56	5.0	3.6	28.2	52	74	116	96	153	107	6	55	14	40	109	4
COLUMBIA REGIONAL	[illegible]	3.3	-6.3	30.8	19.5	12.4	4	39.4	-23.9	614	2823	119	40	950	256	6	55	109	505	284	77	66	67	83	55	54	5.2	3.9	25.9	58	70	92	86	187	117	7	54	27	35	[illegible]	[illegible]
KANSAS CITY 1971	226	4.4	-4.8	33.3	21.7	13.8	12	41.1	-22.8	573	2617	116	31	865	303	1	189	142	503	325	75	61	62	[illegible]	[illegible]	53	4.4	4.0	32.2	53	76	119	102	144	98	6	50	12	42	99	[illegible]
ST JOSEPH	247	2.2	-8.7	31.7	19.7	12.1	10	39.4	-28.9	668	3021	165	26	906	349	0	181	142	500	287	74	64	66	84	[illegible]	56	4.8	3.5	26.8			124	98	143	95	6	56	19	42	[illegible]	5
ST LOUIS	163	4.4	-5.2	31.3	20.4	13.3	13	41.1	-23.9	580	2638	112	47	912	231	2	84	104	437	305	80	62	67	86	58	56	4.6	3.4	26.8	53	69	102	103	160	108	6	44	[illegible]	38	[illegible]	3
SPRINGFIELD	386	5.2	-5.2	31.7	19.2	13.4	14	38.9	-23.3	552	2538	125	42	1008	476	2	174	71	376	399	77	59	64	86	57	58	5.5	4.1	29.5	50	71	114	100	151	107	5	58	[illegible]	40	[illegible]	3
MONTANA							107	47.2	-56.7							0	292																								
BILLINGS	1087	-0.4	-10.8	29.8	14.4	7.9	15	40.6	-32.8	742	4035	66	16	359	194	0	72	231	1412	602	65	51	58	63	39	30	5.9	4.4	35.3	48	78	89	119	157	94	19	29	18	29	[illegible]	18
GLASGOW	696	-7.3	-17.5	29.1	13.7	5.3	9	41.1	-43.9	961	4982	69	8	276	136	0	101	196	701	224	71	68	69	74	44	34	5.0	4.7	[illegible]			85	109	171	88	9	27	13	24	182	46
GREAT FALLS	1116	-1.5	-11.3	28.7	12.7	7.2	13	41.1	-41.7	766	4250	79	17	381	207	0	81	249	1443	427	65	62	61	64	27	28	7.1	4.6	36.7	[illegible]	81	85	104	176	99	19	26	13	23	[illegible]	29
HAVRE	787	-5.5	-17.5	29.4	12.7	5.7	13	43.9	-46.7	924	4825	65	10	293	120	0	59	267	1049	411	73	68	69	71	27	27	4.8	4.2	[illegible]	[illegible]	85	86	100	179	83	14	[illegible]	9	29	184	45
HELENA	1166	-2.1	-13.4	28.7	11.2	6.2	10	40.6	-38.9	807	4549	60	10	289	120	1	52	229	1237	546	69	55	64	66	39	27	3.2	3.5	32.6	48	80	81	103	181	96	14	34	8	19	190	[illegible]
KALISPELL	903	-2.7	-11.7	27.1	8.8	5.4	14	40.6	-37.2	790	4751	65	22	412	120	0	60	503	1722	391	80	79	74	81	43	[illegible]	3.2	[illegible]	23.2			74	82	209	132	22	24	33	18	194	[illegible]
MILES CITY	801	-3.3	-15.2	31.6	15.4	7.4	36	43.3	-38.3	854	4382	84	12	354	248	0	69	170	815	267	73	69	69	69	[illegible]	30	4.2	4.3				101	108	156	93	13	29	10	[illegible]	172	32
MISSOULA	972	-1.9	-10.6	29.1	9.4	6.5	14	40.6	-34.4	761	4405	54	18	339	106	0	46	340	1257	284	84	81	77	76	42	29	2.4	[illegible]	[illegible]	29	81	76	80	209	[illegible]	16	24	28	25	190	[illegible]
NEBRASKA							98	47.8	-43.9							0	334																								
GRAND ISLAND	561	0.7	-11.6	31.5	17.7	10.1	13	41.7	-33.3	735	3569	112	13	595	355	0	137	142	737	305	76	64	66	83	53	49	5.2	4.8	25.5			122	102	141	88	9	50	18	40	[illegible]	16
LINCOLN	359	[illegible]	-11.3	31.6	18.7	10.6	2	38.3	-28.9	737	3434	127	16	677	191	6	69	157	734	264	74	[illegible]	[illegible]	[illegible]	[illegible]	59	4.2	4.2	24.1	58	73	109	99	157	[illegible]	9	46	15	33	139	[illegible]
LINCOLN U 1972	350	1.1	-8.8	33.5	19.9	11.6	7	40.6	-27.8	687	3257	114	23	697	328	1	137	160	734	483							4.4	4.2	28.6	58	75	115	104	146	[illegible]	8	49	8	33	129	8
NORFOLK	470	-1.3	-13.3	30.6	17.7	9.1	28	45.0	-32.2	793	3877	124	16	618	310	0	107	140	719	267	76	64	68	84	53	50	[illegible]	[illegible]				116	101	148	87	9	[illegible]	11	33	157	21
NORTH PLATTE	845	2.6	-12.2	30.9	16.1	9.2	9	40.6	-31.7	716	3745	96	10	505	203	0	97	132	798	246	79	64	65	86	54	51	4.2	4.3	32.2	59	74	118	108	139	84	10	49	19	30	179	17
OMAHA	297	0.4	[illegible]	31.4	18.8	10.8	10	41.7	-27.2	729	3360	125	19	767	349	0	164	206	813	465	75	65	67	83	59	57	5.0	4.1	[illegible]	56	75	121	[illegible]	147	99	9	48	15	34	137	[illegible]
SCOTTSBLUFF	1206	3.6	-11.5	31.6	14.8	9.0	9	42.8	-31.7	690	3763	85	8	370	212	0	95	145	947	307	75	59	[illegible]	82	44	39	4.8	4.2	[illegible]			122	107	136	84	12	44	11	34	173	[illegible]
VALENTINE	788	[illegible]	-13.6	31.3	15.4	8.3	19	42.8	-33.9	768	4055	91	8	452	228	0	86	109	650	229	68	56	77	[illegible]	42	[illegible]	4.5	4.5	[illegible]	65	76	120	105	140	79	9	45	5	39	176	26
NEVADA							85	50.0	-45.6							0	188																								
ELKO	1539	2.2	[illegible]	32.4	9.2	7.4	9	38.9	-33.3	719	4156	29	9	248	117	0	105	262	1011	424	75	70	[illegible]	56	25	19	2.4	2.8	[illegible]			133	97	135	78	15	22	6	44	193	14
ELY	1905	3.3	-12.7	30.2	8.9	6.7	35	37.2	-33.3	712	4340	25	14	221	90	0	39	221	1204	333	71	59	55	[illegible]	12	21	4.8	4.6	[illegible]	66	80	131	111	123	72	15	32	2	16	218	[illegible]
LAS VEGAS	658	13.2	0.3	39.9	24.1	18.8	14	46.7	-13.3	358	1444	12	2	96	66	0	66	20	28	127	52	38	[illegible]	28	19	14	4.1	4.4	[illegible]	78	[illegible]	215	82	68	24	*	15	1	131	[illegible]	[illegible]
RENO	1342	7.4	-7.6	32.8	8.6	9.7	10	39.4	-26.7	569	3345	31	6	183	133	0	60	170	673	429	73	66	[illegible]	66	29	19	2.7	2.9	35.8	66	92	165	89	111	50	9	14	8	54	188	[illegible]
WINNEMUCCA	1310	4.8	-9.1	32.8	10.5	8.8	24	41.1	-36.7	633	3682	26	6	215	73	0	45	150	655	251	78	67	58	45	21	14	3.4	3.8	29.5	46	86	135	87	143	67	9	15	4	54	194	7
NEW HAMPSHIRE							97	41.1	-43.3							0	264																								
CONCORD	104	-0.4	-12.3	28.1	13.7	7.6	8	38.9	-33.9	764	4088	101	62	919	257	10	114	422	1628	483	71	57	64	87	53	67	3.3	2.5	32.2	52	62	94	111	160	125	18	21	52	9	173	25
MT WASHINGTON OBS	1908	-9.9	-16.2	12.6	6.1	-2.8	41	21.7	-43.9	1021	7709	195	130	1935	649	19	264	843	5852		82	83	83	91	86	90	20.7	11.1		33	31	51	75	239	206	65	16	310	0	243	65
NEW JERSEY							89	43.3	-36.7							0	376																								
ATLANTIC CITY	19	5.2	-4.4	29.3	18.6	12.1	9	41.1	-22.2	556	2747	124	76	1155	332	3	164	127	422	366	74	55	67	85	58	73	5.4	4.1	26.8	51	58	97	[illegible]	160	112	4	25	48	18	112	1
NEWARK	2	3.6	-4.3	29.8	19.6	12.2	8	40.6	-17.2	578	2799	108	72	1053	301	5	199	178	716	660	73	57	62	72	52	60	5.1	3.9	36.7			96	114	155	122	7	25	20	22	84	0
TRENTON	17	3.8	-3.7	29.4	19.3	12.2	41	41.1	-25.6	566	2750	120	64	1020	358	1	192	140	589	422							4.4	3.5	28.4	52	65	100	116	149	122	7	33		18	88	*

NORMALS, MEANS AND EXTREMES

State and Station	Elevation Ground (Meters)	Temperature (°C) Normal (1941-1970) January Daily Maximum	January Daily Minimum	July Daily Maximum	July Daily Minimum	Annual	Extremes Length (Yrs)	Record Highest	Record Lowest	Normal Heating Degree Days (1941-1970) January	Seasonal	Precipitation (Millimeters) Normal (1941-1970) Wettest Month	Driest Month	Annual	Extremes Wettest Month	Driest Month	Maximum In 24 Hours	Snow @ Mean Total January	Seasonal	Extreme Maximum In 24 Hours	Relative Humidity (Percent) January 7:00 a.m. EST	January 1:00 p.m. EST	January 7:00 p.m. EST	July 7:00 a.m. EST	July 1:00 p.m. EST	July 7:00 p.m. EST	Wind Speed (m.p.s.) Mean Speed January	Mean Speed July	Fastest Mile (1.6 Kilometers)	Sunshine (% of Possible) January	July	Annual Mean Number of Days Sunrise to Sunset Clear	Partly Cloudy	Cloudy	Precipitation .25mm or More	Snow, Sleet, Hail 25.4mm or More	Thunderstorms	Heavy Fog	Temperature Max ≥ 32.2 °C	Min ≤ 0 °C	Min ≤ 17.8 °C
NEW MEXICO							82	46.7	-45.6							0	287																								
ALBUQUERQUE	1618	8.3	-4.7	33.4	18.4	13.8	14	40.0	-27.2	513	2384	35	7	197	85	0	49	53	264	361	66	48	36	61	36	28	3.5	4.1	40.2	73	76	174	110	81	59	4	43	5	61	121	1
CLAYTON	1514	8.6	-7.4	30.7	15.5	11.5	29	40.0	-29.4	549	2895	70	7	404	197	0	119	79	508	323	63	42	47	77	42	42	0.0	0.0				161	100	104	68	7	54	11	36	143	3
RATON 1968	1944	7.4	-10.8	30.3	11.6	9.4	23	36.7	-35.0	619	3459	67	7	375	303	0	142	122	615	257		45			38		0.0	0.0				134	132	99	78	9	75	8	16	182	9
ROSWELL 1972	1100	12.8	-6.3	35.2	16.5	14.7	12	43.3	-22.2	466	2107	46	9	295	143	0	108	69	282	389	70	46	37	73	40	35	3.8	4.2	33.5	78	76	178	102	85	50	4	40	9	107	109	1
SILVER CITY 1968	1637	11.4	-3.1	32.4	17.7	14.6	7	38.9	-22.8	439	2058	61	7	273	114	0	53	66	213	178		43	39		36	36	0.0	0.0				187	110	68	60	3	54	1	43	105	*
NEW YORK							84	42.2	-46.7							0	284																								
ALBANY	83	-0.9	-10.8	28.8	15.6	8.7	8	36.7	-33.3	749	3826	83	54	847	228	5	115	378	1684	556	79	63	73	78	54	62	4.4	3.3	31.7	46	64	71	112	182	134	16	28	24	9	155	17
BINGHAMTON	484	-1.8	-9.3	25.8	15.3	7.8	22	35.6	-28.9	740	4046	97	57	949	240	7	99	480	2243	584	80	72	75	85	58	66	5.2	3.8	32.2	38	66	46	104	215	162	25	31	53	2	148	8
BINGHAMTON U 1968	261	1.2	-7.3	28.4	15.8	9.3	77	39.4	-33.3	661	3583	97	60	932	244	4	116	325	1326	533							0.0	0.0							151	15			9	133	7
BUFFALO	214	-1.2	-8.0	26.4	15.9	8.4	13	34.4	-28.9	711	3847	95	57	917	232	3	99	559	2240	617	77	72	75	79	55	61	6.5	4.7	40.7	34	69	58	103	204	167	26	30	20	2	136	5
NEW YORK CENTRAL PK.	40	3.6	-3.4	29.6	20.0	12.5	105	41.1	-26.1	564	2693	102	69	1021	428	1	284	193	747	671	68	60	61	75	55	63	4.9	3.4	31.3	51	65	107	125	133	121	8	18		17	81	*
NEW YORK KENNEDY	3	3.3	-4.0	28.4	19.4	11.7	13	40.0	-18.9	578	2879	109	68	1055	442	0	167	168	625	505	70	58	63	74	57	71	6.0	4.8	23.2			97	119	149	118	7	22	32	10	86	*
NEW YORK LA GUARDIA	3	3.2	-3.1	28.9	20.7	12.4	12	41.7	-18.9	566	2726	114	73	1057	408	1	181	163	698	579	64	56	57	72	52	60	6.3	4.6	31.3			92	119	154	120	7	24	14	14	76	*
ROCHESTER	166	-0.4	-8.5	27.9	15.7	8.8	10	36.7	-23.9	706	3732	75	57	796	246	6	80	546	2169	475	74	66	71	81	52	59	5.2	3.5	32.6	38	70	64	110	191	154	26	29	13	12	134	6
SYRACUSE	124	-0.3	-9.0	27.8	16.1	8.9	10	36.1	-32.2	712	3709	89	68	925	312	5	108	658	2781	622	74	67	73	79	55	63	4.8	3.8	28.2	35	66	66	99	200	167	33	29	9	7	138	10
NORTH CAROLINA							87	42.8	-33.9							0	564																								
ASHEVILLE U 1964	671	9.4	-0.9	29.4	17.6	13.6	34	37.2	-21.7	435	2245	109	56	962	349	0	172	63	310	401	81	59	66	89	57	70	4.2	2.5	23.2	48	60	105	124	136	128	3	50	47	13	84	*
ASHEVILLE	652	9.1	-2.6	29.1	17.0	13.2	9	35.6	-21.7	466	2353	124	75	1148	287	4	130	124	523	414	86	60	69	97	65	76	4.2	2.7	26.8	57	60	99	109	157	129	5	50	83	6	107	1
CAPE HATTERAS R	2	11.3	3.4	28.8	22.3	16.5	16	35.0	-11.1	339	1517	171	78	1413	372	11	206	13	51	178	80	68	78	85	71	83	5.8	4.7	32.2	52	66	104	99	162	123	1	46	18	3	32	0
CHARLOTTE	224	11.2	0.1	31.3	20.4	15.8	13	37.8	-16.7	394	1787	116	68	1085	277	0	123	58	147	305	78	56	61	89	59	68	3.6	3.0	26.4	56	69	110	106	149	111	2	42	25	33	74	0
GREENSBORO	273	9.3	-1.9	30.8	19.4	14.5	10	37.8	-18.3	452	2124	112	67	1051	337	3	190	86	229	363	80	56	65	91	62	73	3.7	3.0	28.2	51	62	111	108	146	118	3	47	31	27	87	*
RALEIGH	132	10.6	-1.1	30.9	19.6	15.1	9	36.7	-17.8	422	1952	129	71	1081	329	6	132	74	188	236	76	53	61	91	61	74	3.9	3.0	32.6	56	61	114	107	144	113	2	46	35	23	84	*
WILMINGTON	8	13.7	2.3	31.6	22.2	17.6	10	37.8	-10.6	325	1351	212	75	1361	394	4	209	10	53	297	80	56	71	86	65	78	4.2	3.7	39.3	57	64	116	107	142	118	1	45	23	39	44	0
WINSTON SALEM 1964	293	9.9	-0.3	31.2	19.9	15.1	10	37.8	-17.2	418	1997	118	71	1121	276	3	91	81	234	277	72	52	59	84	57	67	4.2	3.3				121	102	142	115	3	42	32	34	76	0
NORTH DAKOTA							82	49.4	-51.1							0	196																								
BISMARCK	502	-7.2	-16.2	29.1	14.1	5.2	14	42.8	-41.7	978	5023	91	11	410	211	0	83	183	978	394	72	66	68	83	47	43	4.6	4.3	32.2	55	76	95	106	164	96	12	34	12	22	186	52
FARGO	273	-9.2	-15.8	28.2	14.8	4.9	14	37.8	-37.2	1017	5150	81	11	498	216	1	120	168	856	284	72	69	71	87	55	53	5.8	4.8	51.4	50	71	87	112	166	102	11	33	13	14	181	55
WILLISTON	578	-7.1	-16.2	28.9	13.4	4.9	12	41.7	-40.6	976	5088	83	12	364	187	0	128	178	879	193	77	71	73	83	47	40	4.6	4.1	31.3	49	76	91	107	167	93	12	24	11	21	191	55
OHIO							100	45.0	-39.4							0	267																								
AKRON	368	1.1	-7.4	28.1	16.0	9.8	10	36.1	-26.1	666	3457	98	55	892	290	5	106	244	1176	277	78	68	71	84	56	62	5.2	3.4	22.8			70	102	193	151	15	40	28	8	128	5
CINCINNATI ABBE OBS.	231	4.3	-4.3	30.3	18.8	12.7	58	42.8	-27.2	566	2690	105	56	1017	347	3	121	130	480	279							3.7	2.3	21.9	42	69				132	6	50		28	98	2
CLEVELAND	236	0.8	-6.5	27.6	16.2	9.8	13	36.7	-28.3	656	3418	89	55	889	241	9	102	259	1283	381	75	68	70	82	58	62	5.6	3.9	33.1	32	67	71	98	196	155	18	36	13	8	125	5
COLUMBUS	247	2.4	-6.4	29.3	16.9	10.8	14	36.7	-26.1	630	3167	107	48	940	248	3	122	180	719	226	75	66	69	84	56	60	4.6	3.0	28.2	38	64	77	103	185	135	9	42	18	15	122	5
DAYTON	305	2.1	-6.4	29.3	18.0	11.1	10	37.8	-26.7	635	3133	99	49	873	277	3	109	168	693	287	74	65	69	81	55	58	5.3	3.6	34.9	42	67	80	101	184	129	8	41	23	18	116	5
MANSFIELD	394	1.8	-6.3	28.7	17.4	10.7	8	36.1	-26.1	637	3231	96	50	855	205	11	129	216	996	305	78	68	73	82	57	64	6.0	3.6	20.6			71	103	191	138	13	40	31	7	124	5
TOLEDO	203	0.2	-8.2	28.8	16.0	9.6	18	37.2	-27.2	692	3544	86	44	800	215	7	112	216	925	249	78	68	73	85	55	61	4.9	3.4	32.2	45	67	74	107	184	134	12	40	19	14	144	8
YOUNGSTOWN	359	0.6	-7.6	27.7	15.3	9.3	30	37.8	-27.8	676	3569	99	61	965	251	7	109	315	1468	526	82	73	77	85	55	64	5.3	3.5	25.9			69	98	198	162	19	36	29	7	136	6
OKLAHOMA							82	48.9	-32.8							0	398																								
OKLAHOMA CITY	391	8.7	-3.3	33.7	21.3	15.5	8	42.2	-18.3	485	2052	132	28	797	274	0	195	76	239	213	81	64	65	81	51	47	6.0	5.1	38.9	58	76	140	96	129	82	3	51	19	67	80	*
TULSA	198	8.3	-3.3	33.8	21.9	15.7	14	43.3	-19.4	488	2044	130	36	937	478	0	192	81	246	249	78	59	59	83	55	51	4.9	4.2	33.5	52	71	125	102	138	90	4	53	10	72	86	1
OREGON							84	48.3	-47.8							0	258																								
ASTORIA	2	8.1	1.4	19.8	11.2	10.3	20	37.8	-14.4	420	2941	268	24	1685	556	0	110	94	180	274	87	85	79	90	75	69	4.2	3.8	24.6			51	72	242	200	2	8	42	1	39	0
BURNS U	1265	1.9	-9.4	29.8	10.6	7.8	23	39.4	-32.2	685	4006	45	8	300	146	0	55	381	1229	279	82	76	69	53	35	21	2.8	3.4				123	91	151	92	16	14	12	22	187	5
EUGENE	109	7.6	0.6	28.1	10.6	11.4	31	41.1	-24.4	441	2632	194	7	1081	533	0	122	140	211	582	92	87	81	87	55	37	3.8	3.6	28.2			75	85	205	137	3	5	58	15	55	*
MEACHAM	1234	0.1	-6.6	25.1	9.9	6.5	29	40.6	-30.6	668	4367	117	14	830	262	0	76	813	3810	582	87	81	79	62	39	26	0.0	0.0	19.7			92	67	206	151	45	16	31	4	170	4
MEDFORD	395	6.8	-1.7	31.9	12.1	11.7	13	42.8	-21.1	488	2738	94	6	524	323	0	95	104	218	236	90	88	74	73	44	25	1.9	2.5	24.6			118	80	167	102	3	9	48	55	90	*
PENDLETON	451	3.7	-3.7	31.2	14.9	11.3	38	45.0	-30.0	568	2910	41	7	313	119	0	39	201	452	338	80	76	75	53	33	22	3.8	4.3	34.4			107	90	168	100	6	10	29	34	84	3
PORTLAND U 1964	9	7.2	1.9	26.2	14.4	12.6	62	41.7	-16.1	427	2282	188	10	1076	443	0	127	130	231	406															152	3			8	21	0
PORTLAND	6	6.4	0.3	26.1	12.9	11.4	33	41.7	-19.4	463	2662	153	12	955	326	0	67	119	203	269	86	82	77	83	61	45	4.5	3.3	39.3	23	70	68	70	227	153	3	7	33	10	44	*
ROSEBURG 1964	153	8.4	0.8	28.9	11.0	11.9	11	41.1	-18.3	425	2494	145	5	841	400	0	122	81	165	239		86	73		54	34	1.7	2.6	22.4	26	79	75	89	201	135	2	5	59	21	56	*
SALEM	59	7.4	0.1	28.0	10.4	11.3	12	40.0	-24.4	451	2695	175	9	1062	391	0	80	102	193	274	87	84	78	85	56	38	3.9	3.0	25.9			78	82	205	150	2	6	38	18	69	*
SEXTON SUMMIT R	1169	4.3	-1.6	24.3	10.8	8.7	29	37.8	-18.9	525	3571	166	8	934	612	0	132	673	2690	866	81	81	78	63	59	39	5.7	5.3	28.2			128	67	170	129	29	6	160	3	114	*

NORMALS, MEANS AND EXTREMES

State and Station	Elevation Ground (Meters)	Temperature (°C) Normal (1941-1970) January Daily Maximum	Temperature Normal January Daily Minimum	Temperature Normal July Daily Maximum	Temperature Normal July Daily Minimum	Temperature Normal Annual	Temperature Extremes Length (Yrs)	Temperature Extremes Record Highest	Temperature Extremes Record Lowest	Normal Heating Degree Days (1941-1970) January	Normal Heating Degree Days Seasonal	Precipitation (Millimeters) Normal (1941-1970) Wettest Month	Precipitation Normal Driest Month	Precipitation Normal Annual	Precipitation Extremes Wettest Month	Precipitation Extremes Driest Month	Precipitation Extremes Maximum In 24 Hours	Snow @ Mean Total January	Snow @ Mean Total Seasonal	Snow @ Extreme Maximum In 24 Hours	Relative Humidity (Percent) January 7 00 a m EST	Relative Humidity January 1 00 p m EST	Relative Humidity January 7 00 p m EST	Relative Humidity July 7 00 a m EST	Relative Humidity July 1 00 p m EST	Relative Humidity July 7 00 p m EST	Wind Speed (m.p.s.) Mean Speed January	Wind Speed Mean Speed July	Wind Speed Fastest Mile (1 6 Kilometers)	Sunshine (% of Possible) January	Sunshine July	Annual Mean Number of Days Sunrise to Sunset Clear	Sunrise to Sunset Partly Cloudy	Sunrise to Sunset Cloudy	Precipitation 25mm or More	Snow, Sleet, Hail 25.4mm or More	Thunderstorms	Heavy Fog	Temperature Max ≥ 32 2 °C	Temperature Min ≤ 0 °C	Temperature Min ≤ 17 8 °C
PACIFIC AREA																																									
CANTON ISLAND 1966	2	31.3	25.4	31.9	25.4	28.6	20	36.7	21.1	0	0	110	28	748	520	0	141	0	0		80	79	65	80	80	65	6.8	5.9				75	146	144	103	0	4	0	155	0	0
ENIWETOK 1966	3	29.2	25.4	30.3	26.2	27.9	13	34.4	21.1	0	0	231	26	1307	623	3	117	0	0		77	77	68	82	84	75	7.7	5.6							202	0	5	0	15	0	0
GUAM TAGUAC R	110	28.4	21.9	30.1	22.6	25.9	17	35.0	12.2	0	0	366	75	2303	643	13	252	0	0		87	88	78	92	94	79	3.7	2.3	35.8	56	48	71	135	223	267	0	27	*	4	0	0
JOHNSTON ISLAND	2	27.1	22.7	29.2	25.0	26.1	18	31.7	16.7	0	0	88	26	713	401	3	242	0	0		74	75	66	78	77	68	6.3	6.9	46.9	67	76	74	174	117	162	0	4	0	0	0	0
KOROR R	28	30.2	23.8	30.6	24.0	27.5	24	33.9	20.6	0	0	411	189	3650	884	31	294	0	0		88	90	81	89	91	82	3.8	3.1	32.6	56	53		47	318	267	0	36	0	52	0	0
KWAJALEIN ISLAND	2	29.4	25.2	30.4	25.3	27.7	21	36.1	20.6	0	0	304	60	2573	772	5	436	0	0		80	80	71	85	86	78	7.7	4.8	24.6			19	79	267	240	0	9	0	18	0	0
MAJURO ISLAND	3	29.3	25.0	29.7	24.8	27.3	18	32.8	20.6	0	0	406	177	3629	790	10	454	0	0		80	81	75	83	84	77	5.8	3.8	17.0	59	54	11	83	271	257	0	17	0	1	0	0
MARCUS ISLAND 1968	6	24.4	20.1	30.7	25.6	25.7	4	33.9	12.8	0	0	183	41	1081	343	3	144	0	0		72	75	68	79	83	71	6.3	5.2	51.0	58	73	85	147	133	146	0	5	1	23	0	0
PAGO PAGO AM SAMOA	3	30.6	23.3	28.7	22.8	26.4	14	33.3	16.7	0	0	377	154	3265	830	35	261	0	0		89	89	76	85	85	76	3.4	4.8	25.5	49	55	24	144	197	253	0	25	0	16	0	0
PONAPE R	37	29.9	24.2	30.7	22.7	26.9	23	35.6	18.9	0	0	497	291	4920	982	43	571	0	0		83	84	76	94	95	79	3.8	2.2	16.1	48	49	2	65	298	297	0	29	0	34	0	0
TRUK MOEN ISLAND	1	29.6	24.9	30.3	23.9	27.3	23	34.4	20.0	0	0	400	163	3701	886	21	379	0	0		81	82	76	88	91	80	4.6	3.3	34.9	64	59	1	54	310	268	0	21	0	5	0	0
WAKE	3	27.6	22.5	30.6	25.0	26.6	26	33.3	17.8	0	0	161	27	950	449	2	381	0	0		75	76	65	81	82	70	6.0	5.6	46.5	70	71	109	156	100	179	0	7	0	15	0	0
YAP	13	29.6	24.2	30.7	24.0	27.3	25	36.1	18.3	0	0	385	137	3087	882	25	265	0	0		85	87	78	89	92	80	4.7	2.6	32.2	60	52	6	61	298	261	0	16	0	36	0	0
PENNSYLVANIA							86	43.9	-41.1							0	876																								
ALLENTOWN	117	2.1	-6.8	29.7	17.1	10.6	30	40.6	-24.4	640	3236	111	69	1079	307	2	122	198	838	444	76	62	69	82	52	62	4.9	3.2	36.2			94	114	157	123	9	32	29	17	129	2
ERIE	222	-0.2	-7.5	25.2	15.6	8.4	8	34.4	-25.0	687	3805	94	54	970	251	15	123	495	2070	584	74	70	72	81	64	65	5.9	4.0	24.6			67	98	200	159	26	39	14	1	131	5
HARRISBURG	103	3.2	-5.3	30.4	18.6	11.9	35	41.7	-22.2	601	2901	96	61	926	471	1	319	231	914	533	71	58	63	78	51	60	3.8	2.8	30.4	48	68	85	104	175	124	9	33	21	25	107	1
PHILADELPHIA	1	4.5	-4.2	30.4	19.3	12.6	14	40.0	-20.6	563	2702	104	64	1014	246	2	144	137	526	371	73	59	65	80	55	63	4.6	3.6	32.6	51	62	92	113	160	116	6	26	26	18	102	*
PITTSBURGH GTR. AP	346	1.8	-6.2	28.1	16.3	10.2	14	36.7	-27.8	635	3294	98	60	920	208	4	90	264	1173	373	76	66	67	83	53	59	4.8	3.4	25.9	38	62	58	103	204	152	14	36	18	8	124	5
PITTSBURGH C	227	3.0	-4.6	28.9	18.4	11.7	39	39.4	-25.0	592	2931	96	58	920	225	4	91	188	770	511							0.0	0.0		26	53				146	9			17	97	1
READING C 1968	81	3.9	-3.2	30.2	19.6	12.4	28	39.4	-18.9	556	2746	108	67	1052	377	4	154	213	777	475	71			75			5.1	3.8	35.8	46	53	98	110	157	122	8	32	8	24	92	*
W B SCRANTON AVOCA	283	0.8	-7.6	28.3	16.3	9.7	18	38.3	-23.9	671	3486	104	50	884	198	1	92	264	1306	521	76	64	67	83	55	62	4.0	3.3	26.8	45	61	72	106	187	139	13	31	25	8	134	5
WILLIAMSPORT	159	1.7	-7.0	29.1	16.3	10.2	29	38.9	-26.1	651	3322	106	64	1016	427	5	220	239	1125	587	77	62	68	87	54	64	4.1	3.0	34.9			67	117	181	143	12	4	40	14	130	4
RHODE ISLAND							86	38.9	-30.6							0	308																								
BLOCK ISLAND	33	3.0	-3.7	24.2	17.4	10.1	23	32.8	-20.0	578	3205	110	56	1029	292	0	216	124	526	429	73	65		87	72		0.0	0.0				98	114	153	111	6	17	82	*	89	*
PROVIDENCE	15	2.3	-6.3	27.3	17.2	10.0	10	36.1	-20.6	630	3317	115	67	1086	302	10	168	234	975	465	70	55	62	78	57	68	5.2	4.3	40.2	57	59	104	100	161	124	10	21	27	8	124	3
SOUTH CAROLINA							89	43.9	-25.0							0	337																								
CHARLESTON	12	15.4	2.9	31.7	21.8	18.2	31	39.4	-13.3	289	1192	209	54	1324	692	0	257	0	13	150	84	55	73	88	63	79	4.1	3.6	31.7	56	63	101	116	148	115	*	57	29	49	36	0
COLUMBIA	64	13.8	1.1	33.3	21.3	17.5	7	41.1	-15.0	337	1443	144	59	1178	425	0	195	10	48	399	83	55	66	91	57	72	3.2	3.0	26.8	58	65	121	103	141	110	1	54	27	65	65	0
FLORENCE 1964	44	14.6	2.6	32.7	21.3	17.8	17	42.2	-13.3	306	1326	158	55	1084	347	0	162	3	25	122	82	52	66	88	57	73	3.7	3.2				121	107	137	110	*	53	29	71	46	0
GRNVLLE SPRTNBRG	291	10.9	0.6	30.9	20.6	15.9	11	37.2	-21.1	391	1757	135	75	1208	287	6	158	58	183	290	76	54	63	87	58	68	3.2	2.7	23.2	52	57	117	101	147	117	2	43	34	31	69	*
SOUTH DAKOTA							84	48.9	-50.0							0	203																								
ABERDEEN	395	-6.4	-16.9	29.5	14.7	6.0	14	44.4	-39.4	955	4786	92	11	485	226	0	102	180	912	381	72	68	71	84	53	49	5.2	4.1	25.9			102	98	165	86	12	38	18	24	182	46
HURON	390	-4.8	-16.9	30.4	15.9	7.1	14	44.4	-39.4	903	4474	96	11	494	211	0	139	160	988	444	73	67	70	87	52	48	5.2	4.8	24.4	56	77	100	110	155	94	12	42	15	28	173	39
RAPID CITY	963	1.2	-12.4	30.2	14.9	8.1	31	43.3	-32.8	742	4068	93	10	435	187	0	102	132	973	414	68	59	63	72	46	41	4.7	4.4	29.5	54	71	110	112	143	96	12	42	16	31	169	20
SIOUX FALLS	432	-4.1	-15.7	29.5	16.4	7.4	10	42.2	-37.8	874	4354	110	14	628	202	0	115	150	1008	660	76	57	72	84	54	51	5.0	4.3	31.3			106	102	157	94	11	44	22	24	170	35
TENNESSEE							91	45.0	-35.6							0	279																								
BRISTOL	459	7.8	-2.9	29.9	18.0	13.4	12	35.0	-26.1	492	2392	126	57	1053	247	2	93	124	414	411	80	51	65	91	61	68	2.9	1.8	22.4			91	110	164	134	5	46	43	14	98	2
CHATTANOOGA	202	9.9	-0.8	31.9	20.1	15.4	34	41.1	-23.3	427	1947	143	75	1319	351	5	166	46	109	226	82	52	68	88	57	64	3.2	2.3	36.7	42	61	106	108	151	121	2	56	36	51	75	*
KNOXVILLE	298	9.4	0.1	31.1	20.2	15.4	13	37.2	-22.8	420	1932	123	68	1173	298	0	129	102	330	462	79	53	64	90	62	66	3.7	2.8	32.6	38	59	96	106	163	128	4	48	31	19	73	1
MEMPHIS	78	9.7	-0.2	33.1	21.9	16.4	32	41.1	-25.0	422	1792	138	66	1247	312	0	125	53	147	409	79	54	68	85	57	59	4.7	3.4	25.5	49	73	117	99	149	105	2	52	11	65	60	*
NASHVILLE	179	8.7	-1.7	32.3	20.6	15.2	8	39.4	-21.1	460	2053	127	55	1168	354	0	136	97	287	259	79	53	65	91	59	64	4.1	2.8	32.6	41	64	104	108	153	119	4	56	17	40	78	1
OAK RIDGE R	275	8.4	-1.6	30.8	19.1	14.3	26	40.6	-22.8	463	2193	144	69	1336	489	0	190	81	262	305							2.1	1.7	26.4			109	88	168	128	3	53	34	31	81	*
OAK RIDGE AREA 1964	270	9.4	-0.4	31.1	19.3	14.7	20	39.4	-22.2	428	2078	138	72	1309	326	0	197	0	0								2.5	1.7							119				35	79	*
TEXAS							93	48.9	-30.6							0	970																								
ABILENE	543	13.2	-0.2	35.2	22.4	18.1	10	41.7	-18.3	366	1449	98	25	599	335	0	170	43	112	190	71	54	49	70	45	38	5.5	4.9	48.7	63	78	149	96	120	65	2	42	7	91	54	*
AMARILLO	1098	9.7	-5.3	33.0	18.8	14.1	13	40.0	-22.8	499	2323	88	13	515	273	0	171	86	371	343	68	48	43	73	42	38	5.9	5.5	37.6	69	77	160	104	101	67	5	48	25	66	106	2
AUSTIN	181	15.6	4.1	35.2	23.2	20.1	13	40.6	-11.1	268	964	101	48	825	313	0	183	13	28	178	78	60	67	87	49	44	4.4	3.8	25.5	49	77	115	115	135	82	*	41	24	106	23	0
BROWNSVILLE	5	20.8	10.6	33.8	24.4	23.2	7	37.8	-3.3	125	361	133	18	637	489	0	310	0	0		86	68	74	90	56	63	5.3	5.2	30.8	45	81	97	137	131	73	0	24	27	103	2	0
CORPUS CHRISTI	12	19.2	7.8	34.7	24.0	22.2	9	38.3	-7.8	168	516	124	28	725	516	0	223	3	3	28	89	70	73	93	58	64	5.4	5.2	53.6	47	83	104	121	140	76	*	31	28	94	7	0
DALLAS	146	13.2	2.2	34.7	24.1	18.8	15	41.7	-13.3	333	1312	123	49	878	391	0	233	30	51	188	77	59	56	77	51	44	4.7	4.5	29.1	51	77	139	93	133	80	1	40	8	95	35	0
DALLAS FT WORTH	163	13.2	1.1	35.3	23.3	18.6	10	42.2	-15.6	347	1323	114	46	820	321	0	150	41	74	307	81	60	59	81	51	46	5.2	4.5	32.6			141	92	132	79	1	46	11	88	41	0
DEL RIO	312	17.4	3.4	37.3	23.4	21.1	11	42.8	-8.3	249	846	77	13	429	401	0	193	0	23	76	75	54	45	78	51	37	3.8	4.9	26.8			119	103	143	59	*	35	16	122	18	0
EL PASO	1194	13.9	-1.0	34.8	21.1	17.4	14	42.2	-22.2	368	1487	39	6	197	160	0	73	38	114	198	60	42	32	59	39	29	4.1	4.0	31.3	78	79	195	99	71	45	2	36	2	102	61	*
GALVESTON U	2	15.2	9.1	30.8	26.1	21.0	103	38.3	-13.3	202	679	142	66	1072	661	0	364	3	8	391	85	77	80	81	70	73	5.2	4.4	44.7	49	72				96	*			11	4	0
HOUSTON INTERCON	29	17.0	5.3	34.3	22.7	20.5	4	38.3	-7.2	231	796	130	68	1224	366	7	190	5	10	51	88	66	71	94	59	64	3.6	2.8	20.6	43	70	90	111	164	106	1	72	39	81	23	0

NORMALS, MEANS AND EXTREMES

State and Station	Elevation Ground (Meters)	Temperature (°C)								Normal Heating Degree Days (1941-1970)		Precipitation (Millimeters)									Relative Humidity (Percent)						Wind Speed (m p s)			Sunshine (% of Possible)		Annual Mean Number of Days									
		Normal (1941-1970)					Extremes					Normal (1941-1970)			Extremes			Snow			January			July			Mean Speed					Sunrise to Sunset							Temperature		
		January		July														Mean Total		Extreme																			Max	Min	
		Daily Maximum	Daily Minimum	Daily Maximum	Daily Minimum	Annual	Length (Yrs)	Record Highest	Record Lowest	January	Seasonal	Wettest Month	Driest Month	Annual	Wettest Month	Driest Month	Maximum in 24 Hours	January	Seasonal	Maximum in 24 Hours	7:00 a m EST	1:00 p m EST	7:00 p m EST	7:00 a m EST	1:00 p m EST	7:00 p m EST	January	July	Fastest Mile (1.6 Kilometers)	January	July	Clear	Partly Cloudy	Cloudy	Precipitation 25mm or More	Snow, Sleet, Hail 25.4mm or More	Thunderstorms	Heavy Fog	32.2 C and Above	0 C and Below	-17.8 C and Below
TEXAS																																									
HOUSTON U 1966	12	17.0	8.1	33.3	24.3	21.1	29	41.1	-12.2	201	709	131	61	1150	448	0	275	5	8	76															104	*			91	7	0
HOUSTON HOBBY 1969	15	17.6	6.4	33.4	23.2	20.7	9	41.1	-8.3	213	775	111	68	1167	567	0	398	5	10	112	84	64	67	91	59	64	5.3	3.9	24.1	47	74	87	126	152	103	0	59	42	95	13	0
LAREDO 1964	151	20.2	8.3	37.2	24.4	23.3	20	43.3	-7.8	148	442	73	16	473	219	0	141	3	3	51	81	58	53	83	44	39	4.3	6.6				130	116	119	58	*	31	14	174	6	0
LUBBOCK	991	11.9	-4.0	33.6	19.4	15.4	27	41.7	-26.7	446	1969	81	12	468	225	0	145	48	241	307	72	49	47	75	47	39	5.7	6.2	31.3	58	83	162	106	97	59	3	45	16	79	99	1
MIDLAND-ODESSA	868	14.3	-1.4	35.0	20.8	17.7	10	41.7	-16.7	368	1456	55	12	343	171	0	152	33	84	150	69	45	39	69	43	31	4.4	4.6	30.0			166	97	102	50	2	39	15	93	57	0
PORT ARTHUR	4	16.4	5.8	33.3	23.3	18.8	13	41.7	-10.0	233	843	150	77	1399	475	0	335	5	18	112	89	70	78	94	64	71	5.1	3.6	33.1	42	66	94	126	145	104	*	64	41	82	18	0
SAN ANGELO	[illegible]	15.1	0.9	36.1	22.4	19.0	14	43.9	14.4	321	1244	70	18	[illegible]	[illegible]	0	[illegible]	30	84	147	73	50	46	74	41	35	4.6	4.4	33.5			157	96	112	56	1	36	8	116	53	0
SAN ANTONIO INTL AP	240	16.4	4.3	35.3	23.2	20.4	32	41.1	-17.8	250	872	94	37	700	401	0	185	5	13	119	80	60	58	87	50	44	4.0	4.1	33.1	49	77	110	118	137	80	*	35	23	115	21	*
VICTORIA	31	17.4	6.4	34.1	24.1	21.2	13	41.7	-8.9	206	681	117	45	871	369	0	218	3	5	30	85	64	67	91	56	59	4.8	4.1	44.3			86	120	159	85	*	46	40	104	12	[illegible]
WACO	152	14.1	2.6	35.7	23.9	19.5	10	44.4	-15.6	310	1143	117	37	794	381	0	182	23	38	178	82	63	61	77	47	42	5.5	5.0	30.8			134	100	131	76	1	46	13	104	30	*
WICHITA FALLS	302	11.9	-1.4	37.3	22.4	17.8	14	45.0	-20.6	405	1613	116	27	691	306	0	142	46	147	150	81	57	57	77	43	39	5.1	4.9	26.8			153	95	117	69	2	49	12	107	69	*
UTAH							83	46.7	-45.6							0	152																								
MILFORD	1532	3.6	-10.6	33.8	13.2	9.6	25	40.6	-35.6	676	3561	26	13	213	66	0	34	213	1125	414		55	60		24	20	0.0	0.0	25.0	54	77	151	102	112	63	14	32	7	59	180	13
SALT LAKE CITY	1286	3.0	-7.5	33.8	15.8	10.6	14	41.7	-27.8	637	3323	54	17	385	124	0	61	338	1445	460	76	68	67	51	26	19	3.4	4.2	31.7	47	84	127	106	132	88	18	35	11	59	136	4
WENDOVER	1291	2.2	-7.3	33.3	19.2	11.2	36	44.4	-28.3	647	3199	19	6	124	76	0	34	58	196	216	70	61	59	33	22	14	0.0	0.0				152	92	121	48	3	29	5	50	128	1
VERMONT							86	40.6	-45.6							0	223																								
BURLINGTON	101	-3.4	-13.6	27.2	14.7	6.9	9	36.7	-32.8	[illegible]29	4375	94	43	827	293	10	91	439	1968	419	67	61	64	80	55	64	4.3	3.5	32.2	43	65	59	104	202	151	22	25	16	4	165	29
VIRGINIA							83	43.3	-33.9							0	686																								
LYNCHBURG	279	7.7	-2.6	30.1	18.6	13.5	10	37.2	-20.0	488	2351	103	66	972	289	8	159	135	490	340	71	52	59	86	58	71	3.9	3.0	25.0	51	61	112	106	147	119	6	41	40	19	96	1
NORFOLK	7	9.3	0.1	30.3	21.1	15.2	25	39.4	-13.3	422	1937	150	69	1135	326	9	290	86	188	290	75	59	68	82	60	72	5.2	3.9	34.9	57	65	108	105	152	116	2	37	23	30	54	0
RICHMOND	49	8.6	-2.4	31.2	19.7	14.3	44	40.0	-24.4	473	2188	143	70	1082	479	8	223	137	378	549	81	57	69	85	57	72	3.6	3.0	30.4	51	65	104	106	155	113	4	37	29	42	85	1
ROANOKE	350	7.6	-2.7	29.9	18.0	13.3	9	37.8	-20.0	492	2392	105	63	991	232	5	163	175	648	442	68	50	55	83	56	65	4.4	3.0	25.9			102	115	148	121	7	38	25	21	93	*
WASHINGTON							107	47.8	-44.4							0	305																								
OLYMPIA	59	6.7	-0.9	25.8	9.3	10.1	14	37.8	-21.7	478	3071	208	18	1289	504	0	125	249	505	521	91	89	82	91	64	48	3.4	2.7	26.8			51	87	227	163	6	5	91	6	89	*
QUILLAYUTE	54	6.7	0.7	19.8	11.7	9.3	7	35.6	-13.9	452	3305	396	60	2667	631	10	211	320	587	213	91	89	85	94	72	62	3.8	2.7	17.4	17	50	49	72	244	214	7	8	46	1	67	0
SEATTLE EMSU U	5	8.0	2.2	24.5	13.4	11.8	40	37.8	-12.2	410	2495	133	14	828	278	0	84	112	231	292							0.0	0.0	29.1	28	63	71	93	201	151	3	6		2	13	0
SEATTLE TACOMA	121	6.3	0.6	23.9	12.1	10.6	14	37.2	-14.4	461	2880	151	18	985	328	0	87	190	396	544	80	79	75	84	66	48	4.6	3.8	20.1	20	68	55	82	228	161	5	8	48	3	31	0
SEATTLE U 1964	4	7.6	2.7	23.9	13.4	11.8	31	37.8	-11.7	410	2457	138	16	866	278	0	84	109	206	292									29.1	28	63	71	93	201	152	3	6		2	15	0
SPOKANE	718	-0.5	-6.9	29.1	12.8	8.5	14	42.2	-31.7	682	3796	63	10	442	145	0	53	470	1346	330	82	80	75	58	37	23	3.9	3.6	26.4	27	81	90	85	190	114	18	10	48	22	140	5
STAMPEDE PASS R	1206	-2.6	-7.3	18.6	8.3	4.0	30	32.2	-29.4	721	5221	363	39	2313	773	5	202			958	94	92	92	86	66	59	0.0	0.0				67	56	242	206	87	7	252	*	188	3
TATOOSH ISLAND 1966	30	7.3	3.8	15.3	10.8	9.6	63	31.1	-10.0	396	3176	309	50	1973	573	1	150	89	196	305	84	82	82	94	89	87	8.9	4.5	42.0	26	47	58	76	231	197	3	5	59	0	8	0
WALLA WALLA	299	4.1	-2.5	31.6	16.8	12.3	59	45.0	-26.7	549	2685	53	8	407	149	0	51	203	521	356		76			34		2.3	2.4	30.0	24	86	117	87	161	106	7	11	14	37	64	2
YAKIMA	320	2.4	-7.4	31.2	11.8	9.9	27	43.3	-31.7	646	3338	34	4	203	106	0	36	259	650	356	83	76	70	68	34	24	2.6	3.4	21.5			111	91	163	68	9	7	18	34	150	4
WEST INDIES							73	39.4	4.4							0	584																								
SAN JUAN	3	27.7	20.4	30.6	23.8	25.9	19	35.6	15.6	0	0	177	52	1502	383	11	162	0	0		83	65	76	80	67	78	4.0	4.4	35.8	65	65	57	209	99	200	0	41	0	37	0	0
SAN JUAN U 1964	14	26.6	21.3	29.0	24.4	25.7	66	35.6	16.7	0	0	182	53	1533	429	1	268	0	0																208	0	49	0	10	0	0
SWAN ISLAND	8	28.1	23.3	30.7	25.3	27.2	27	33.3	17.8	0	0	188	16	1311	801	0	274	0	0								0.0	0.0				79	159	127	153	0			13	0	0
WEST VIRGINIA							83	44.4	-38.3							0	483																								
BECKLEY	763	4.4	-5.1	26.7	15.5	10.5	10	32.2	-26.1	578	3119	111	63	1083	210	4	136	338	1425	351	79	65	70	90	61	73	5.0	3.2	23.7			69	92	204	162	17	45	43	*	117	4
CHARLESTON	286	6.4	-3.7	29.8	17.9	12.9	26	38.9	-24.4	525	2549	128	62	1035	344	2	142	208	729	384	76	62	65	90	61	67	3.4	2.3	24.6			58	118	189	149	9	42	111	22	100	1
ELKINS	593	4.8	-7.1	26.8	13.9	9.8	29	36.1	-29.4	602	3319	125	69	1098	236	8	82	338	1768	475	80	63	71	95	60	72	3.3	1.9	24.6			52	107	206	166	23	44	81	2	142	6
HUNTINGTON	252	6.1	-3.6	29.8	18.2	12.9	13	37.8	-26.1	528	2568	106	53	988	218	0	108	175	605	208	79	64	64	91	61	67	3.3	2.1	21.0			65	108	192	138	7	43	60	17	102	3
PARKERSBURG	187	5.2	-4.2	29.8	18.2	12.6	85	41.1	-32.8	552	2675	109	54	976	306	2	122	173	610	465	82	66	74	80	52	67	3.2	2.3	29.5	32	62	109	103	153	142	7	44	12	22	97	2
WISCONSIN							93	45.6	-47.8							0	298																								
GREEN BAY	207	-4.5	-13.9	27.1	14.3	6.5	13	36.1	-33.9	854	4498	87	26	686	215	0	93	241	1059	257	76	70	73	85	57	60	5.0	3.7	48.7	46	64	92	101	172	120	14	36	28	7	160	29
LA CROSSE	198	-3.9	-13.8	28.3	16.9	8.0	9	37.2	-37.8	842	4120	113	22	739	267	1	100	239	1085	399	76	66	70	90	57	59	4.0	3.4	28.2			95	97	173	110	12	41	22	17	150	28
MADISON	261	-3.7	-13.2	27.4	14.9	7.2	14	36.7	-34.4	829	4294	110	24	768	278	2	133	224	993	406	77	68	72	88	58	59	4.7	3.7	34.4	49	69	95	95	175	116	12	40	22	10	163	26
MILWAUKEE	204	-2.6	-11.4	26.9	15.2	7.6	14	37.2	-31.1	785	4135	91	29	738	251	1	134	310	1115	424	75	68	72	83	61	63	5.8	4.3	32.6	45	70	96	100	169	122	13	36	27	9	147	16
WYOMING							114	45.6	-52.8							0	140																								
CASPER	1627	0.9	-10.7	30.6	12.7	7.4	9	38.3	-40.0	719	4196	49	12	285	142	0	63	229	1834	419	67	58	61	71	33	26	7.6	4.5	36.2			112	108	145	92	23	34	9	25	188	18
CHEYENNE	1867	3.4	-9.5	28.7	12.5	7.7	14	36.7	-32.8	661	4030	64	9	372	136	0	87	150	1336	419	53	43	47	69	35	38	7.1	4.8	33.5	62	68	106	128	131	98	17	50	24	12	173	11
LANDER	1695	-0.5	-13.3	30.0	12.8	6.9	27	38.3	-38.3	781	4371	66	11	352	175	0	90	224	2647	587	66	58	58	56	34	28	2.9	3.4	35.8	67	77	115	126	124	71	25	32	3	19	187	20
SHERIDAN	1208	0.8	-13.1	30.1	12.6	7.2	9	39.4	-34.4	757	4281	76	18	410	242	0	98	262	1753	678	67	59	61	72	38	34	3.4	3.2	37.6	56	76	99	111	155	108	23	35	6	22	194	25

NORMALS, MEANS AND EXTREMES

State and Station	Elevation Ground (Meters)	Temperature (°C)								Normal Heating Degree Days (1941-1970)		Precipitation (Millimeters)									Relative Humidity (Percent)						Wind Speed (m.p.s.)			Sunshine (% of Possible)		Annual Mean Number of Days									
		Normal (1941-1970)					Extremes					Normal (1941-1970)			Extremes			Snow @														Sunrise to Sunset							Temperature		
		January		July														Mean Total		Extreme	January			July			Mean Speed												Max	Min	
		Daily Maximum	Daily Minimum	Daily Maximum	Daily Minimum	Annual	Length (Yrs)	Record Highest	Record Lowest	January	Seasonal	Wettest Month	Driest Month	Annual	Wettest Month	Driest Month	Maximum In 24 Hours	January	Seasonal	Maximum In 24 Hours	7:00 a.m. EST	1:00 p.m. EST	7:00 p.m. EST	7:00 a.m. EST	1:00 p.m. EST	7:00 p.m. EST	January	July	Fastest Mile (1.6 Kilometers)	January	July	Clear	Partly Cloudy	Cloudy	Precipitation 25mm or More	Snow Sleet Hail 25.4mm or More	Thunderstorms	Heavy Fog	≥ 32.2 °C	≤ 0 °C	≤ 17.8 °C

Data from airport or from airport and Urban site records combined. U indicates Urban, R indicates Rural sites.

Data for this table are based on records through 1973 except as indicated in notes.

Date after station name indicates last year included in summarization of data.

Normal values are based on the period, 1941-1970, and are means adjusted to represent observations taken at the present standard location, except closed stations based on 1931-1960 period.

Degree days are based on a daily average of 18.3 °C.

For detailed periods of record see ANNUAL LOCAL CLIMATOLOGICAL DATA, 1972.

Clear Day averages 0-3 tenths sky cover, Partly Cloudy 4-7 tenths and Cloudy 8-10 tenths.

Heavy Fog includes data formerly referred to as 'Dense' or "Thick". The upper visibility limit for heavy fog is 402.3 meters.

* Less than one-half.

B Number of days Maximum 21.1 or above (Alaskan stations).

1 Means and extremes are from post office location through 1962.

2 Based on records from Urban office through January 1943; airport through June 1964.

c Relative Humidity readings 8:00 a.m. and NOON Local Time.

e Reopened 1963.

x Sun below horizon continuously Nov. 19 - Jan. 23.

y Sun below horizon continuously Nov. 21 - Jan. 17

(x and y)-Yearly totals for period sun above horizon.

m Mean wind speed record for 1949-1951, 1958-1962

@ Includes all forms of frozen precipitation, except hail occurring alone.

ELEVATIONS

State and station		Ft	Mtrs
ALABAMA			
Birmingham		630	192
Huntsville		644	196
Mobile		221	67
Montgomery		202	62
ALASKA			
Anchorage		132	40
Annette		110	34
Barrow		13	4
Barter Island		50	15
Bethel		150	46
Bettles		672	205
Big Delta		1274	389
Cold Bay		103	31
Fairbanks		454	138
Gulkana		1579	481
Homer		73	22
Juneau		24	7
King Salmon		49	15
Kodiak		111	34
Kotzebue		16	5
Mc Grath		338	103
Nome		22	7
St. Paul Island		28	9
Summit		2405	733
Talkeetna		356	180
Unalakleet		21	6
Yakutat		31	9
ARIZONA			
Flagstaff		7018	2139
Phoenix		1107	337
Tucson		2555	779
Winslow		4883	1488
Yuma		206	63
ARKANSAS			
Fort Smith		463	141
Little Rock		265	81
CALIFORNIA			
Bakersfield		492	150
Bishop		4145	1263
Blue Canyon		5283	1610
Eureka	U	60	18
Fresno		327	100
Long Beach		40	12
Los Angeles		104	32
Los Angeles	U	512	156
[illegible]	[illegible]	[illegible]	[illegible]
Oakland		7	2
Red Bluff		353	108
Sacramento		25	8
Sandberg	R	4523	1379
San Diego		28	9
[illegible]	U	155	47
San Francisco		18	5
Santa Maria		238	73
Stockton		27	8
COLORADO			
Alamosa		7541	2298
Colorado Springs		6170	1881
Denver		5332	1625
Grand Junction		4839	1475
Pueblo		4720	1439
CONNECTICUT			
Bridgeport		17	5
Hartford		179	55
DELAWARE			
Wilmington		80	24
DISTRICT OF COLUMBIA			
Wash. Dulles Int. AP		323	98
Wash. Nat'l AP		65	20
FLORIDA			
Apalachicola	U	35	11
Daytona Beach		41	12
Fort Myers		12	4
Jacksonville		31	9
Key West		21	6
Lakeland	U	236	72
Miami		12	4
[illegible]		119	36
Pensacola		118	36
Tallahassee		68	21
Tampa		11	3
West Palm Beach		21	6
GEORGIA			
Athens		811	247
Atlanta		1034	315
Augusta		148	45
Columbus		394	120
Macon		362	110
Rome		643	196
Savannah		51	16
HAWAII			
Hilo		36	11
Honolulu		15	5
Kahului		67	20
Lihue		148	45
IDAHO			
Boise		2868	871
Lewiston		1436	438
Pocatello		4478	1365
ILLINOIS			
Cairo	U	357	109
Chicago (O'Hare)		674	205
Chicago (Midway)		623	190
Moline		594	181
Peoria		662	202
Rockford		743	226
Springfield		613	187
INDIANA			
Evansville		388	118
Fort Wayne		828	252
Indianapolis		808	246
South Bend		773	236
IOWA			
Burlington		702	214
Des Moines		963	294
Dubuque		1080	329
Sioux City		1103	336
Waterloo		878	268
KANSAS			
Concordia		1484	452
Dodge City		2592	790
Goodland		3688	1124
Topeka		885	270
Wichita		1340	408
KENTUCKY			
Covington		877	267
Lexington		989	301
Louisville		488	149
LOUISIANA			
Alexandria		118	36
Baton Rouge		76	23
Lake Charles		32	10
New Orleans		30	9
Shreveport		259	79
MAINE			
Caribou		628	191
Portland		63	19
MARYLAND			
Baltimore		155	47
MASSACHUSETTS			
Blue Hill Obs	R	640	195
Boston		29	9
Worcester		1017	310
MICHIGAN			
Alpena		693	211
Detroit		626	191
Detroit Metro.		664	202
Flint		766	233
Grand Rapids		803	245
Houghton Lake		1160	354
Lansing		874	266
Marquette	U	734	224
Muskegon		633	193
Sault Ste. Marie		724	221
MINNESOTA			
Duluth		1417	432
International Falls		1183	361
Minneapolis		838	255
Rochester		1320	402
St. Cloud		1043	318
MISSISSIPPI			
Jackson		331	101
Meridian		310	94
MISSOURI			
Columbia, Regional		898	274
Kansas City		750	229
St. Joseph		817	249
St. Louis		564	172
Springfield		1270	387
MONTANA			
Billings		3570	1088
Glasgow		2298	700
Great Falls		3657	1115
Harve		2599	792
Helena		3898	1188
Kalispell		2973	906
Miles City		2634	803
Missoula		3189	972
NEBRASKA			
Grand Island		1856	566
Lincoln		1189	362
Norfolk		1551	473
North Platte		2787	849
Omaha		982	299
Scottsbluff		3958	1206
Valentine		2598	792
NEVADA			
Elko		5077	1547
Ely		6262	1909
Las Vegas		2180	664
Reno		4400	1341
Winnemucca		4314	1314
NEW HAMPSHIRE			
Concord		346	105
Mt. Washington Obs		6267	2056
NEW JERSEY			
Atlantic City		67	20
Newark		30	9
Trenton	U	190	58
NEW MEXICO			
Albuquerque		5314	1620
Clayton		4972	1515
Roswell		3619	1103
NEW YORK			
Albany		292	89
Binghamton		1638	499
Buffalo		706	215
New York U		87	27
New York Kennedy AP		22	7
New York LaGuardia		31	9
Rochester		555	169
Syracuse		408	124
NORTH CAROLINA			
Asheville		2170	661
Cape Hatteras	R	11	3
Charlotte		769	234
Greensboro		886	270
Raleigh		441	134
Wilmington		38	12
NORTH DAKOTA			
Bismarck		1660	506
Fargo		899	274
Williston		1905	581
OHIO			
Akron		1236	377
Cincinnati Abbe Ob.		627	191
Cleveland		805	245
Columbus		833	254
Dayton		1003	306
Mansfield		1312	400
Toledo		692	211
Youngstown		1186	361
OKLAHOMA			
Oklahoma City		1304	397
Tulsa		676	206
OREGON			
Astoria		22	7
Burns	U	4170	1271
Eugene		373	114
Meacham		4056	1236
Medford		1329	405
Pendleton		1495	456
Portland		39	12
Salem		201	61
Sexton Summit	R	3841	1171
PACIFIC AREA			
Guam Taquac	R	365	111
Johnston		17	5
Koror	R	109	33
Kwajalein		26	8
Majuro		10	3
Pago Pago		10	3
Ponape	R	151	46
Truk Moen Island		8	2
Wake Island		12	4
Yap	R	56	17
PENNSYLVANIA			
Allentown		385	117
Erie		737	225
Harrisburg		351	107
Philadelphia		28	9
Pittsburgh		1225	373
Pittsburgh	U	1017	334
Scranton		948	289
Williamsport		525	160
RHODE ISLAND			
Block Island		118	36
Providence		62	19
SOUTH CAROLINA			
Charleston		48	15
Columbia		225	69
Grnvl-Spartanburg		971	296
SOUTH DAKOTA			
Aberdeen		1300	396
Huron		1289	393
Rapid City		3168	966
Sioux Falls		1427	435
TENNESSEE			
Bristol		1525	465
Chattanooga		688	210
Knoxville		980	299
Memphis		284	87
Nashville		605	184
Oak Ridge	R	914	279
TEXAS			
Abilene		1753	534
Amarillo		3604	1099
Austin		621	189
Brownsville		20	6
Corpus Christi		44	13
Dallas		488	149
Dallas/Fort Worth		576	176
Del Rio		1027	313
El Paso		3916	1194
Galveston	U	54	16
Houston Intercon		108	33
Lubbock		3241	988
Midland		2862	872
Port Arthur		22	7
San Angelo		1908	582
San Antonio		794	242
Victoria		117	36
Waco		508	155
Wichita Falls		1030	314
UTAH			
Milford		5033	1534
Salt Lake City		4227	1288
Wendover		4239	1292
VERMONT			
Burlington		340	104
VIRGINIA			
Lynchburg		937	286
Norfolk		30	9
Richmond		177	54
Roanoke		1176	358
WASHINGTON			
Olympia		200	61
Quillayute		205	62
Seattle-Tacoma		450	137
Seattle	U	28	9
Spokane		2365	721
Stampede Pass	R	3967	1209
Walla Walla	U	991	302
Yakima		1066	325
WEST INDIES			
San Juan, P. R.		62	19
WEST VIRGINIA			
Beckley		2514	766
Charleston		951	290
Elkins		1997	608
Huntington		838	255
Parkersburg	U	637	194
WISCONSIN			
Green Bay		702	214
LaCrosse		672	205
Madison		866	264
Milwaukee		693	211
WYOMING			
Casper		5290	1612
Cheyenne		6141	1872
Lander		5558	1694
Sheridan		3968	1209

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.
These are the elevations of the barometer (in feet and meters above mean sea level) to which station pressure values pertain in the "Climatological Data" table in the monthly publication CLIMATOLOGICAL DATA NATIONAL SUMMARY.

GENERAL SUMMARY OF TORNADOES, 1973

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National Climatic Center

The 1973 tornado year, with its 1109 tornadoes, shattered many records. Some of the more significant record-breakers are listed in the table below:

New Record (1973)		Previous Record (Year)
Annual Total:	1109	929 (1967)
June Total:	224	210 (1967)
November Total:	85	59 (1959)
April to June Total:	624	589 (1957)
Annual Tornado Days:	208	194 (1972)

In addition, the following states set significant record-high yearly or monthly tornado totals:

January	Florida (8) and Texas (14)
February	New Jersey (3)
March	Texas (29)
April	Arkansas (19), Florida (12), and Missouri (23)
May	Alabama (16), Indiana (12), Mississippi (16), Missouri (26), North Carolina (32), Ohio (13), South Carolina (12), and Tennessee (14)
June	Connecticut (3), Illinois (26), Indiana (30), Kentucky (7), Maryland (3), Michigan (19), Ohio (15), and Oklahoma (24)
July	Ohio (10)
September	Kansas (15)
November	Arkansas (13) and Mississippi (18)
December	South Carolina (6)
Annual	Arkansas (50), Connecticut (8), Illinois (63), Indiana (48), Kentucky (19), Michigan (33), Mississippi (50), Missouri (79), New Jersey (8), North Carolina (38), Ohio (43), South Carolina (23), and Tennessee (24)

GENERAL SUMMARY OF TORNADOES

In brief review, the tornado year began rather quietly at 2:20 a.m. on January 18 and ended, in the same fashion, on New Year's Eve. Inclusive of these two dates, 1109 tornadoes occurred on 208 days, killing 87 people, injuring 2481 others, and, for the first time on record, causing property losses in excess of $500 million. Of the 50 states, only Alaska, Rhode Island, Utah, and Washington recorded a tornado-free year. In contrast, 34 death-dealing twisters struck 17 states, with Texas suffering the most fatalities (14). Georgia led the nation in total property losses with estimated damages exceeding $150 million. Some of the more significant tornadoes are described briefly in the following annual summary:

1973 Tornadoes

JANUARY - - - The first tornado in 1973 occurred near Seminole, Oklahoma on January 18 at 2:20 a.m. It completely demolished a mobile home and slightly injured four members of one family. Except for two tornadoes in Missouri and one in Illinois, the remainder of the tornadic activity was restricted to the South. The first tornado-death of the year was recorded north of Corey, Louisiana on the afternoon of January 18. Although a girl was killed when a tenant farm was destroyed, a baby received only minor injuries when it was carried 300-400 yards by the tornado.

FEBRUARY - - - With 10 tornadoes, February was a relatively peaceful month. Abnormal weather patterns which resulted in record snowfall for the deep South, also brought three tornadoes to Hunterdon County, New Jersey. The State had not experienced a February twister in over 25 years.

MARCH - - - The tornado season accelerated in earnest as 80 of the dreaded storms ripped through 14 states, causing 17 deaths and the greatest property loss from a single tornado. Shortly after 6 a.m. on the 10th, an intense squall line spawned several tornadoes over Texas. One of these slammed into the town of Hubbard, killing six persons and cutting a 15-mile-long swath through the town and beyond, demolishing most of the two-block downtown area. The communities of Hubbard and Burnet were later declared disaster areas. On the 31st, a devastating tornado moved east-northeastward through north-central Georgia causing extremely heavy and almost continuous damage along a 75-mile path. The storm first touched down near Jonesboro and moved through six counties before dissipating 10 miles east of Athens. Two persons were killed and 100 injured. A State survey team estimated total damage at more than $113 million -- the largest for any natural disaster in the State's history. As the same tornadic cloud system moved into South Carolina a few hours later, a funnel cloud descended on Calhoun

Falls. After paralleling highway 72, it smashed into the northern part of Abbeville. The tornado killed 7 people and injured 30 others. Four of the persons killed were occupants of a motel located three miles east of Calhoun Falls. The entire building with its furnishings and occupants, from the foundation upward, was carried across the highway and spread over a large field.

APRIL - - - As in previous years, tornado occurrences increased sharply in April with 150 on 22 days. Ten people were killed and 285 injured. On the 1st, just beyond the shadow of the Washington Monument, a tornado struck the cities of Fairfax and Falls Church, Virginia. Although major damage stretched along a 6-mile path, and amounted to nearly $14 million, only 37 injuries and no deaths occurred in these populated suburbs of the Capital. Texas led the Nation in April with 25 twisters which killed seven people. One tornado, from a pack of these deadly storms, crossed the Frio County Airport on the 15th. As it continued 15 miles east, five occupants of two cars were killed as the tornado crossed the highway. The importance of cool thinking and timely warning was highlighted in Summer, Mississippi on April 24th. When West District Elementary School and Junior High School principals learned that a tornado warning had been issued for their county, they promptly called a tornado drill, placing the children in the school corridors. A tornado did come destroying two mobile school buildings. Thirty-eight students and four teachers were injured, but a much greater disaster was averted.

MAY - - - The number of tornadoes usually reaches a peak in May; the 1956-73 average is 154. Although 1973 was no exception -- logging a staggering 250 for the month -- it still fell short of the record 275 set in 1965. Tornadic activity occurred in 31 states on 26 days causing 35 fatalities and 1143 injuries. During the afternoon and evening of the 10th, a multiple tornado outbreak raked northern and central Ohio. Storm tracks of 85- and 90-mile lengths traversed the area. Hardest hit was the town of Willard in Huron County where 119 mobile homes were completely destroyed, five persons killed, 100 injured, and about 1000 left homeless. Damage was estimated at $5 million. The tornado rate continued high throughout the month reaching its peak during the Memorial Day Weekend (May 26-28) when 97 twisters struck 19 states. The onset of this unparalleled tornado outbreak occurred in Sedgwick County, Kansas at 3:25 p.m. on the 26th when three persons were drowned as a twister set down near Cheney Reservoir. Tornadoes swept through neighboring states the rest of the day with one paying a particularly unwelcomed visit to Jonesboro, Arkansas late that night. This town suffered 34 deaths on the night of May 15, 1968 when automobiles were hurled through the air and wrapped around trees. The return visit, five years later, was less deadly as the tornado with a 55-mile-long path claimed three lives, with 289 injured and about $44 million damages. On the 27th, the tornado scene shifted to the Southeast. For nearly two hours, a large tornado tore a 135-mile path of destruction across central Alabama. At Greensboro, 72 persons were injured and one killed; at Centreville, the National Weather Service radar was put out of action; at Brent, five people were killed and 56 injured as 90 percent of the town was destroyed. Cancelled checks from a Greensboro bank were found at Gadsen over 100 miles to the northeast. The surge of holiday twisters finally ebbed on the 28th with a few tornadoes reaching eastern Pennsylvania and New Jersey.

JUNE - - - Although a record 224 tornadoes was reported in June on 26 days, the very low death-toll (two) and number of injuries (128) attest to the generally weak intensity of the storms. No tornadoes of major note occurred and the greatest frequency was reported in the Midwest with Illinois, Indiana, Michigan, and Missouri accounting for 85.

JULY - - - After a record-breaking total of 624 tornadoes during the preceding three months, July with only 80 twisters, was indeed a welcome change. Its zero death-toll maintained its position as the month with the lowest average fatality (one).

AUGUST - - - Tornado occurrences again declined in August. There were 51 tornadoes on 23 days which caused four deaths and 53 injuries. The four fatalities and 43 of the injuries were reported in the West Stockbridge, Massachusetts tornado on the 28th. A large tornado crossed the state line from New York and veered to the south-southwest as it entered the Commonwealth. The storm smashed into a large truck stop and nearby home killing four people. Two fully loaded semi-trailers were rolled over several times. This was the first major New England tornado since June 9, 1953 when 90 persons were killed in Worcester, Massachusetts.

SEPTEMBER - - - The count rose again in September as Kansas tabulated 15 tornadoes -- almost twice the number of its previous high. Sixty-seven twisters struck on 22 days causing three deaths and 76 injuries. Kansas accounted for all the deaths and 36 injuries. The most damaging of the nine storms in the State on the 25th started at Little River at 4:05 p.m. and ended later in the evening in Nebraska after traveling 158 miles. Timely warnings averted a greater loss of lives, especially in the Sundown Trailer Court in Salina, where 45 mobile homes were demolished; but, their residents had taken shelter earlier. Damage exceeded $6 million and the tornado took a toll of three dead and 42 injured in its trek through north-central Kansas and southeastern Nebraska.

GENERAL SUMMARY OF TORNADOES

NOVEMBER - - - After a quiet October in which only 28 tornadoes and no deaths were reported, November's 85 twisters set a new record for the month. The 85 storms touched down in 15 states causing 12 deaths and 223 injuries. Hardest hit were Alabama, Arkansas, Kansas, Mississippi, Oklahoma, and Texas, tallying 64 of the 85 tornadoes. On the 19th, a tornado moved through Blanchard, Oklahoma destroying 31 homes, two businesses, and two churches. Two persons were killed. Further northeastward, on its 24-mile path, the storm killed two children in a mobile home park where 37 trailers were demolished. Total damages were estimated at $4.3 million. On the 27th, a tornado struck the Huntsville-Decatur, Alabama Jetport and partially unroofed the weather station making it the second National Weather Service facility to suffer tornado damage in 1973. The storm continued its 8-mile path into the northern business district of Huntsville, Alabama where it dissipated. Thirty-two people were injured, mainly in a trailer park where 19 mobile homes were destroyed.

DECEMBER - - - The last month of the year finished strong with 51 tornadoes -- the third highest December total on record. South Carolina, with a record six tornadoes, accounted for all three December deaths. All six storms hit the northwestern section of the State on the afternoon of the 13th. The 1973 tornado year bowed out meekly as a twister unroofed a barn near Loxley, Alabama at 10:50 p.m. on New Year's Eve.

Additional information is presented in the tables and charts which follow. During the past two years, the combined efforts of the National Severe Storms Forecast Center, the National Climatic Center, and the National Weather Service personnel responsible for tornado reporting have produced a complete revision of tornado occurrences and tornado deaths back through 1956. The revision was needed to remove the many inconsistencies and errors in the reported tornado data. For example, in the 1950's, funnel clouds aloft were often counted in a state's tornado total. No effort was made to revise the number of tornado days since, in most cases, the addition or deletion of a tornado on a particular day would not change that day as a tornado day. The base year of 1956 for calculating averages and totals was chosen since, according to Fujita [1], 1956 was the first year when the increase in the efficiency of reporting tornadoes leveled off. The following tables and charts present tornado data from 1916 to 1973. Although several changes were made by the NSSFC in the 1951 to 1955 data and incorporated in the following tables, no changes were made to data prior to 1951.

REFERENCE

1. Fujita, T. T.: Estimate of Areal Probability of Tornadoes from Inflationary Reporting of Their Frequencies. University of Chicago SMRP Research Paper No. 89, p.6, October 1970.

TORNADO SUMMARY 1973

STATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALABAMA													
Number	1		6	2	16	1	2				8	9	45
Days	1		1	[illegible]	[illegible]	1	2				4	4	21
Deaths					[illegible]								[illegible]
Injuries			[illegible]	14	351						40	39	449
ALASKA													
(None)													
ARIZONA													
Number				1				1					2
Days				1				1					2
Deaths													0
Injuries													0
ARKANSAS													
Number	1		1	19	9	1		1	2	1	13	2	50
Days	1		1	4	3	1		1	2	1	3	2	19
Deaths				1	3						1		5
Injuries				27	320						24	7	378
CALIFORNIA													
Number								1					1
Day								1					1
Deaths													0
Injuries													0
COLORADO													
Number					3		3	2	3				11
Days					1		3	2	2				8
Deaths													0
Injuries					5								5
CONNECTICUT													
Number						3		1	4				8
Days						3		1	2				6
Deaths													0
Injuries						1							1
DELAWARE													
Number						1							1
Days						1							1
Deaths													0
Injuries													0
DISTRICT OF COLUMBIA													
(None)													
FLORIDA													
Number	8	1	7	12	6	3	1	1		3		3	45
Days	4	1	3	6	4	3	1	1		2		2	27
Deaths					1								1
Injuries	32	1	7	10	15					20		9	94
GEORGIA													
Number		4	5	3	8	1		1			2	7	31
Days		2	2	2	4	1		1			2	5	19
Deaths		2		1									3
Injuries		5	106		65							21	197
HAWAII													
Number					1								1
Days					1								1
Deaths													0
Injuries													0
IDAHO													
Number					1		1						2
Days					1		1						2
Deaths													0
Injuries													0
ILLINOIS													
Number	1		4	6	6	26	6	5	3	1		5	63
Days	1		1	2	2	6	5	4	2	1		1	25
Deaths													0
Injuries				2	6							3	11
INDIANA													
Number					12	30	3	1	1			1	48
Days					6	10	2	1	1			1	21
Deaths													0
Injuries						1						1	2
IOWA													
Number				[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]			[illegible]
Days					1	[illegible]	[illegible]		[illegible]	1			[illegible]
Deaths						[illegible]							[illegible]
Injuries				1		[illegible]							[illegible]
KANSAS													
Number			8	6	9	[illegible]		1	[illegible]	7	[illegible]		[illegible]
Days			2	[illegible]	5	[illegible]		1	4	[illegible]	[illegible]		[illegible]
Deaths					3				3				[illegible]
Injuries			1		22				[illegible]	[illegible]			[illegible]
KENTUCKY													
Number				4	3	7	1		1		3		19
Days				1	2	4	1		1		1		10
Deaths													[illegible]
Injuries					7	4					4		15
LOUISIANA													
Number	3		1	5	2	2	1		5	1	6	[illegible]	[illegible]
Days	2		1	2	2	2	1		4	1	3	1	20
Deaths	1												1
Injuries	6			1	2				11		1	41	[illegible]
MAINE													
Number						2		1					3
Days						2		1					3
Deaths													0
Injuries													0
MARYLAND													
Number				1		3							4
Days				1		2							3
Deaths													0
Injuries						4							4
MASSACHUSETTS													
Number								2	1				3
Days								2	1				3
Deaths								4					4
Injuries								43					43
MICHIGAN													
Number				1	4	19	5	4					33
Days				1	2	6	4	4					17
Deaths													0
Injuries						3	1	6					10
MINNESOTA													
Number					2	7	6	3	2	2			22
Days					1	4	3	1	2	2			13
Deaths					1								1
Injuries					11	3		3	6				23
MISSISSIPPI													
Number	2	1	2	5	16				2		18	4	50
Days	1	1	2	2	6				2		4	1	19
Deaths					1						1		2
Injuries	8	1	1	42	47						81	6	186
MISSOURI													
Number	2		5	23	26	10	4		3		3	3	79
Days	1		2	4	6	5	4		3		1	2	28
Deaths				1	2						5		8
Injuries	2		5	66	28	16			1		7		125
MONTANA													
Number					1			1					2
Days					1			1					2
Deaths													0
Injuries													0
NEBRASKA													
Number				3	4	2	5		3	2			19
Days				2	2	2	3		2	1			12
Deaths													0
Injuries									8	5			13
NEVADA													
Number							1				1		2
Days							1				1		2
Deaths													0
Injuries							1						1

TORNADO SUMMARY 1973

STATE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	ANN
NEW HAMPSHIRE													
Number					1	1							2
Days					1	1							2
Deaths													0
Injuries													0
NEW JERSEY													
Number		3			[illegible]	[illegible]					1		8
Days					[illegible]	1					1		4
Deaths													0
Injuries					15								15
NEW MEXICO													
Number				1			1						2
Days				1			1						2
Deaths													0
Injuries													0
NEW YORK													
Number						1		3	2				6
Days						1		1	1				3
Deaths													0
Injuries						2		1					3
NORTH CAROLINA													
Number				2	32	2			2				38
Days				1	8	2			1				12
Deaths				1									1
Injuries				1	14	2							17
NORTH DAKOTA													
Number				1		5	3	1					10
Days				1		2	1	1					5
Deaths													0
Injuries													0
OHIO													
Number					13	15	11	3				[illegible]	43
Days					[illegible]	[illegible]	5	[illegible]				1	19
Deaths					[illegible]								6
Injuries					[illegible]	[illegible]	1					4	135
OKLAHOMA													
Number	1		[illegible]	[illegible]	[illegible]	[illegible]	1	1	[illegible]	3	8		75
Days	1		[illegible]	[illegible]	[illegible]	[illegible]	1	1	[illegible]	[illegible]	4		32
Deaths					[illegible]						[illegible]		12
Injuries	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]			14		61		220
OREGON													
Number									1				1
Days									1				1
Deaths													0
Injuries													0
[illegible]													
(None)													
PENNSYLVANIA													
Number					[illegible]	[illegible]	1			1	1		[illegible]
Days					[illegible]	[illegible]	1			1	1		7
Deaths													[illegible]
Injuries					[illegible]					1			4
PUERTO RICO													
(None)													
RHODE ISLAND													
(None)													
SOUTH CAROLINA													
Number			[illegible]	1	[illegible]			1			1	[illegible]	[illegible]
Days			[illegible]		[illegible]			1			1	[illegible]	[illegible]
Deaths			[illegible]									[illegible]	[illegible]
Injuries			[illegible]		[illegible]							[illegible]	[illegible]
SOUTH DAKOTA													
Number				5	1	[illegible]	10	[illegible]	1				26
Days				1	1	[illegible]	4	[illegible]	1				17
Deaths													[illegible]
Injuries						1	15						16
TENNESSEE													
Number			1	4	14						3	2	24
Days			1	2	6						[illegible]	1	12
Deaths			1										1
Injuries			3								1	4	8
TEXAS													
Number	14	1	[illegible]	[illegible]	21	24	4	[illegible]	5	3	9	4	147
Days	3	1	[illegible]	11	9	11	3	7	4	[illegible]	4	3	68
Deaths			7	7									14
Injuries	4	1	131	51	13	3				1	4		208
UTAH													
(None)													
VERMONT													
Number						2							[illegible]
Days						[illegible]							[illegible]
Deaths													
Injuries													[illegible]
VIRGIN ISLANDS													
(None)													
VIRGINIA													
Number				1	[illegible]	1				1			[illegible]
Days				1	2	[illegible]				1			[illegible]
Deaths													
Injuries				37									[illegible]
WASHINGTON													
(None)													
WEST VIRGINIA													
Number						[illegible]							1
Days						1							[illegible]
Deaths													
Injuries													
WISCONSIN													
Number			[illegible]		1	[illegible]	[illegible]	[illegible]		[illegible]			[illegible]
Days			1		1	[illegible]	[illegible]	[illegible]		1			[illegible]
Deaths													
Injuries													
WYOMING													
Number							4	1	[illegible]				[illegible]
Days							[illegible]		1				[illegible]
Deaths													
Injuries													
TOTAL													
Number	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Days †	[illegible]	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Deaths	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]
Injuries	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

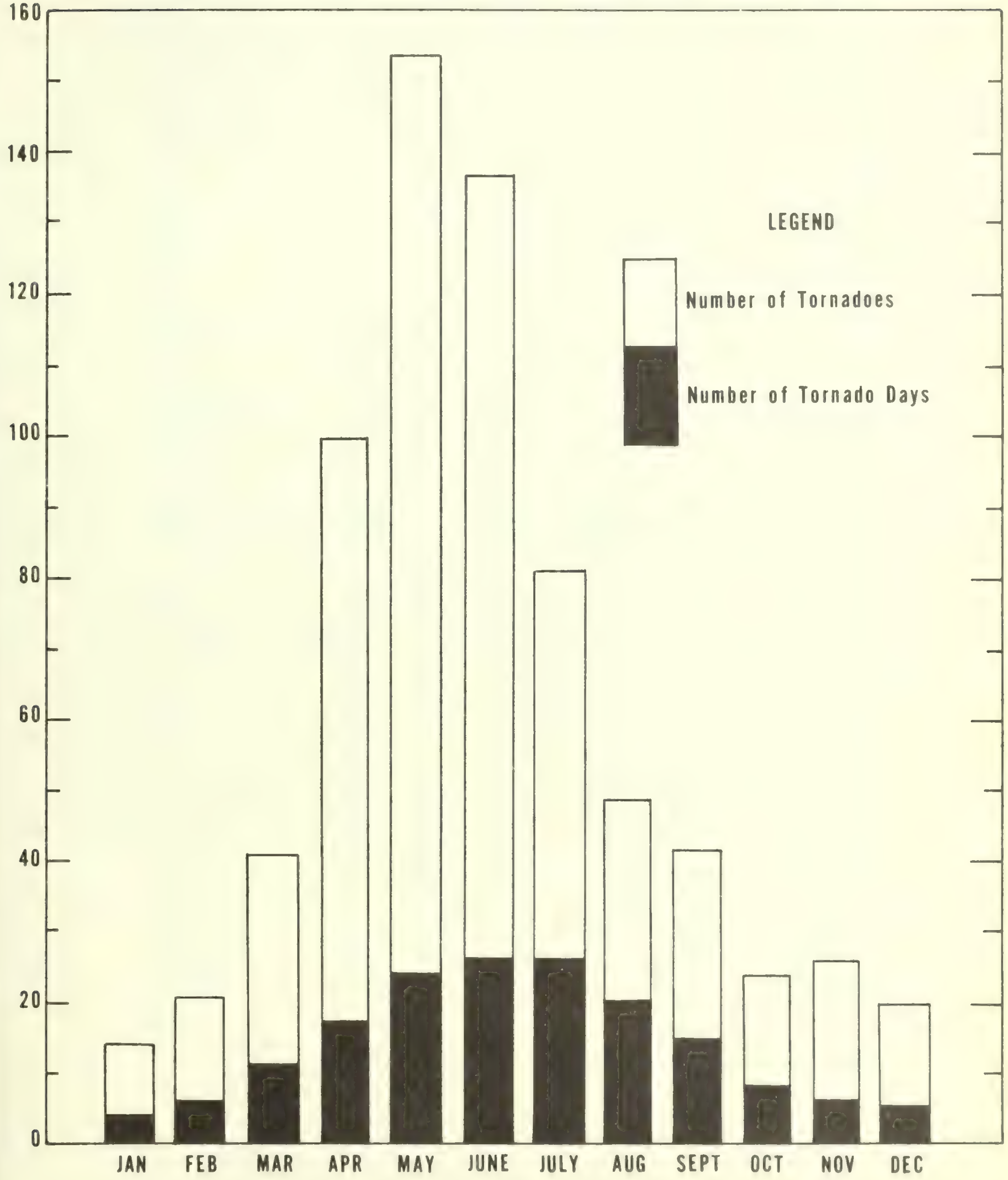
[illegible]

NUMBER OF TORNADOES, TORNADO DAYS, AND DEATHS BY MONTHS, 1953-73

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			ANNUAL		
YEAR	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS
1953	14	[illegible]	0	16	3	3	40	10	24	47	16	34	[illegible]	[illegible]	[illegible]	110	[illegible]	[illegible]	[illegible]	[illegible]	0	14	15	[illegible]	5	4	[illegible]	[illegible]	4	0	[illegible]	[illegible]	0	11	[illegible]	4	[illegible]	[illegible]	[illegible]
1954	[illegible]	1	0	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5	[illegible]	[illegible]	0	[illegible]	21	1	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]	[illegible]	0	17	[illegible]	1	[illegible]	[illegible]	[illegible]
1955	[illegible]	[illegible]	[illegible]	4	[illegible]	[illegible]	[illegible]	15	5	[illegible]	[illegible]	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	1	[illegible]	4	1	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]
1956	[illegible]	[illegible]	0	47	[illegible]	[illegible]	31	7	1	[illegible]	15	[illegible]	79	24	4	[illegible]	[illegible]	0	91	[illegible]	1	[illegible]	20	[illegible]	16	10	0	[illegible]	[illegible]	0	7	[illegible]	0	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]
1957	17	3	13	5	3	0	[illegible]	7	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25	14	[illegible]	[illegible]	0	[illegible]	14	0	17	10	[illegible]	16	11	2	59	11	25	38	4	16	[illegible]	[illegible]	[illegible]
1958	[illegible]	7	0	20	5	13	[illegible]	[illegible]	0	[illegible]	[illegible]	4	[illegible]	[illegible]	[illegible]	[illegible]	27	4	[illegible]	30	1	[illegible]	[illegible]	1	4	14	1	9	[illegible]	4	45	[illegible]	0	1	1	0	[illegible]	[illegible]	[illegible]
1959	16	[illegible]	3	20	5	21	43	[illegible]	9	30	[illegible]	1	[illegible]	[illegible]	6	[illegible]	25	[illegible]	[illegible]	24	0	[illegible]	[illegible]	0	[illegible]	[illegible]	14	24	10	0	11	4	0	[illegible]	[illegible]	0	604	[illegible]	[illegible]
1960	9	4	0	28	10	0	28	10	0	70	20	7	201	26	34	124	27	3	43	22	1	47	23	1	22	13	0	18	10	1	25	6	0	1	1	0	616	[illegible]	47
1961	1	1	0	31	8	0	124	17	7	74	19	3	137	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27	[illegible]	[illegible]	16	[illegible]	53	16	15	14	[illegible]	0	[illegible]	[illegible]	1	16	5	0	[illegible]	[illegible]	51
1962	12	3	1	25	7	0	37	9	17	41	8	1	201	[illegible]	3	171	[illegible]	0	[illegible]	26	0	51	[illegible]	[illegible]	24	11	0	11	10	0	5	4	0	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]
1963	15	5	1	6	3	0	50	12	8	82	14	16	71	21	1	91	[illegible]	0	[illegible]	[illegible]	0	26	13	2	33	13	3	13	5	0	15	[illegible]	0	0	0	0	464	141	31
1964	14	3	10	[illegible]	[illegible]	0	36	[illegible]	[illegible]	157	23	15	133	20	15	[illegible]	24	0	[illegible]	23	0	79	23	[illegible]	25	10	0	[illegible]	4	[illegible]	17	8	0	18	5	[illegible]	703	[illegible]	73
1965	21	11	0	32	4	0	33	9	2	124	20	264	275	25	17	147	26	6	[illegible]	20	0	61	[illegible]	[illegible]	64	11	0	[illegible]	4	1	35	[illegible]	5	7	4	0	901	[illegible]	[illegible]
1966	1	1	0	28	5	0	[illegible]	6	56	80	20	12	[illegible]	17	1	[illegible]	[illegible]	19	100	27	3	58	21	0	[illegible]	13	0	[illegible]	[illegible]	6	[illegible]	3	0	11	3	0	585	150	99
1967	39	4	7	8	5	0	42	14	3	149	18	73	[illegible]	25	3	[illegible]	28	6	90	25	1	28	[illegible]	2	134	16	5	[illegible]	[illegible]	4	8	5	0	64	10	10	929	173	114
1968	5	3	0	7	3	0	28	8	0	[illegible]	15	40	145	26	[illegible]	136	27	11	[illegible]	[illegible]	2	56	23	2	[illegible]	14	0	14	[illegible]	0	44	[illegible]	3	32	[illegible]	1	[illegible]	171	131
1969	3	1	32	5	5	0	8	[illegible]	1	68	15	[illegible]	145	25	4	137	[illegible]	7	99	27	0	69	21	19	[illegible]	11	0	[illegible]	10	0	5	3	0	23	7	1	608	155	[illegible]
1970	9	5	0	15	3	0	[illegible]	[illegible]	[illegible]	117	[illegible]	[illegible]	[illegible]	19	[illegible]	134	24	[illegible]	61	[illegible]	[illegible]	[illegible]	[illegible]	0	54	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	4	[illegible]	14	[illegible]	[illegible]	[illegible]	171	[illegible]
1971	[illegible]	7	1	63	[illegible]	131	40	[illegible]	[illegible]	75	14	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	30	1	50	21	0	47	15	[illegible]	[illegible]	[illegible]	0	1	7	0	57	9	[illegible]	[illegible]	[illegible]	[illegible]
1972	33	10	5	7	4	0	69	17	0	[illegible]	[illegible]	[illegible]	140	[illegible]	[illegible]	114	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	23	[illegible]	[illegible]	[illegible]	0	34	10	0	17	4	[illegible]	[illegible]	[illegible]	0	741	194	[illegible]
1973	33	7	1	10	4	0	80	16	17	150	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	51	23	4	[illegible]	[illegible]	3	[illegible]	[illegible]	0	85	11	12	51	13	3	[illegible]	[illegible]	87
1956-73:																																							
TOTAL	260	79	74	379	100	173	739	191	134	[illegible]	311	600	[illegible]	[illegible]	341	[illegible]	[illegible]	[illegible]	[illegible]	461	13	[illegible]	360	44	700	263	43	[illegible]	[illegible]	46	460	[illegible]	48	354	[illegible]	[illegible]	[illegible]	301	[illegible]
MEAN	14	4	4	21	[illegible]	10	41	11	7	100	17	33	154	24	[illegible]	[illegible]	[illegible]	7	[illegible]	[illegible]	1	[illegible]	20	[illegible]	[illegible]	15	[illegible]	[illegible]	[illegible]	3	[illegible]	[illegible]	3	[illegible]	5	[illegible]	706	168	93

AVERAGE NUMBER OF TORNADOES AND TORNADO DAYS EACH MONTH IN THE UNITED STATES

(Based on 12,739 Tornadoes That Occurred from 1956 - 1973)



NUMBER OF TORNADOES, TORNADO DAYS, DEATHS, AND RESULTING LOSSES BY YEARS, 1916-73

YEAR	Number Tornadoes	Tornado Days	Total Deaths	Most Deaths in Single Tornado	Total Property Losses †	PROPERTY LOSS FREQUENCY* Category 5	Category 6	Category 7 and Over
1916	90	36	150	30	[illegible]	7	1	0
1917	121	38	509	101	7	21	9	0
1918	81	45	135	36	7	20	5	0
1919	64	35	206	59	7	10	2	0
1920	87	50	498	87	7	14	10	0
1921	105	55	202	61	7	22	3	0
1922	108	64	135	16	7	27	5	0
1923	102	59	109	23	6	21	1	0
1924	130	57	376	85	7	26	11	1
1925	119	65	794	689	7	34	2	1
1926	111	57	144	23	6	28	0	0
1927	163	62	540	92	7	42	9	1
1928	203	79	92	14	7	40	7	0
1929	197	74	274	40	7	48	4	0
1930	192	72	179	41	7	38	6	0
1931	94	57	36	6	6	14	1	0
1932	151	67	394	37	7	23	1	1
1933	258	96	362	34	7	46	9	0
1934	147	77	47	6	6	10	3	0
1935	180	77	70	11	6	29	0	0
1936	151	71	552	216	7	17	5	1
1937	147	75	29	5	6	24	0	0
1938	213	76	183	32	7	29	6	0
1939	152	75	87	27	7	21	3	0
1940	124	62	65	18	7	13	2	0
1941	118	57	53	25	6	24	1	0
1942	167	66	384	65	7	42	10	0
1943	152	61	58	5	7	28	8	0
1944	169	68	275	100	7	50	9	0
1945	121	66	210	69	7	21	10	1
1946	106	65	78	15	7	29	7	0
1947	165	78	313	169	7	46	7	1
1948	183	68	140	33	7	62	11	2
1949	249	80	212	58	7	54	13	0
1950	199	88	70	18	7	47	9	0
1951	264	113	34	6	7	35	11	2
1952	240	98	230	57	7	53	19	7
1953	422	136	515	116	8	63	18	7
1954	550	159	36	6	7	63	8	1
1955	595	153	126	80	7	74	13	1
1956	503	155	83	25	7	83	24	1
1957	856	154	191	44	8	129	26	3
1958	563	166	66	19	7	70	8	1
1959	604	156	58	21	7	70	4	1
1960	616	172	47	16	7	65	11	1
1961	698	169	51	16	7	103	21	1
1962	658	152	28	17	7	51	10	0
1963	464	141	31	5	7	77	15	1
1964	703	156	73	22	7	113	17	5
1965	901	181	296	44	8	126	30	11
1966	585	150	99	58	8	79	13	4
1967	929	173	114	33	8	125	33	8
1968	660	171	131	34	8	82	26	6
1969	608	155	66	32	8	98	16	3
1970	652	171	72	26	8	97	24	6
1971	889	192	156	58	8	71	30	5
1972	741	194	27	6	8	100	28	1
1973	1109	208	87	7	9	219	67	9
Means: 1956-73	708	168	93	---	---	98	22	4

NOTE: -- The above estimated losses are based on values at time of occurrence.

† Storm damages in categories:

5. $50,000 to $500,000
6. $500,000 to $5 million
7. $5 million to $50 million
8. $50 million to $500 million
9. $500 million and over.

* Number of times property losses reported in Storm Data in Categories 5, 6, 7 and over.

NUMBER OF TORNADOES, TORNADO DAYS, AND DEATHS BY STATES, 1956-73

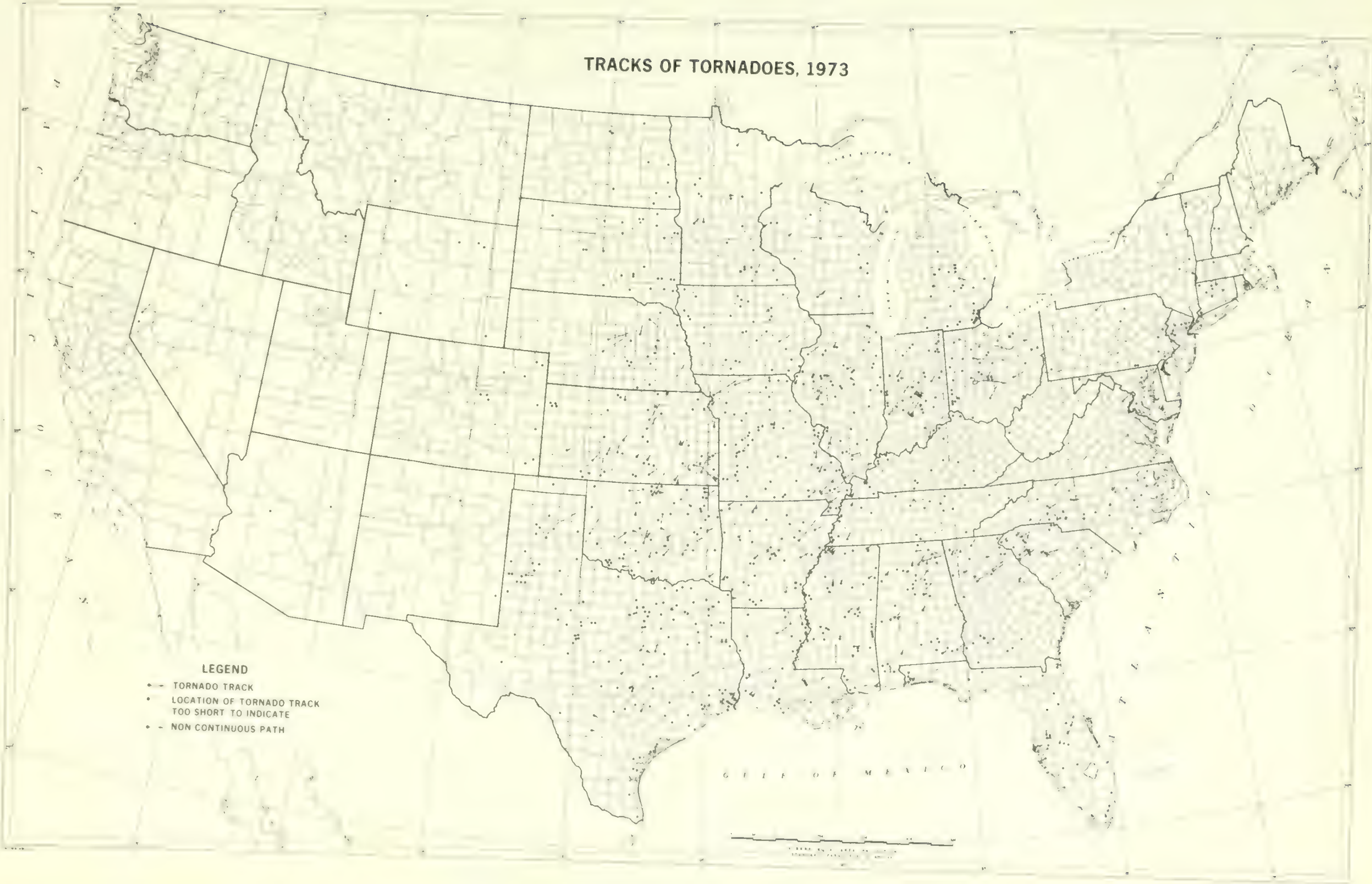
STATE	TORNADOES							DAYS		DEATHS		
	TOTAL	AVERAGE	GREATEST	YEAR	LEAST	YEAR	Per 10,000 Sq.Mi.	TOTAL	AVERAGE	TOTAL	AVERAGE	Per 10,000 Sq.Mi.
Alabama	329	18	45	1957	5	1956	3.54	187	10	77	4	15
Alaska	1	0	1	1959	0	1973+	.00	1	0	0	0	0
Arizona	74	4	17	1972	0	1965	.36	60	3	2	0	0
Arkansas	323	18	50	1973	2	1969+	3.38	163	9	93	5	18
California	49	3	10	1958	0	1968+	.17	39	2	0	0	0
Colorado	232	13	32	1965	1	1959	1.24	170	9	3	0	0
Connecticut	31	2	8	1973	0	1969+	3.44	29	2	1	0	2
Delaware	12	1	4	1967	0	1972+	3.24	11	1	0	0	0
District of Columbia	0	0	0	-	0	-	.00	0	0	0	0	0
Florida	615	34	77	1972	12	1965	5.83	359	20	40	2	7
Georgia	385	21	46	1971+	7	1960	3.63	237	13	14	1	2
Hawaii	11	1	4	1971	0	1972+	.95	9	1	0	0	0
Idaho	29	2	5	1967+	0	1971+	.19	20	1	0	0	0
Illinois	462	26	63	1973	7	1964	4.55	228	13	112	6	20
Indiana	407	23	48	1973	6	1972	6.23	191	11	143	8	39
Iowa	485	27	54	1964	12	1962	4.79	228	13	34	2	6
Kansas	865	48	94	1964	17	1969	5.84	384	21	56	3	7
Kentucky	144	8	19	1973	1	1960	1.98	91	5	25	1	6
Louisiana	301	17	30	1973+	5	1958+	3.45	201	11	59	3	12
Maine	59	3	11	1971	0	1964	.99	49	3	0	0	0
Maryland	34	2	5	1967	0	1970+	1.79	31	2	1	0	1
Massachusetts	90	5	12	1958	0	1959	6.06	61	3	7	0	8
Michigan	215	12	33	1973	2	1959	2.05	126	7	91	5	16
Minnesota	314	17	34	1968	5	1972	2.08	177	10	55	3	7
Mississippi	397	22	50	1973	5	1964	4.62	201	11	254	14	53
Missouri	594	33	79	1973	11	1972	4.74	280	16	108	6	15
Montana	61	3	10	1962	0	1967+	.23	48	3	0	0	0
Nebraska	590	33	54	1958	10	1966	4.24	283	16	14	1	2
Nevada	11	1	4	1964	0	1972+	.06	9	1	0	0	0
New Hampshire	49	3	9	1963	0	1971+	2.93	43	2	0	0	0
New Jersey	32	2	8	1973	0	1972+	2.27	25	1	0	0	0
New Mexico	185	10	18	1972	2	1973+	.84	135	8	2	0	0
New York	60	3	7	1969	1	1966+	.67	53	3	2	0	0
North Carolina	162	9	38	1973	2	1970	1.71	100	6	10	1	2
North Dakota	236	13	41	1965	2	1961	1.86	148	8	11	1	2
Ohio	256	14	43	1973	3	1966	3.45	143	8	88	5	21
Oklahoma	1036	58	107	1957	30	1972+	8.23	424	24	114	6	16
Oregon	18	1	3	1967+	0	1964+	.10	14	1	0	0	0
Pacific	0	0	0	-	0	-	.00	0	0	0	0	0
Pennsylvania	84	5	12	1973+	0	1959	1.03	67	4	3	0	1
Puerto Rico	6	0	2	1969	0	1973+	.97	5	0	0	0	0
Rhode Island	1	0	1	1972	0	1973+	.46	1	0	0	0	0
South Carolina	172	10	23	1973	1	1970	3.08	113	6	15	1	5
South Dakota	452	25	64	1965	1	1958	3.26	231	13	7	0	1
Tennessee	170	9	24	1973	1	1962	2.24	102	6	20	1	5
Texas	2151	120	232	1967	56	1956	4.47	864	48	150	8	6
Utah	27	2	5	1970+	0	1973+	.18	21	1	0	0	0
Vermont	21	1	5	1962	0	1971+	1.21	17	1	0	0	0
Virgin Islands	0	0	0	-	0	-	.00	0	0	0	0	0
Virginia	75	4	12	1959	1	1963+	1.02	57	3	13	1	3
Washington	23	1	4	1972	0	1973+	.19	17	1	6	0	1
West Virginia	30	2	5	1967	0	1960+	.69	27	2	0	0	0
Wisconsin	356	20	33	1964	6	1956	3.52	198	11	45	3	8
Wyoming	106	6	17	1962	0	1970	.60	88	5	1	0	0
Total: United States	*12739	708	1109	1973	464	1963	1.96	†3016	168	1676	93	5

+ Also in earlier year(s).
* Corrected for boundary-crossing tornadoes.
† Tornado Days for country as a whole.

# Mean annual tornadoes per 10,000 square miles.
@ Number of deaths per 10,000 square miles -- 1956-73

NUMBER OF FUNNEL CLOUDS IN 1973

STATE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	ANN
Alabama			1	6	15	3		2	2		2	5	36
Alaska													0
Arizona			1		4		2						7
Arkansas	1		4	52	33	19	3				13		125
California	2	3	2		1	1		1			2	1	13
Colorado					1	4	11	5	2				23
Connecticut													0
Delaware						1							1
District of Columbia													0
Florida	2	1											3
Georgia			1		21	5		1					28
Hawaii	1		2					1		2			6
Idaho							3						3
Illinois			3	8	3	13	2						29
Indiana	3			4	18	44	2	1				2	74
Iowa				14	26	60	24	12	9				145
Kansas			7	2	20	23	16	3	22				93
Kentucky				3	5	6	1						15
Louisiana	6		2	1	5	6	17	14	13	4			68
Maine													0
Maryland					6	2							8
Massachusetts					3				1				4
Michigan					7	19	2						28
Minnesota				6	5	6	12	25		1			55
Mississippi	3		11	9	13	5	5	12	2		20	1	81
Missouri	9		3		5	5	3						25
Montana													0
Nebraska				1									1
Nevada											3		3
New Hampshire													0
New Jersey													0
New Mexico				5			7	2	1				15
New York													0
North Carolina					1								1
North Dakota						3		1					4
Ohio					8	25	5	2					40
Oklahoma			4	17	28	62	3	3	9	1			127
Oregon													0
Pacific			1										1
Pennsylvania						2							2
Puerto Rico			1										1
Rhode Island													0
South Carolina					3								3
South Dakota					3	2	4	4					13
Tennessee	1		1	2	9	5		1					19
Texas	9	3	15	18	38	49	22	50	24	22	5		255
Utah				1	3	1	2						7
Vermont													0
Virgin Islands		2											2
Virginia					5	1	1				1		8
Washington													0
West Virginia							1						1
Wisconsin						8	7	4	1				20
Wyoming							7	1	3				11
TOTAL	37	9	59	149	289	380	162	145	89	30	46	9	1404



TRACKS OF TORNADOES, 1973

LEGEND
TORNADO TRACK
LOCATION OF TORNADO TRACK TOO SHORT TO INDICATE
NON CONTINUOUS PATH
PACIFIC OCEAN
ATLANTIC OCEAN
GULF OF MEXICO

HAILSTORM LOSSES FOR PAST YEARS

Year	Property (exclusive of crops) †	Crops †	Total †
[illegible]	–	–	7
[illegible]	–	–	7
[illegible]	–	–	7
[illegible]	6	7	7
[illegible]	6	7	7
[illegible]	[illegible]	7	7
[illegible]	5	6	6
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1955	7	7	8
1956	7	8	8
1957	7	8	8
1958	7	8	8
1959	6	7	7
1960	7	8	8
1961	8	8	8
1962	9	8	9
1963	8	8	8
1964	8	8	8
1965	8	8	8
1966	8	8	8
1967	8	8	8
1968	8	8	8
1969	8	8	8
1970	8	8	8
1971	7	8	8
1972	7	7	8
1973	7	7	8

† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50	4	$5,000 to $50,000	7	$5 million to $50 million
2	$50 to $500	5	$50,000 to $500,000	8	$50 million to $500 million
3	$500 to $5,000	6	$500,000 to $5 million	9	$500 million to $5 billion.

NOTE.--The above estimated losses are based on values at time of occurrence.

WINDSTORM LOSSES PAST YEARS

(Windstorms other than tornadoes)

Year	Total loss of life	Total property loss †
1916	65	7
1917	25	6
1918	79	7
1919	344	7
1920	12	6
1921	65	7
1922	133	7
1923	68	7
1924	78	7
1925	88	7
1926	357	8
1927	64	7
1928	1,947	8
1929	46	7
1930	49	7
1931	17	7
1932	306	7
1933	156	8
1934	109	7
1935	461	7
1936	121	7
1937	43	7
1938	630	8
1939	60	6
1940	251	7
1941	43	7
1942	68	7
1943	61	7
1944	448	8
1945	85	7
1946	70	7
1947	117	8
1948	52	8
1949	102	8
1950	210	8
1951	289	8
1952	137	8
1953	118	8
1954	292	9
1955	301	8
1956	196	8
1957	553	8
1958	129	8
1959	145	7
1960	85	8
1961	64	8
1962	134	9
1963	54	9
1964	64	9
1965	107	9
1966	74	8
1967	48	8
1968	49	8
1969	194	9
1970	64	8
1971	76	8
1972	103	8
1973	80	8
Total	10,216	

† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50	4	$5,000 to $50,000	7	$5 million to $50 million
2	$50 to $500	5	$50,000 to $500,000	8	$50 million to $500 million
3	$500 to $5,000	6	$500,000 to $5 million	9	$500 million to $5 billion.

NOTE.--The above estimated losses are based on values at time of occurrence.

NORTH ATLANTIC TROPICAL CYCLONES, 1973

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National Weather Service, NOAA
National Hurricane Center
Miami, Florida

In contrast to the 1972 hurricane season, when only limited areas of North Atlantic waters were affected by tropical cyclones, Figure 1 shows that relatively few areas failed to come under the influence of at least one storm or hurricane during 1973. For the first time since 1966, tropical cyclones of storm strength developed in the far eastern Atlantic. The total of seven tropical cyclones, of which four were hurricanes, was below the 30-year averages of ten and six respectively. Tropical cyclones of hurricane intensity were in existence on 13 days with a ship reporting winds of hurricane force in Brenda and Fran.

Figure 2 shows the tracks of subtropical cyclones of 1973. This type of storm was discussed in an article in the July 1973 issue of the Mariners Weather Log. Hurricane Fran evolved from a subtropical cyclone in a manner similar to Betty of 1972. However, for the first time of record a tropical storm Gilda weakened to a depression and then was rejuvenated as a large, severe type A subtropical cyclone.

Summaries of the North Atlantic tropical and subtropical cyclones are given in Tables 1 and 2 respectively.

HURRICANE ALICE, JULY 1-6

Hurricane Alice was the first hurricane or tropical storm of record to ever develop or pass near Bermuda in early July. The initial development of the low which became Alice resulted from the interaction of an easterly wave with a large convective cloud system moving eastward from Florida and the Western Bahamas. A ship report of southerly 20-knot winds and 12-foot swells, near 24°N, 68°W, at 1200 on June 30, helped confirm the existence of a well-defined 1012-mb center near 26°N, 69°W.

The depression gradually strengthened during the next 48 hours, as it turned to a northerly course on the western periphery of a large high centered near 40°N, 47°W. Tropical storm strength was not attained until late on the 2d, when the low had reached a pressure of 1005 mb, about 250 miles south-southwest of Bermuda. Winds reached hurricane force the next morning when Alice was about 150 miles south of Bermuda. The hurricane continued northward at 10 knots, with the lowest pressure of 986 mb and maximum sustained winds of 80 knots occurring as the center passed within 10 miles of the western tip of the island, about 0600 July 4. The highest sustained surface wind reported at Bermuda was 43 knots, while gusts reached 57 knots. Sustained winds reached 65 knots, with gusts to 77 knots, atop a 100-foot tower on the island. The hurricane weakened only slightly until it reached the colder waters off Nova Scotia and Newfoundland, decreasing to tropical storm strength near 43°N, 62°W, and finally merging with a frontal trough over Newfoundland on the 6th.

HURRICANE BRENDA, AUGUST 18-22

The disturbance which eventually developed into Brenda moved westward off the African Coast south of Dakar, Senegal, on August 9. The first signs of development did not occur until a large area of showers and thunderstorms appeared on satellite pictures, as the disturbance moved into the Lesser Antilles on the 13th. This area became more concentrated as the disturbance moved thru the eastern and central Caribbean. During the evening of the 17th, a ship near 21°N, 84°W reported 45-knot southeasterly winds and 18-foot seas, suggesting that not only was a low center finally developing but it was fast becoming a tropical storm. The next morning the National Hurricane Center received a ship-to-shore call reporting 45-knot southeasterly gales which had shifted from the northeast at 50 to 60 knots, together with 20-foot seas. By afternoon a reconnaissance aircraft reported winds nearing hurricane force. The central pressure dropped to 992 mb shortly before the center moved inland just north of Cozumel, Mexico, during the evening.

The center of Brenda moved westward across extreme northern Yucatan, passed over Merida about 24 hours after moving inland, and continued into the Bay of Campeche early on the 20th. Winds of minimum gale force were reported at Merida, and earlier at Cozumel, but were undoubtedly higher over Gulf of Mexico waters to the North. Upon reaching water Brenda intensified rapidly once again and reached hurricane strength by early evening. The lowest pressure of 977 mb and maximum sustained winds of 70 knots were reported by reconnaissance aircraft around 0000 of the 21st, but it is likely that further strengthening occurred before landfall early the next morning. Rapid weakening occurred after landfall and Brenda was a depression by late that day.

The turn of Brenda to the southwest and south, as high pressure built over Texas and northern Mexico, was very unusual for an August storm. Brenda was the first hurricane of record to affect the southeast coastal sections of Campeche Bay by moving onshore from the Gulf of Mexico. The only other tropical cyclones of storm intensity to move ashore in the Carmen-Campeche area occurred in May 1933 and October 1922.

Carmen, Mexico, reported the highest sustained wind by a land station, 45 knots, but hurricane force winds undoubtedly occurred near and just west of the center. Ten persons were killed in coastal towns as widespread flooding occurred from Vera Cruz to Campeche.

TROPICAL STORM CHRISTINE, AUGUST 25-SEPTEMBER 4

The disturbance which developed into Christine left the West African Coast as a strong depression on August 25. Satellite pictures, on the morning of the 28th, indicated the system was probably of minimal tropical storm strength. Because of the marginal storm intensity and conditions believed to be unfavorable for development in advance of the low, the first advisory on Christine was not issued until late on the 30th. On that day reconnaissance aircraft found a surface pressure of 1007 mb and sustained winds of 45 knots about 1,000 miles east of Trinidad.

The storm continued west-northwestward at 10-knots and slowly intensified until reaching maximum strength of 996 mb and 60-knot winds early on September 2. As has been the case several times in recent years, the storm began weakening steadily as it approached the Leeward Islands, and was of less than tropical storm strength when it reached Antigua at midday on the 3d. Ship observations of sea surface temperatures, used routinely at the National Hurricane Center in an automated analysis for Atlantic and Eastern Pacific Waters, showed that below normal temperatures continued to persist in the area.

A few gusts of gale force occurred westward to Puerto Rico as the depression center degenerated into an easterly wave upon approaching Puerto Rico. There was one death by electrocution from a fallen power line in Puerto Rico. Marine interests were affected only slightly by Christine. The worst conditions were reported by a ship that encountered 40-knot gales and 25 to 30-foot seas about 75 miles north of the center, on the 31st.

TROPICAL STORM DELIA, SEPTEMBER 1-7

Satellite pictures showed a general increase in cloudiness over the southwestern Caribbean and Central America during the last few days of August. This seemed to be the result of an upper level trough moving westward over Cuba combining with a disturbance moving northwestward from the Canal Zone. A weak cyclonic circulation became evident over the Gulf of Honduras, on the 31st. Satellite pictures showed the depression to be better organized on September 1, as it drifted northward along the east coast of the Yucatan Peninsula. The depression moved northwestward into the Gulf of Mexico during the night, and by afternoon of the 2d, reconnaissance aircraft found a central pressure of 1000 mb and 45-knot winds near 23°N, 87°W. Delia turned to a more westerly course during the night and increased in forward speed while continuing to intensify. At 0600 on the 3d southeasterly gales of 55 knots were encountered by a ship near 24°N, 88°W, very close to the center of the storm. These were the worst conditions reported by a vessel during Delia.

The storm slowed during the evening of the 3d, making a small loop, and looped again as it reached the Texas coast near Galveston late on the 4th, making a second landfall in the same area 24 hours later. This erratic behavior resulted from a combination of passing anticyclones to the north and large falls in pressure south of the storm. The latter also inhibited significant strengthening. Reconnaissance aircraft measured sustained winds of 60 knots on the 3d, 4th, and 5th and squalls well above hurricane strength were reported some distance from the center on the latter two days. However, Delia never developed the classic wall cloud of a hurricane and sustained winds remained just below hurricane force. The lowest pressure of 986 mb was reported by reconnaissance aircraft just prior to the first landfall on the 4th. The storm weakened to a depression over south central Texas less than 12 hours after the second landfall.

Gales of 40 to 45 knots occurred from Freeport to Galveston with gusts of 50 to 60 knots. Tides of 5 to 7 feet above mean sea level in Galveston Bay caused flooding of the Baytown area and an estimated $3 million in losses for homeowners. Coastal marine interests apparently suffered only minor losses from Delia. Significant additional damage to crops estimated at $3 million resulted from 8 to 10 inch rains over southeastern Texas and southwestern Louisiana. These losses were augmented when a strong tropical depression moved into the same area 5 days later and became nearly stationary, producing 15 inches of additional rainfall along the Texas coast and raising total crop losses to an estimated $15 million. There were five deaths indirectly attributed to Delia in the Houston-Galveston area.

HURRICANE ELLEN, SEPTEMBER 14-23

Ellen was the first hurricane to affect the North Atlantic between 15°-30°N and east of 40W since Faith of 1966. Ellen was the most intense hurricane of the season with NOAA reconnaissance aircraft measuring sustained winds of 120-knots at 1500 feet and a minimum central pressure of 962 mb, near 36°N, 52°W, after the storm had recurved on the 21st.

As in the case of Christine, Ellen was spawned by an African disturbance. The cloud system moved off the coast on September 11, and formed a depression south of the Cape Verde Islands on the 14th. Twenty-four hours later a ship encountered 40-knot southerly squalls near 15°N, 26°W, suggesting that a storm had formed about 75 miles off the southwesternmost Cape Verdes. Again, as in Christine, because of the marginal storm strength, sparsity of conclusive data, and unfavorable conditions in advance of the system, the first advisory on Ellen was not issued until the 17th. On that day reconnaissance aircraft found a minimum pressure of 1005 mb and 50-knot surface winds.

Ellen had moved steadily northwestward at 17-knots since leaving the Cape Verdes. Under the influence of a strong high to the north the storm turned more westward on the 18th, and strengthened to hurricane force on the 19th, just prior to recurving. Reconnaissance aircraft found a 985 mb central pressure at 80-knot surface winds at midday.

The hurricane accelerated northeastward ahead of a low pressure system which was moving eastward from the United States and Canada, and reached a forward speed of 50-knots by the 22d. It merged with a frontal zone and became extratropical while passing 650 miles east of Newfoundland at midday.

HURRICANE FRAN, OCTOBER 8-13

A rather large area of showers located north of Hispaniola on October 1 was the weather disturbance which eventually gave birth to subtropical cyclone Bravo, which in turn matured to hurricane Fran. The shower area was associated with an upper level trough of low pressure that had been moving westward across the Atlantic during the preceding week, and may possibly have originated in Africa. The area of showers continued westward to the Western Bahams before becoming stationary on the 4th. Reports of light westerly winds from ships just east of Florida, on the 5th, suggested a closed circulation was developing. Ship reports confirmed the continued existence and eastward drift of this weak circulation on the 6th and 7th, with the low near 29°N, 71°W, on the morning of the 7th. The following day reconnaissance aircraft found 35-knot surface winds some distance from the center. The system appeared to have characteristics more subtropical than tropical and was designated Bravo that evening, while located about 125 miles south of Bermuda. By the next day (9th), reconnaissance aircraft found hurricane-force winds of 70 knots very close to the center and a distinctly tropical system. Bravo was reclassified as hurricane Fran, while located near 32°N, 55°W.

Some of the strongest winds of the Hurricane season were reported by ships during the next 3 days as Fran gradually accelerated towards the east-northeast from a forward speed of 20 knots on the 9th to 35 knots while passing just northwest of the Azores on the 11th. One of the two observations of hurricane-force winds was received near 32°N, 49°W at 1200 on the 10th; a ship was buffeted by 65-knot southwest winds. Twenty-four hours later another ship was reporting southerly 60-knot gales near 39°N, 32°W. The central pressure in Fran continued to fall reaching a minimum of 978 mb. On the 11th, the hurricane's center passed about 30 miles north of the islands of Flores and Corvo in the Azores. Surface winds of 35 to 45 knots were reported at 1200 and 1800, but the maximum winds actually observed there are not known. Fran finally merged with a cold front, becoming extratropical off the French Coast near Brest on the 13th.

TROPICAL STORM GILDA, OCTOBER 16-29

As in several earlier storms, the development of Gilda seemed to be at least partially influenced by an African disturbance. The disturbance in question left the coast on October 3, reached the eastern Caribbean on the 10th, and slowed considerably, moving only to a position south of Haiti by the 13th. Cloudiness and shower activity became more widespread over the northwestern Caribbean on the 15th, with a weak depression developing near 16°N, 82°W by the end of the day. A ship near 11°N, 82°W, late on the 16th, reported a west-northwest 10-knot wind suggesting the beginning of significant strengthening. Surface observations from Grand Cayman during the night indicated the depression was drifting northeastward and continuing to strengthen. By afternoon of the 17th, a reconnaissance flight found a central pressure of 1002 mb, which had dropped to 996 mb by 0000 on the 18th. Tropical storm Gilda had formed just 60 miles east of Grand Cayman.

The storm continued slowly northward during the next 36 hours. It then turned towards the northeast after leaving the north coast of Cuba on the morning of the 19th. The highest sustained winds of 50 knots came from Gran Piedra, a mountain station over 100 miles east of the storm center. The lowest central pressure during Gilda's tropical life, 994 mb, together with the highest sustained winds of 50 knots, was measured by a NOAA reconnaissance aircraft late on the 19th, just off the southern tip of Andros Island. Several U. S. Navy automatic weather stations reported wind gusts in excess of 59 knots during October 19-20 with the highest value of 67 knots at Goulding Cay.

Increasing westerly winds aloft over the storm on the 20th gradually separated the convection from Gilda's low level circulation. As in Christine's case, the result was a gradual weakening until winds decreased to less than tropical storm strength on the 22d. Rising pressures around Gilda had caused the center to stall on the 21st, while located about 60 miles east of Harbour Island in the central Bahamas.

The depression remained stationary for 48 hours until the morning of the 23d. During this time winds of near gale force and rough seas lashed the coastal sections of most of the South Atlantic States and the western and central Bahamas. This was to appear relatively inconsequential 24 to 48 hours later as the depression moved northeastward and then northward, and acquired the characteristics of a large, severe subtropical cyclone with a central pressure of 985 mb located midway between Bermuda and Hatteras on the 25th. The circulation of the storm covered the entire southwest North Atlantic. Many gale observations were received during this portion of Gilda's life as from all of the North Atlantic tropical cyclones of 1973. The 50-knot gales reached out more than 200 miles from the center. The USCGC TANEY (OSV "H"), stationed near 38° N, 71° W, endured gales for 96 hours and 50-knot winds for 24 hours. Waves rose to a peak 28 feet during the evening of the 25th and early morning hours of the 26th. Several other ships reported 50-knot gales and seas 20 feet or more on the 25-26th. The pounding surf produced considerable beach erosion and some property damage from New Jersey to Florida.

The storm turned northeastward away from the United States on the 26th, and decreased very little in strength before becoming extratropical just southeast of Sable Island, on the afternoon of the 27th. The central pressure dropped to 968 mb while passing east of Newfoundland early on the 28th, but the stabilizing influence of the colder waters probably prevented any further increase in wind strength.

SUBTROPICAL CYCLONE ALFA, JULY 30-AUGUST 1

In addition to the subtropical portions of Fran and Gilda, one other small subtropical cyclone, dubbed Alfa, produced 35 to 40-knot winds on July 31 and August 1 as it moved north-northeastward about 100 to 200 miles offshore from New Jersey to New England. It weakened before making landfall in Maine, and produced no deaths or damages.

Acknowledgments. Portions of the Narrative on the individual storms are based on Preliminary Reports by other hurricane forecasters at Miami, New Orleans, Washington, Boston, and San Juan.

NORTH ATLANTIC TROPICAL CYCLONES FOR PAST YEARS

TOTAL NUMBER OF TROPICAL CYCLONES, LOSS OF LIFE AND DAMAGE

	Total Number Tropical Cyclones*		Total Number Hurricanes		Loss of Life		Damage by Categories**	
Year	All Areas	Reaching U. S. Coast	All Areas	Reaching U. S. Coast	Total All Areas	United States	Total All Areas	United States
1931	9	2	2	0		0		#
1932	11	5	6	2		0		#
1933	21	7	9	5		63		7
1934	11	5	6	3		17		6
1935	6	2	5	2		414		7
	58	21	28	12				
1936	16	7	7	3		9		6
1937	9	4	3	0		0		4
1938	8	4	3	2		600		8
1939	5	3	3	1		3		3
1940	8	3	4	2		51		6
	46	21	20	8				
1941	6	4	4	2		10		7
1942	10	3	4	2	17	8	7	7
1943	10	4	5	1	19	16	7	7
1944	11	4	7	3	1,076	64	8	8
1945	11	5	5	3	29	7	8	8
	48	20	25	11				
1946	6	4	3	1	5	0	7	7
1947	9	7	5	3	72	53	8	8
1948	9	4	6	3	24	3	7	7
1949	13	3	7	2	4	4	8	8
1950	13	4	11	3	27	19	7	7
	50	22	32	12				
1951	10	1	8	0	244	0	7	6
1952	7	2	6	1	16	3	6	6
1953	14	6	6	2	3	2	7	7
1954	11	4	8	3	720+	193	9	9
1955	12	5	9	3	1,518+	218	9	9
	54	18	37	9				
1956	8	2	4	1	76	21	8	7
1957	8	5	3	1	475	395	8	8
1958	10	1	7	0	49	2	7	7
1959	11	7	7	3	57	24	7	7
1960	7	5	4	2	185	65	8	8
	44	20	25	7				
1961	11	3	8	1	345	46	8	8
1962	5	1	3	0	4	4	6	6
1963	9	1	7	1	7,218+	11	9	7
1964	12	6	6	4	266	49	9	9
1965	6	2	4	1	76	75	9	9
	43	13	28	7				
1966	11	2	7	2	1,040	54	8	7
1967	8	2	6	1	68	18	8	8
1968	7	3	4	1	11	9	7	7
1969	13	3	10	2	364	256	9	9
1970	7	4	3	1	74	11	9	8
	46	14	30	7				
1971	12	5	5	3	44	8	8	8
1972	4	3	3	1	128	121	9	9
1973	7	1	4	0	16	5	7	7
Total	412	158	237	77				
Mean	9.6	3.7	5.6	1.8				

**The Environmental Data Service has for some time recognized that, without detailed expert appraisal of damage, all figures published are merely approximations. Since errors in dollar estimates vary in proportion of the total damage, storms are placed in categories varying from 1 to 9 as follows:

1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

*Including hurricanes
# Not reported in literature, believed minor.
+ Additional deaths for which figures are not available.

NORTH ATLANTIC TROPICAL CYCLONES FOR PAST YEARS

Frequency of Tropical Cyclones (Including Hurricanes) by Months and Years

		May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1931			1	1	2	3	1	1		9
1932		1			3	3	3	1		11
1933		1	1	3	7	5	3	1		21
1934		1	1	1	2	2	3	1		11
1935					3	1	2			6
1936			3	2	6	4	1			16
1937				1	2	6				9
1938					3	1	3	1		8
1939			1		1	1	2			5
1940		1			3	2	2			8
1941						4	2			6
1942					3	3	3	1		10
1943				1	2	4	3			10
1944				3	2	4	2			11
1945			1	1	4	3	2			11
1946			1	1	1	1	2			6
1947				1	2	3	3			9
1948		1		1	2	3	1	1		9
1949					3	7	2	1		13
1950					4	3	6			13
1951		1			3	4	2			10
1952	(Feb.) 1				2	2	2			7
1953		1			3	4	4	1	1	14
1954			1	1	2	4	1	1	1	11
1955				1	4	5	2			12
1956			1	1	1	4	1			8
1957			2		1	4	1			8
1958			1		4	4	1			10
1959		1	2	2	1	3	2			11
1960			1	2	1	3				7
1961				1		6	2	2		11
1962					2	2	1			5
1963				1	1	5	2			9
1964			1	1	4	4	1	1		12
1965			1		2	2	1			6
1966			1	4	1	4		1		11
1967					1	4	3			8
1968			3		1	2	1			7
1969				1	6	2	3	1		13
1970		1		2	1	3				7
1971				1	3	6	1	1		12
1972			1		2	1				4
1973	Feb.			1	2	2	2			7
Totals	1	9	24	35	103	143	79	16	2	412

Frequency of Tropical Cyclones Reaching Hurricane Intensity by Months and Years

	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1931					2				2
1932				3	1	1	1		6
1933		1	1	3	3	1			9
1934		1	1	1	1	1	1		6
1935				2	1	2			5
1936		1	1	3	2				7
1937					3				3
1938				2	1				3
1939				1		2			3
1940				3	1				4
1941					3	1			4
1942				3			1		4
1943			1	1	2	1			5
1944			2	1	3	1			7
1945		1		1	1	2			5
1946			1		1	1			3
1947				2	1	2			5
1948				1	3	1	1		6
1949				2	4	1			7
1950				4	3	4			11
1951	1			2	3	2			8
1952				2	2	2			6
1953				2	3	1			6
1954		1		2	3	1		1	8
1955				3	5	1			9
1956			1	1	1	1			4
1957		1			2				3
1958				3	3	1			7
1959		1	2		3	1			7
1960			1	1	2				4
1961			1		5	1	1		8
1962				1	1	1			3
1963			1	1	4	1			7
1964				2	3	1			6
1965				2	1	1			4
1966		1	3	1	1		1		7
1967				1	3	2			6
1968		2		1		1			4
1969				5	2	2	1		10
1970	1		1		1				3
1971				1	4				5
1972		1		1	1				3
1973			1	1	1	1			4
	2	11	18	66	90	42	7	1	237

Table 1. - Summary of North Atlantic Tropical Cyclones, 1973

Storm name	Intensity	Date	Highest sustained Wind (kt)	Lowest Pressure (mb)	U.S. damage	Deaths
1. Alice	Hurricane	July 1-6	80	986		
2. Brenda	Hurricane	August 18-22	70	977		Mexico - 10
3. Christine	Tropical storm	August 25- September 4	62	996		Puerto Rico - 1
4. Delia	Tropical storm	September 1-7	60	986	18.0 million *	U.S. - 5
5. Ellen	Hurricane	September 14-23	120	962		
6. Fran	Hurricane	October 8-13	70	978		
7. Gilda	Tropical storm	October 16-29	50	994		

* $15 million of this amount was crop damage resulting from heavy rains with Delia and a tropical depression which affected the same area five days later.

An undetermined amount of beach erosion was caused mainly by the subtropical storm which developed from Gilda.

Table 2. - Summary of North Atlantic Subtropical Cyclone Statistics, 1973

Storm name	Date	Highest sustained Wind (kt)	Lowest Pressure (mb)
1. Alfa	July 30 - August 1	40	1,005
2. Bravo (Fran)	October 8-9	60	998
3. Un-named (Gilda)	October 24-27	60	980

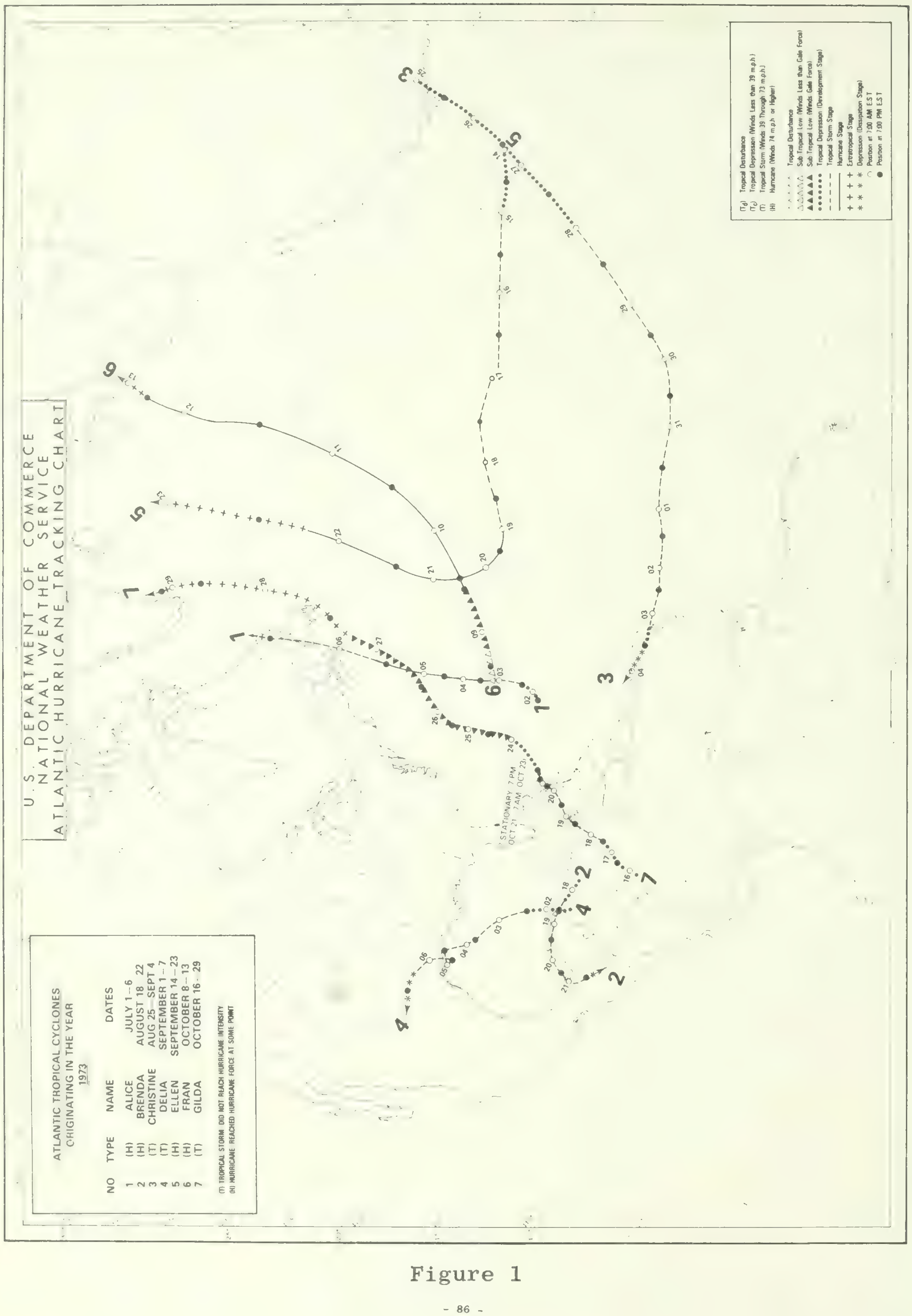

U. S. DEPARTMENT OF COMMERCE
NATIONAL WEATHER SERVICE
ATLANTIC HURRICANE TRACKING CHART
ATLANTIC TROPICAL CYCLONES
ORIGINATING IN THE YEAR
1973
NO TYPE NAME DATES
1 (H) ALICE JULY 1 – 6
2 (H) BRENDA AUGUST 18 22
3 (T) CHRISTINE AUG 25 — SEPT 4
4 (T) DELIA SEPTEMBER 1 – 7
5 (H) ELLEN SEPTEMBER 14 – 23
6 (H) FRAN OCTOBER 8 – 13
7 (T) GILDA OCTOBER 16 - 29
(T) TROPICAL STORM DID NOT REACH HURRICANE INTENSITY
(H) HURRICANE REACHED HURRICANE FORCE AT SOME POINT
(Td) Tropical Disturbance
(Tc) Tropical Depression (Winds Less than 39 m.p.h.)
(T) Tropical Storm (Winds 39 Through 73 m.p.h.)
(H) Hurricane (Winds 74 m.p.h or Higher)
Tropical Disturbance
Sub Tropical Low (Winds Less than Gale Force)
Sub Tropical Low (Winds Gale Force)
Tropical Depression (Development Stage)
Tropical Storm Stage
Hurricane Stage
Extratropical Stage
Depression (Dissipation Stage)
Position at 7:00 AM EST
Position at 7:00 PM EST
STATIONARY 7 PM OCT 21 – 7AM OCT 23
1
2
3
4
5
6
7

Figure 1

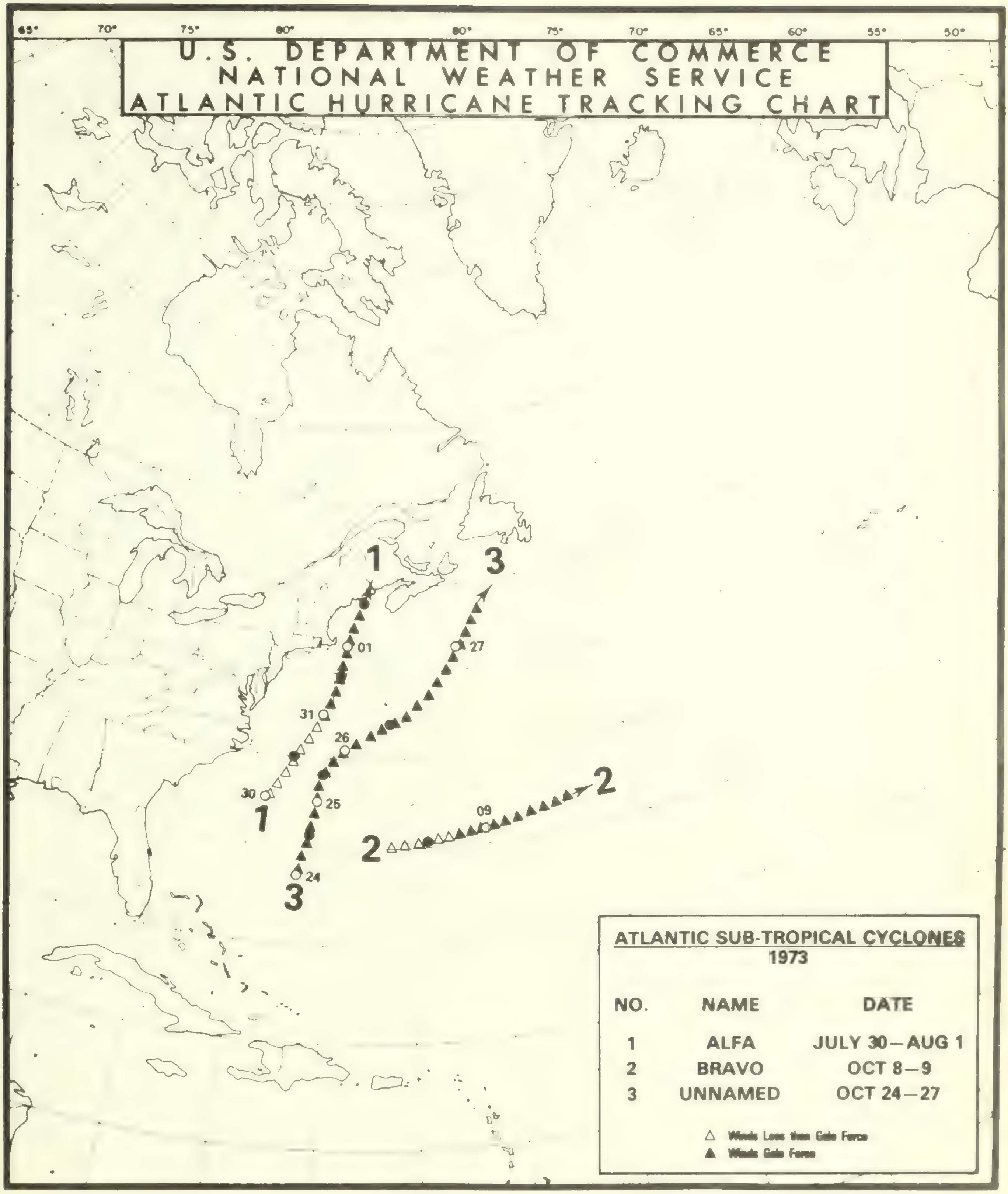

65°
70°
75°
80°
80°
75°
70°
65°
60°
55°
50°
U.S. DEPARTMENT OF COMMERCE
NATIONAL WEATHER SERVICE
ATLANTIC HURRICANE TRACKING CHART
1
01
31
30
1
3
27
26
25
24
3
2
09
2
ATLANTIC SUB-TROPICAL CYCLONES
1973
NO. NAME DATE
1 ALFA JULY 30 — AUG 1
2 BRAVO OCT 8 — 9
3 UNNAMED OCT 24 — 27
△ Winds Less than Gale Force
▲ Winds Gale Force

Figure 2

TROPICAL CYCLONES IN THE EASTERN NORTH PACIFIC, 1973

Eastern and Central Pacific Hurricane Centers
San Francisco, Calif., and Honolulu, Hawaii

Tropical cyclone activity in the eastern North Pacific Ocean began June 1 and continued through October 9. It was one of the least active seasons since information from operational satellites, which completely cover the tropical areas, became available to field stations in 1966. A total of six tropical depressions, five tropical storms, and seven hurricanes required the issuance of 106 bulletins and 195 advisories.

Reconnaissance flights into the storm areas were conducted by the U.S. Air Force 32 times, on 29 flights. Doreen and Emily were investigated July 22 by separate aircraft, and Doreen was investigated twice by the same aircraft July 20. An average of 15 enroute observations were made on each flight.

The primary source of data in observing tropical cyclones during 1973 was from ESSA-8 and NOAA-2 satellites. ESSA-8 visible and NOAA-2 visible and infrared pictures were monitored midmornings and NOAA-2 infrared in the evenings (approximately 1700 and 0500, plus or minus 1 hour and 50 minutes), depending on the location of the storm. In addition, a Mercator projection satellite picture readout of tropical areas was received on facsimile circuits from the National Environmental Satellite Service (NESS) for each day and night pass.

NESS supplied daily estimated positions, intensity, and movement using the Dvorak format. Special bulletins were transmitted via teletypewriter when new systems were first observed or where marked changes in intensity or location were indicated. A total of 70 Satellite Weather Bulletins were received from NESS, in addition to a daily summary of convective activity and Intertropical Convergence Zone (ITCZ) location in the eastern North Pacific Ocean.

The Global Weather Center, Offutt Air Force Base, Omaha, Nebr., supplied daily information on developing, active, and dissipating storms from the Data Acquisition and Processing Program (DAPP) satellite. One message a day was received, beginning in mid-August. The Air Force and NESS interpretations of storm location and intensity from the different series of satellites appeared to agree very well, although no direct correlation was attempted. Locations, when extrapolated for different passage times, agreed well in all but weak systems.

The National Hurricane Center, Coral Gables, Fla., was consulted at times, especially for "first light" information for morning advisories. Their receipt of Advance Technology Series 3 (ATS-3) pictures made information available about an hour earlier than from locally obtained pictures.

While satellite pictures gave good location and intensity estimates, aircraft reconnaissance of storms gave the most accurate data. Storm center location was most often within 10 miles, but varied upwards form within 1 mile, when navigational accuracy was precise and the eye was small and well defined.

The most sophisticated reconnaissance of an eastern North Pacific hurricane occured with Ava, when she was about 300 miles southwest of Acapulco on June 6. NOAA research aircraft entered the storm area with radiometric sensors to measure sea heights from various altitudes, between 500 and 1,000 feet, finding measured winds increasing from 60 to 137 knots over a line of about 4 miles in length. Wave heights of 40 feet were measured by a 13 gHz passive microwave system and by a laser altimeter. (For additional details, see page 296 of the September 1973 issue of the Mariners Weather Log.) Instruments installed in Skylab, which passed directly over the center of the storm at an altitude of 270 miles, made similar measurements. At nearly the same time, U.S. Air Force reconnaissance was being conducted at 10,000 feet, using dropsondes to measure temperature and moisture qualities of the air in the eye of the storm. A 915-mb sea-level presure was measured. This is about 100 millibars lower than the ambient pressures 180 miles from the center of the storm.

Some powerlines and communication lines were damaged as Irah passed over the southern tip of Baja California during the day and night of September 25. No other reports of damage have been received, but newspaper reports alluded to heavy rainfall and local flooding at most points on the West Coast from 90° W to 110° W several times during the season. The strongest wind reported by a surface vessel was 54 knots from the TEXAN in Heather, but few ships reported near any storm.

A summary of eastern North Pacific tropical storms and hurricanes is included in table 3 and storm tracks are shown in figures 1 and 2.

HURRICANE AVA, JUNE 1 TO 12

This was the first tropical cyclone in the North Pacific this year, and she was a beauty. Hurricane Ava was one the most vigorous and sophisticatedly measured storms on record in the eastern North Pacific. She started as a depression on June 1, near 11.4° N, 94.5° W, about 250 miles south of Salina Cruz, Mexico. The depression was nearly stationary in its formative stage, but began moving slowly westward after becoming a tropical storm at 1800 on the 2d. Ava was located by satellite and ship reports. These reports indicated the presence of a cyclonic circulation, 30-kt winds, and a pressure of 1000.6mb about 100 miles from the center. Slow westward movement continued with intensification.

The storm became a hurricane by the afternoon of the 3d, when Air Force reconnaissance from Puerto Rico measured winds of 70 knots, with gusts to 95 knots near the center, at 12.6° N, 96.6° W, about 180 miles south of Port Angeles, Mexico. Winds reached 100 knots on the afternoon of the 5th; on the 6th, 137 knots were measured by NOAA aircraft; and Air Force radiosonde equipment, dropped into the eye, determined a central pressure of 915 millibar (27.02 in), 650 miles southwest of Acapulco. At this time, the westward movement had increased to 17 knots.

Skylab passed near hurricane Ava, and the storm was almost directly under satellite NOAA-2 at its peak intensity. Skylab and NOAA aircraft investigating the storm were both equipped with unique sensing devices which enabled them to measure wave heights of 40 feet by radiometric means, the first hurricane wave height measurement by remote sensors. The NOAA aircraft measurements also indicated how rapidly winds increased toward the eye of the storm. In 1 minute, 50 seconds--4 mile flight distance--winds increased from 60 to 137 knots, and in only 37 seconds --a flight distance of 2 miles--winds increased from 90 to 137 knots. A circular closed-wall eye was observed by the Air Force reconnaissance crew and by the NOAA-2 satellite.

The peak intensity of the hurricane was reached on the 6th, near 11.9° N, 107.5° W, and gradual deterioration continued for the next 6 days. On the 7th, a wind of 120 knots; on the 8th, 100 knots; and on the 9th, 90 knots were measured by reconnaissance. The hurricane weakened to a 60-knot tropical storm near 16° N, 126° W, late on the 9th; to 40 knots on the 10th; and became a depression on the 11th. By the 12th, the remains entered the trades as an easterly wave.

TROPICAL STORM BERNICE, JUNE 21 TO 23

Tropical storm Bernice was first detected by satellite pictures and ship reports on the 18th, 300 miles south of Ixtepec, Mexico, as a disturbance on the intertropical convergence zone. The disturbed area remained nearly stationary and increased in intensity until becoming a tropical depression at 1800 on the 21st, near 13° N, 97° W, about 180 miles southwest of Salina Cruz. Movement was toward the northwest at 10 to 12 knots.

Development to tropical storm intensity continued during the afternoon, and, by 0000 on the 22d, winds to 40 knots were estimated from satellite pictures, and a 35-knot wind was reported by the HENNITES. Movement continued northwest, with the TARONGA reporting 40-knot winds about 60 miles from the center, at 1200 on the 22d, and Acapulco, 90 miles from the center, indicating 30-knot winds. At 1800, the TARONGA reported 50-knot winds about 30 miles northwest of the center, while another vessel reported a west 40-knot wind about 50 miles southwest of Zihuantaneo, Mexico, suggesting the storm was moving onshore.

TROPICAL STORM CLAUDIA, JUNE 25 TO 28

Tropical storm Claudia began as a disturbed area noticed on satellite pictures on the 23d, about 300 miles south of San Salvador, near 8° N, 88° W. The area moved westward at about 10 knots to 9° N, 92° W on the 24th. A closed circulation was indicated in satellite pictures, and reports by the SEUCIA, TRENTON, and the STARSTONE centered a weak depression at 10° N, 95° W, by 1800 on the 25th.

Satellite pictures indicated a more northwesterly course between the 25th and 26th, and the depression intensified to a tropical storm with 50-knot winds, near 13° N, 98° W, at 1800 on the 27th. The storm continued north-northwest, but slowed to about 5 knots with maximum winds of 55 knots, until it went onshore about 30 miles east of Acapulco, late on the 28th.

HURRICANE DOREEN, JULY 17 TO AUGUST 3

Hurricane Doreen began as a disturbed area near 9° N, 101° W, over the warm water off Panama, and was first seen by satellite, at 1600 on July 16. The area was in the intertropical convergence zone and showed some signs of a closed circulation. A nighttime infrared photograph, at 0400 on the 17th, showed the area was moving west at 10 knots and becoming organized. By 1800, satellite pictures placed the center of circulation near 9° N, 105° W, but reports from the KAPAA, HOEGH DYKE, and the AKADEMIC KOROLYOV indicated that the center was some 2° farther north. By this time, a tropical depression had formed, and bulletins were issued.

Development was rapid, with the AKADEMIC KOROLYOV reporting 30-knot winds at 0000 on the 18th, suggesting that a tropical storm had formed near 10.5° N, 107° W, about 120 miles east of Clipperton Island. The AMERICAN CORSAIR reported 38-knot winds and 15-foot seas at 0600, and 0600 and 0900 observations were received from the SHAMALY. An Air Force reconnaissance aircraft measured 60-knot winds at 2230 on the 18th, and at the rate of development taking place, the storm was indicated as a hurricane at 0000 on the 19th.

The hurricane was moving west-northwestward at about 12 knots. The AMERICAN CHALLENGER passed to the south during the night of the 18th. The HOEGH DYKE, heading west, passed in front of the storm between 1800 and 2100 on the 19th, reporting 40-knot winds. The SPEY BRIDGE also reported 40-knot winds. Both vessels were about 150 miles from the center. Reconnaissance aircraft at that time measured winds of 90 knots, with a central pressure of 973 mb.

Doreen continued on her course, well out of range of surface vessels. Aircraft reported maximum intensity winds of 120 knots at 1920 on the 20th; 80 knots at 1906 on the 21st; 65 knots at 1825 on the 22d; and 60 knots at 1800 on the 23d, near 15° N, 133° W.

Reconnaissance priority after the 23d was directed toward hurricane Emily, nearer to the more heavily traveled shipping lanes of Manzanillo.

Wind speeds in the storm were in the 55- to 70-knot range after 1800 on the 23d. Doreen passed 16.3° N, 140° W, on a westerly course, shortly before 1800 on the 25th.

A frontal system between two portions of the North Pacific high-pressure area weakened as Doreen approached 145° W, and the two cells merged with the main center about 1,000 miles northwest of Honolulu. The main High center moved eastward, forcing Doreen southward on the 27th, to near 12.5° N, 150° W at 1800 on the 28th, after which she set a west-northwesterly course, at 8 to 10 knots.

On the afternoon of the 27th, the 144-foot Greek ship CORNELIA sailed into the storm's path and sent out an emergency call for help when it lost its rudder, while being lashed by 52-knot winds and 35-foot waves. A sea-level pressure of 971 millibar was reported. The ship managed to clear the storm and continued its way to Panama, after deciding not to return to Honolulu with Coast Guard assistance.

Before the dip to more southern latitudes, Doreen was classed as a tropical storm, but with regeneration developed hurricane winds again on the 28th, which continued until 0600 on August 1. The hurricane passed 300 miles south-southwest of South Point, Hawaii, on the afternoon of the 30th. On the afternoon of the 29th, 9-foot ocean swells and 3½-foot surf generated by Doreen were observed at Kapoho, the easternmost point of the island of Hawaii.

West of 165° W, deterioration of the storm was rapid. Winds decreased to 60 knots near 18° N, 166° W, at 1200 on August 1; and to 35 knots at 20° N, 171° W, at 1200 on the 2d. At 0000 on the 3d, the storm was a depression with 30-knot winds. Advisories were discontinued, and she dissipated in an upper air trough as she crossed the Dateline.

Doreen was an interesting storm. The sharp recurvature on the 27th and 28th, and the subsequent redevelopment to hurricane intensity, were unusual. She had a long life--18 days, covering a distance of 4,200 miles. She was well behaved--except for the redevelopment period on the 27th, she followed the forecast track. Throughout her life cycle, Doreen followed a strikingly similar path to that of hurricane Celeste in August 1972.

HURRICANE EMILY, JULY 21 TO 28

Squally weather and 40-knot winds in the Gulf of Tehuantepec, beginning July 18, were reported by the ROSEVILLE. The RUTH LYKES reported 30-knot winds. The squalls gradually organized into a cyclonic circulation and formed a tropical depression near 13° N, 96° W, at 0600 on July 21.

The squally area was nearly stationary; but, as it organized it began moving west-northwestward at 12 knots, becoming tropical storm Emily near 14° N, 99° W, at 1800 on the 21st. Winds increased to hurricane force by 0600 on the 22d. Winds of 40 knots were reported 120 miles from the center by the EXPORT COMMERCE, the TAIAN, and the VAR, and 45-knot by the KEYTANKER, at 0600 on the 22d. At 0300, the EXPORT COMMERCE had encountered 45-knot gales.

Emily ran west-northwestward, nearly parallel to the coast and 180 miles offshore, until south of Manzanillo, where she turned to a more westerly course, leaving the heavily traveled shipping lanes. She developed 110-knot winds at 1755 on the 22d, near 16° N, 104° W, and 90-knot winds at 17° N, 108° W, on the 23d, as measured by Air Force reconnaissance planes. Gale winds were reported off the coast of Mexico, more than 300 miles to the east, between the 22d and 24th. Satellite pictures indicated that Emily maintained hurricane intensity through 1200 on the 25th, then near 17.5° N, 114.5° W.

Gradual weakening then took place, with the tropical storm curving toward the northwest, until winds reached 35 knots. This strength was maintained for about 36 hours, until the center reached 22° N, 123° W, at 0000 on the 28th. Thereafter, remains of the storm were indicated in satellite pictures, and the cloudiness moved northwestward to 25° N, 125° W by August 6, before being absorbed into the northeast trades.

HURRICANE FLORENCE, JULY 25 TO 30

A disturbed area, 150 miles off Guatemala on the 25th, was moving slowly west-northwestward, curving a little toward the coast. The area was slow to develop; but at 0600 on the 26th the LABRADOR CLIPPER and the UNION EAST reported 30- and 35-knot winds, respectively, and indicated a cyclonic circulation about 75 miles southeast of Acapulco.

By 0000 on the 27th, ship reports indicated that the greatest activity had moved to about 100 miles south of Acapulco, with a circulation strong enough to indicate a tropical storm. A westward movement continued, as the storm slowly increased, becoming hurricane Florence.

The hurricane continued west-northwestward until 2150 on the 28th, when winds reached an estimated 80 knots, according to satellite pictures. A pressure of 990 millibar was measured by reconnaissance aircraft. As the storm moved over cooler waters and into more stable air from the north, dissipation was completed in less than 24 hours, near 20.5° N, 115.5° W, by 1800 on the 30th.

TROPICAL STORM GLENDA, JULY 30 TO AUGUST 5

Glenda developed slowly, about 300 miles off the coast of Guatemala. As a tropical disturbance, she moved west at about 12 knots, until south of Acapulco, when a closed circulation was inferred from nighttime satellite pictures, at about 0400, July 30.

At 1800 on the 30th, the MALLORY LYKES reported squalls and southerly 30-knot winds about 75 miles east of the center, and the NISSAN MARU, a north wind of 10 knots, 180 miles west of the center. An advisory was issued for a tropical storm, with winds to 40 knots, heading west-northwestward at 12 knots.

This direction of movement and speed continued through the 4th. Winds increased to 50 knots during the nights of the 31st, then appeared to decrease to the 30-knot winds of of a tropical depression, at 1800 on the 1st. The available data indicated the storm was maintaining 30-knot winds through 1200 on the 4th, near 18° N, 123° W. However, the TOYOTA MARU reported 40-knot winds, with a 989.3-millibar pressure, at 1800, indicating that a tropical storm was still in progress. This intensity was continued until 1800 on the 5th, when satellite pictures showed cool air entering the dissipating system. Later data and analysis verified that Glenda remained at or above tropical storm strength between the 1st and 4th.

TROPICAL STORM HEATHER, AUGUST 31 TO SEPTEMBER 1

A tropical depression developed into tropical storm Heather at 1800 on the 31st, after a period of development starting on the 29th.

The convergence zone was active along 8° N, 82° W to 10° N, 92° W. At 0000 on the 30th, a large cloud mass, on satellite pictures near 13° N, 94° W, indicated that a disturbance had formed. The AMERICAN LIBERTY and the UNDEN reported pressures of about 1007 millibar, and a cyclonic circulation near 13° N, 93° W was indicated.

No further reports were received until 1800 on the 30th, when the disturbance became a depression with a central pressure of 1004 millibar, centered near 13.4° N, 94° W. The AMERICAN AQUARIUS, CHRYSALEMA, and DAISHIN MARU were in the peripheral area.

The depression developed into a tropical storm after moving northwest to 15° N, 95° W, at 1800 on the 31st. At 0000 that day, the BOSTON had reported 40-knot southwesterly winds at 13° N, 93° W. The TEXAN reported 30-knot winds about 30 miles southeast of the center and, at 2100, found 54-knot winds, with 26-foot swells, at 15.4° N, 95.6° W.

At 1800 September 1, Heather was relocated near 15.5° N, 98° W, farther west than previous movement would have indicated. Reports from the CLARK-MAXWELL and the PEMEX C indicated a weak circulation and low-pressure center, but these were later analyzed to be associated with a different short-lived small-scale system. Heather died during the morning of September 1, near 15.5° N, 95° W.

HURRICANE IRAH, SEPTEMBER 21 TO 26

Hurricane Irah began as a tropical disturbance near 13° N, 97° W, at 1800 on the 20th. Showers and squalls were reported the previous day, and the NANCY LYKES estimated 35-knot winds several degrees north of the center of a large mass of clouds. Westward movement of a about 10 knots was indicated by ship reports and satellite pictures, as the disturbance became more organized.

Tropical depression stage was reached by 1800 on the 21st, near 13° N. 101° W, with the center turning northwestward. Tropical storm intensity was attained by 0000 on the 23d, at 15° N, 104.5° W. Movement continued northwestward at 12 to 15 knots, but slowed to about 8 knots as it intensified to hurricane strength at 1800 on the 23d.

A more northerly course was taken from the 24th to the 26th, with winds increasing to 95 knots at 0600 on the 25th, after which weakening began. The hurricane moved across the Baja California Peninsula during the afternoon of the 25th, with 65- to 70-knot winds and heavy rain causing some power and communication line damage at La Paz. Further weakening took place during the night of the 25th, as the hurricane became a tropical storm, by 0600 on the 26th, with estimated 50-knot winds. By the time the storm moved onshore, about 30 miles northwest of Los Mochis, at 1600 on the 26th, it had weakened to 35-knot winds, with only light rainfall.

TROPICAL STORM JENNIFER, SEPTEMBER 23 TO 27

Tropical Storm Jennifer began developing as a tropical depression near 13° N, 116° W, at 1200 September 23. The depression drifted eastward, south of hurricane Irah, and slowly intensified until it became a tropical storm with 35-knot winds, near 13°N, 113° W, at 1800 on the 24th. No surface vessels were near the system, so its location and intensenity were estimated from satellite pictures. Afternoon pictures indicated weakening and the storm intensity was lowered to depression stage, moving northwestward at 10 knots.

At 1200 on the 25th, the SANDVAAG reported a 1007-millibar pressure and a 30-knot wind, about 40 miles from the center. This report was not available at map analysis time and suggested the tropical storm warnings should have been continued. At 1800, the TOYOTA MARU No. 18 and the non-AMVER-listed vessel 6MJJ located the center near 16.5° N, 109° W, moving northeastward at 10 knots. Reports at 0000 on the 26th from the HOEGH TRADER and the STATE OF MADYAPRADESH indicated the storm intensity had lowered to a tropical depression.

Local heavy squalls continued moving northeastward at 10 to 12 knots, brushing the Tres Marias Islands and moving onshore just southwest of Mazatlan, as indicated by reports from the BOSTON MARU, MARIAELISA, and the USCGC NORTHWIND, at 0600 on the 27th.

HURRICANE KATHERINE, SEPTEMBER 29 TO OCTOBER 8

Squally areas of showers and thunderstorms developed about 400 miles south of Zihuantenejo on September 27, drifted westward and increased in activity on the 28th, and showed cyclonic circulation just north of Clipperton Island by the morning of the 29th. Satellite pictures at 1800 suggested intensification had continued, with development into tropical storm Katherine. The MOUNT PARK, southeast bound, north of the center, experienced 10- to 20-knot veering winds.

The storm moved northwestward at 12 to 15 knots, as it was followed in successive satellite pictures, due to a lack of ship reports near the storm. The SHEAF TYNE's reports on September 30 and October 1 indicated the presence of the storm, while 200 to 300 miles south of the center.

Infrared pictures at 0435 October 1 showed a well-developed hurricane near 14° N, 116.5° W. The hurricane reached a maximum intensity of 85 knots near 16° N, 118° W, at 0000 on the 2d, and continued that strength to near 17° N, 121° W, at 0000 on the 3d. Weakening began as the storm continued moving westward at 15 knots, becoming a tropical storm near 17° N, 127° W, at 0600 on the 4th.

The storm then moved west-southwestward at 10 to 12 knots, to 14°N, 140° W, by 1800 on the 6th, then continuing to move westward at 12 knots with winds of 40 to 50 knots through the 7th, weakening to 35 knots during the night of the 7th, and to a depression with 30-knot winds on the 8th. It dissipated near 14° N, 148° W, soon after 1800 on the 8th.

HURRICANE LILLIAN, OCTOBER 4 TO 9

A large area of thunderstorms was followed on satellite pictures from about 300 miles south of the Gulf of Tehuantepec, on October 2, to 400 miles south of Manzanillo, at 0000 on the 5th. Reporting ships were generally 200 to 300 miles from the center, at the closest, but the KAPAA and the SANTA MARIANA helped locate the disturbance, which was to become hurricane Lillian.

Gradual intensification took place, and satellite pictures, at 0330 on the 5th, indicated a tropical storm had developed near 11°N, 103° W. The storm was moving northwestward at 10 knots, a direction and speed that was maintained through 1800 on the 7th. At 0000 on the 5th, the storm passed about 120 miles south of the UNION VENUS, which reported 30-knot winds.

Few ships reported near the storm, but, at 1800 on the 7th the characteristic cloud formation of a hurricane was visible in pictures. A more westerly course was followed after intensification occurred, but, as the hurricane moved over cooler waters southwest of the Lower California peninsula, dissipation was rapid. At 0000 on the 9th, it was a hurricane with 70-knot winds; by 0600 a tropical storm of 50 knots; by 1200, 45 knots; and, at 1800, only a swirl of clouds remained.

Tracks of Eastern North Pacific Tropical Storms and Hurricanes.

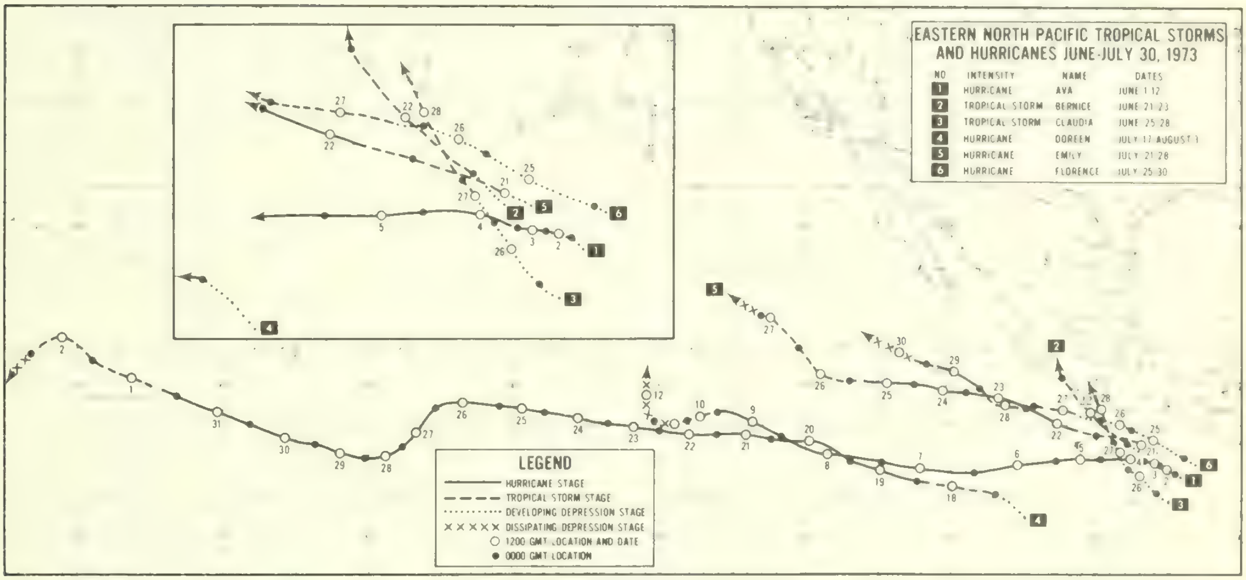

EASTERN NORTH PACIFIC TROPICAL STORMS AND HURRICANES JUNE-JULY 30, 1973
NO INTENSITY NAME DATES
1 HURRICANE AVA JUNE 1-12
2 TROPICAL STORM BERNICE JUNE 21-23
3 TROPICAL STORM CLAUDIA JUNE 25-28
4 HURRICANE DOREEN JULY 17-AUGUST 1
5 HURRICANE EMILY JULY 21-28
6 HURRICANE FLORENCE JULY 25-30
LEGEND
HURRICANE STAGE
TROPICAL STORM STAGE
DEVELOPING DEPRESSION STAGE
XXXXX DISSIPATING DEPRESSION STAGE
○ 1200 GMT LOCATION AND DATE
● 0000 GMT LOCATION

Figure 1

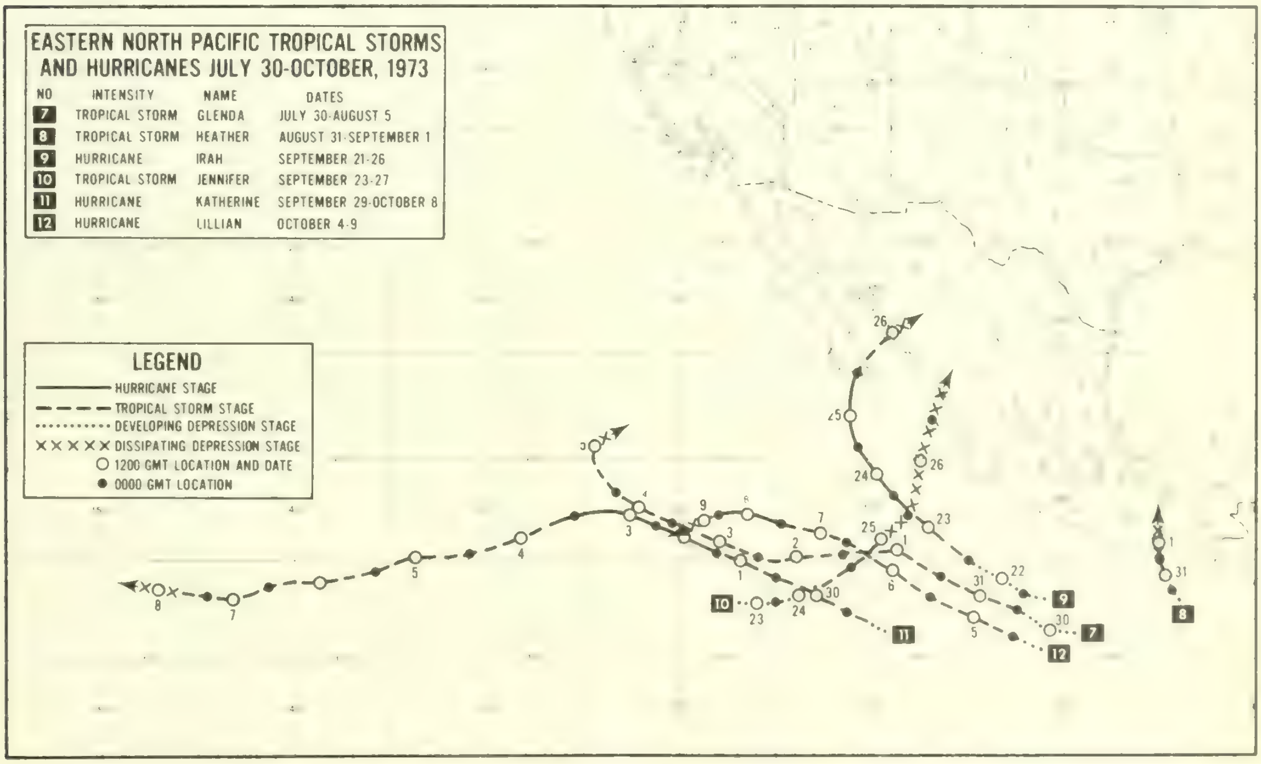

EASTERN NORTH PACIFIC TROPICAL STORMS AND HURRICANES JULY 30-OCTOBER, 1973
NO INTENSITY NAME DATES
7 TROPICAL STORM GLENDA JULY 30-AUGUST 5
8 TROPICAL STORM HEATHER AUGUST 31-SEPTEMBER 1
9 HURRICANE IRAH SEPTEMBER 21-26
10 TROPICAL STORM JENNIFER SEPTEMBER 23-27
11 HURRICANE KATHERINE SEPTEMBER 29-OCTOBER 8
12 HURRICANE LILLIAN OCTOBER 4-9
LEGEND
HURRICANE STAGE
TROPICAL STORM STAGE
DEVELOPING DEPRESSION STAGE
XXXXX DISSIPATING DEPRESSION STAGE
○ 1200 GMT LOCATION AND DATE
● 0000 GMT LOCATION

Figure 2

Monthly distribution of tropical storms and hurricanes, 1973

	May	June	July	Aug.	Sept.	Oct.	Nov.	Total
Tropical storms*	0	2	1	1	1	0	0	5
Hurricanes*	0	1	3	0	2	1	0	7
Total	0	3	4	1	3	1	0	12

*Tropical cyclones are counted for the month in which they formed.

Frequency of tropical storms and hurricanes combined by months and years

Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Total
1966	0	1	0	4	6	2	0	13
1967	0	3	4	4	3	3	0	17
1968	0	1	4	8	3	3	0	19
1969	0	0	3	2	4	1	0	10
1970	1	3	6	4	1	2	1	18
1971	1	1	7	4	2	2	1	18
1972	1	0	1	6	2	1	1	12
1973	0	3	4	1	3	1	0	12
Total	3	12	29	31	24	15	3	119
Average	.4	1.5	3.6	3.9	3.0	1.9	.4	14.9

Frequency of tropical storms reaching hurricane intensity by months and years

Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Total
1966	0	1	0	4	2	0	0	7
1967	0	1	0	2	1	2	0	6
1968	0	0	0	3	2	1	0	6
1969	0	0	1	1	1	1	0	4
1970	1	0	1	1	0	1	0	4
1971	1	1	5	2	2	1	0	12
1972	1	0	0	6	1	0	0	8
1973	0	1	3	0	2	1	0	7
Total	3	4	10	19	11	7	0	54
Average	.4	.5	1.3	2.4	1.4	.9	0	6.8

Summary of eastern North Pacific tropical cyclones, 1973

Name and intensity	Lifespan	Origin (°N, °W)	Dissipation (°N, °W)	Highest reported wind speed (kt)	Estimated satellite maximum wind speed (kt)	Lowest reported pressure	Coasts affected	Remarks
Hurricane Ava	June 1-12	11.4, 94.5	17.0, 131.0	137 11.9°N, 107.5°W USAF recon	140 6/7/73 Satellite	915 mb 11.9°N, 107.5°W USAF recon	None	First hurricane measured sea conditions by radiometric means.
Tropical storm Bernice	June 21-22	15.0, 97.0	18.0, 102.2	60 16.7°N, 101.3°W USAF recon	60 6/23/73 Satellite	990 mb 16.7°N, 101.3°W USAF recon	Coastal area, Zihuantenejo, Mexico	No damage reported.
Tropical storm Claudia	June 25-28	10.0, 95.0	17.0, 100.1	40 16.0°N, 99.6°W USAF recon	55 6/28/73 Satellite	999 mb 16.0°N, 99.6°W USAF recon	Coastal area near Acapulco, Mexico.	No damage reported.
Hurricane Doreen	July 17-August 3	10.3, 105.4	19.4, 173.[illegible]	120 14.1°N, 121.4°W USAF recon	120 7/20/73 Satellite	972 mb 14.2°N, 121.9°W USAF recon	None	CORNELIA lost its rudder on 27th, in 72-kt winds and 35-ft waves.
Hurricane Emily	July 21-28	12.0, 96.0	22.0, 123.0	110 15.8°N, 103.8°W USAF recon	110 7/23/73 Satellite	972 mb 17.1°N, 108.2°W USAF recon	None	None
Hurricane Florence	July 25-30	12.8, 94.0	20.5, 115.5	70 17.5°N, 107.6°W USAF recon	80 7/28/73 Satellite	990 mb 17.5°N, 107.6°W USAF recon	Passed 90 mi south Clarion Is. 7/29	None
Tropical storm Glenda	July [illegible]-August [illegible]	11.[illegible], 100.0	21.0, 124.0	40 17.5°N, 122.4°W TOYOTA MARU	50 7/31/73 Satellite	989 mb 17.3°N, 107.6°W TOYOTA MARU	None	None
Tropical storm Heather	August 31-September 1	14.0, 94.5	15.[illegible], 95.5	[illegible] 15.4°N, 95.6°W TEXAN	45 8/31/73 Satellite	100[illegible] mb 14.7°N, 94.8°W JIH	Coastal area, Gulf of Tehuantepec	None
Hurricane Irah	September 21-26	11.0, 101.0	2[illegible].8, 10[illegible].0	70 22.4°N, 109.9°W USAF recon	65 9/2[illegible]/73 Satellite	95[illegible] mb 19.[illegible]°N, 10[illegible].1°W USAF recon	Lower California Peninsula near La Paz	[illegible] and shoreline damage. MARIKA M. steering damaged.
Tropical storm Jennifer	September 2[illegible]-27	15.5, 110.0	23.1, 106.[illegible]	40 1[illegible].[illegible]°N, 10[illegible].[illegible]°W SANDVAAG	[illegible] 9/24/73 Satellite	1007 mb 1[illegible].[illegible]°N, 10[illegible].[illegible]°W SANDVAAG	Coastal area near Mazatlan	None
Hurricane Katherine	September 29-October 8	11.5, 104.8	13.[illegible], 148.0	40 11.0°N, 114.8°W USAF recon	85 9/30/73 Satellite	97[illegible] mb 11.0°N, 11[illegible].[illegible]°W USAF recon	None	None
Hurricane Lillian	October 1-[illegible]	11.0, 10[illegible].0	1[illegible].0, 11[illegible].0	80 1[illegible].4°N, 11[illegible].[illegible]°W USAF recon	70 10/[illegible]/73 Satellite	[illegible] mb 17.4°N, 11[illegible].[illegible]°W USAF recon	None	None

TYPHOONS OF THE WESTERN NORTH PACIFIC, 1973

Capt. Charles R. Holliday, USAF
Fleet Weather Central/Joint Typhoon Warning Center
Guam, Mariana Islands

This season was marked by the small number of tropical cyclones that developed over western North Pacific waters and the late start in the year. During 1973, 21 tropical storms formed (5 below average), with only 12 reaching typhoon strength. This equals 1970 and 1950 for the lightest typhoon activity in the modern 29-year period of record. Only 5 years have had a lower total number of storms. Typhoon days numbered 42, which is a record low, since establishment of the Joint Typhoon Warning Center (JTWC) in 1959. A typhoon day is defined as a day on which a typhoon occurred. Two typhoons on one day are counted as two typhoon days. Tables contain the statistics on the storms for past years.

The most striking period of inactivity was the lack of development during the first 6 months of the year, a period in which, on the average, five tropical storms are charted. Since World War II, only in 1952 has this region experienced a similar late start---through May---of the tropical storm season. Also notable for periods of inactivity were the months of August and September, which produced only 11 typhoon days, as compared to the average of 37.

The monsoon trough did not become well established across the Philippine Sea until October, when three successive typhoons developed in the Yap-Guam area. The lack of a persistent trough during much of the season, especially its eastward extension to the central Caroline and Mariana areas, gave rise to an abnormally low formation frequency east of 135°E.

The percentage of typhoons that reached the severe category was low, as only 3 of the year's 12 (Billie, Nora, and Patsy) achieved the supertyphoon threshold (130 kt. or greater). This compares with the mean of six, based on the past 15 years (1959-73). Nora was the most intense, with sustained winds estimated at 160 kt., and the longest lived of the year, maintaining typhoon strength for 6 days. There were several occurrences of multiple tropical storms (Billie-Clara, Billie-Dot-Ellen, Georgia-Hope-Iris, Nora-Opel-Patsy, Patsy-Ruth).

Several tropical cyclones dealt destruction to the Far East during 1973. The Republic of the Philippines once again bore the brunt of casualties. Typhoons Nora, Ruth, and tropical storm Vera brought a combined death toll of approximately 155 to the island republic. Interestingly, the main Japanese islands did not experience a coastal crossing of a typhoon-strength storm during 1973--a first, according to the records available since 1945.

The statistics for 1973 storms are contained in table 3. The storm tracks and maximum winds are based on post-storm analysis. The dates given include the period when the storm was first identifiable, no matter what stage, until it dissipated or became extratropical. Maxium winds are over-water estimates of sustained wind speeds for a 1-minute averaging period.

The individual typhoons during 1973 are described in the following narratives. Specific times and tables and figures are GMT, but generalized times, such as afternoon of, may be local time.

ANITA

After 6 quiet months, the tropical North Pacific gave birth to its first typhoon of the year. Anita became an organized depression about 350 miles east of Saigon in the South China Sea on July 5th. Reaching tropical storm force the following day, Anita began to drift north-northwestward in response to a weakness in the mid-tropospheric subtropical ridge across southern China.

The storm's circulation at this time was marked by stronger winds in its southern semicircle than elsewhere, due to an increased southwest monsoon flow. Several ships, including the Japanese tankers TOYAMA MARU, RANGOON MARU, and the USNS WASHOE COUNTY, reported winds of 30 kt., 35 kt., and 50 kt., respectively, at 1200 GMT on the 6th--all located within 250 miles of Anita's center in the southwestern quadrant.

By 0845 GMT on the 7th, Anita's central pressure had fallen to 983 mb., and winds around her center had reached typhoon force. Anita began to shift to a more westerly course within 6 hours as an extension of a subtropical ridge from a 500-mb. high in the East China Sea began to build over southern China.

The typhoon, now targeted in on North Vietnam, traversed the Gulf of Tonkin with little intensity change, at a forward speed of 8 to 12 kt. for slightly more than a day. The eye finally arrived onshore near Vinh at 1200 GMT on the 8th. Moving inland over the highlands region, Anita weakened rapidly to a low-pressure area and dissipated over Laos by the 9th.

During Anita's trek across the Gulf of Tonkin, two ships reported eye passage. These were the USS OGDEN and USS TRIPOLI, approximately 60 miles east of Dong Hoi, North Vietnam. The USS OGDEN experienced winds greater than 60 kt. and recorded a barometer reading of 981 mb. at 0000 GMT on the 8th. The barograph aboard the USS TRIPOLI dipped to 979 mb. 1 hour later.

BILLIE

Billie, the season's first supertyphoon, became a tropical depression in the western Philippine Sea some 250 miles east of Luzon on July 12th. Her early history can be traced to the Yap-Palau area on the 10th, as a weak circulation in the monsoon trough.

Billie initially tracked westward, gradually shifting to the northwest in response to a long wave, midtropospheric trough over eastern China. Reaching tropical storm force late on the 13th, Billie assumed a northerly course at a speed of 7 kt.

The long wave trough remained stationary, influencing Billie to maintain a meriodonal-track at about 8 kt. Her center never deviated more than 30 miles from either side of 125.5°E for 4 days, covering a distance of 720 miles. This steadiness in direction for such an extended period of time sets Billie apart from any other northward-moving typhoon during the period 1945-72.

Rapid deepening occurred once typhoon-strength winds were attained early on the 14th, as Billie's central pressure fell 50 mb. in 24 hours. At 0330 GMT on the 15th, aircraft reconnaissance indicated that the central pressure had dropped to 916 mb. within a tightly organized eye 8 miles in diameter.

Billie's central pressure rose to 954 mb. during the next 18 hours, as she approached the Ryukyus. Commencing an unusual second deepening as she crossed the island chain, Billie's central pressure dropped to 917 mb. in the East China Sea at 1154 GMT on the 16th.

Billie passed just east of Miyako Jima, where maximum sustained winds of 65 kt. (10 minute average) with gusts to 104 kt. were recorded at 0700 GMT on the 16th. The lowest pressure reading at the Japanese Meteorological Agency Station was 947.5 mb. at 0650 GMT.

The island of Okinawa experienced gale-force winds as Billie transited northward through the East China Sea. Naha registered maximum sustained winds of 35 kt., with gusts to 58 kt., at 1700 GMT on the 16th, while White Beach Naval Port Facility recorded 45 kt. sustained with gusts to 55 kt. at 1900 GMT. Based on land radar, Billie's eye passed 105 miles west of Okinawa at 1800 GMT.

On the 18th, Billie shifted to a northwest course 120 miles south-southwest of Cheju-do Island. Satellite imagery indicated drier air off the Asian Mainland was entering Billie's circulation at this time. She weakened significantly during the 18th, dropping to tropical storm status late that day, while tracking into the Yellow Sea.

Approaching the Gulf of Chihli on the 19th, Billie acquired extratropical characteristics and accelerated to a forward speed greater than 20 kt. Billie finally moved inland near Chin-Chow, China, and dissipated on the 20th.

DOT

While Billie gained strength as a tropical storm in the west central Philippine Sea, and tropical storm Clara was in the process of recurvature 700 miles north-northwest of Wake Island, a third circulation appeared in the South China Sea. This circulation intensified to tropical storm force late on July 14th, acquiring the name of Dot.

During the first 2 days of her existence, Dot drifted northward and meandered somewhat, about 300 miles south of Hong Kong, as her movement appeared to be retarded due to a slight Fujiwara interaction with typhoon Billie to the east.

The observation of the British ship HYRIA, located 60 miles southeast of Dot's center, recorded 55-kt. winds and pressure of 989.3 mb. at 0600 GMT on the 15th, and was indicative of her soon reaching typhoon strength some 12 hours later. Dot then began to increased in forward speed to a rate of 9 kt. and attained a peak intensity of 85-kt. winds, 80 miles south of Hong Kong, passing just east of the colony at 2300 GMT, moving ashore near Mirs Bay.

The Royal Observatory, 12 miles west of the center, recorded maximum sustained winds of 32 kt. (10 minute average) and gusts to 76 kt. Other meteorological extremes within the colony showed a minimum pressure of 976.9 mb. at Cape Collinson and a maximum sustained wind of 57 kt. (10 minute average) with peak gusts of 86 kt. at Wanglan Island. A total of 8.4 inches of rain fell at the Royal Observatory during the 16th and 17th, local time.

Damage reports from Hong Kong indicated many low-lying areas in the New Territories were flooded. Landslides killed one person. Two freighters were beached and six others dragged their anchors.

Dot weakened to a low-pressure area after landfall on the South China coast and entered the East China Sea as a tropical depression near Foochow early on the 18th. Following the wake of Billie, the depression tracked westward, then abruptly shifted northward, dissipating along the western coast of Korea on the 20th.

ELLEN

Initially spotted by satellite, the existince of a circulation some 400 miles south-southwest of Iwo Jima was confirmed by reports from the MEISHUSAN MARU on July 16th. The circulation destined to be Ellen had developed in a trailing surface trough southeast of typhoon Billie. Ellen quickly generated to tropical storm force by the following day. Aircraft reconnaissance at 2210 GMT on the 17th found that a 10-mile circular eye had formed. A mininmum pressure of 978 mb. and 70-kt. winds were observed at 700-mb. flight level near the center, indicating Ellen had reached typhoon strength.

Drifting slowly at first, the typhoon began to increase its forward rate of speed by the end of the 18th. This acceleration was in response to a zone of confluence created by mid-tropospheric troughing in the East China Sea by weakening typhoon Billie and a building high-pressure cell east of Ellen. Ellen tracked northward under this steering flow through the 20th, while achieving her peak intensity at 0420 GMT on the 19th, when reconnaissance aircraft observed a central pressure of 941 mb. and maximum winds of 105 kt.

Ellen weakened significantly during the next 24 hours and dropped to tropical storm status some 180 miles south-southwest of Hachijo Jima, as she moved beneath upper tropospheric northerly flow of 35 to 40 kt., creating a hostile environment for the storm to survive. Ellen deteriorated to depression status early on the 23d, after commencing a meandering course which culminated in a loop over Kyushu and the southwestern Shikoku Islands during the next 3 days, as steering currents remained weak for guidance of the low-level circulation. Reports indicated 3.4 to 10.5 inches of rain were recorded in the mountainous terrain of Kyushu, aiding in relieving the drought-stricken Kumamoto Prefecture. By the 27th, as the depression drifted eastward 90 miles south of the Kii Peninsula, satellite imagery indicated that Ellen was rejuvenating. Several Japanese vessels, including the weather ship OJIKA, reported winds of 30 to 35 kt. near Ellen's center, at 0000 GMT on the 28th. The intensification was short-lived, however, as Ellen recurved and weakened prior to landfall on the 29th. The circulation finally dissipated near Nagoya, Japan, later that day, with heavy rains up to 4 inches recorded in the Ise Bay area.

GEORGIA

The first signs of a disturbance in the Luzon Straits were indicated in satellite and ship report data on August 7th. The developing depression entered the South China Sea on a west-southwesterly heading, becoming tropical storm Georgia about 50 miles south of Pratas Island on the 9th. Georgia progressed at a moderate forward speed of 6 to 9 kt. as she was guided along by ridging extending from a mid-tropospheric high centered in the Yellow Sea.

Developing to a minimal typhoon on the 10th, her forward progress slowed some 90 miles east of Hai-nan Island, as the ridge began to recede over eastern China and the high center moved into the Sea of Japan. Georgia performed an abrupt change in track on the 11th, in response to this weakness created in the subtropical ridge over southern China.

Indication that winds had dropped to tropical storm strength was evidenced in satellite data early on the 12th, some 6 hours before Georgia moved ashore on the southern China coast, east of the Luichow Peninsula. The system weakened to a low-pressure area quickly thereafter, as it moved inland.

Georgia was only the fifth tropical storm to reach typhoon intensity in the South China Sea during August since 1945. The most recent was Cora in 1972.

IRIS

August's second typhoon developed from a depression in the Philippine Sea, and was first noted as a circulation 400 miles north of Yap on the 8th. After tracking northward for several days and gaining tropical storm status, Iris slowed and preformed an erratic anticyclonic loop some 300 miles southeast of Okinawa during the 11th. The following day, winds of typhoon force were occurring around a broad center, approximately 50 miles in diameter, as Iris began to advance northward again.

By the 14th, the typhoon shifted to a northwesterly heading around the periphery of a mid-tropospheric high, east of northern Honshu, and started to increase its forward rate of movement from 7 to 12 kt. Passage of Minami Daito Jima occurred about 0700 GMT on the 14th, as the Japanese meteorological station measured a minimum pressure of 974.7 mb. Peak gusts of 63 kt. were registered from the southwest some 11½ hours (1830 GMT) after passage of the surface center.

Iris' circulation was quite extensive during her trek over the Philippine Sea, covering an area over 700 miles in diameter. The diameter of the typhoon's eye was also enormous, as satellite estimates of its ragged appearance ranged from 50 miles on the 11th to 100 miles on the 13th and 14th.

Iris crossed the northern Ryukyu Islands over the southern tip of Amami-O-Shima. The barograph at the Japanese meteorological station at Naze dipped to a minimum reading of 978 mb., and a wind shift was experienced at 0030 GMT on the 15th. The center was so broad that the barograph trace showed less than 1 mb. change for over 10½ hours. The peak gust of 55 kt. at 0950 GMT did not occur until over 9 hours after the wind shift. A rainfall total of 10.3 inches was recorded during the 3-day period (14th-16th) that the island was affected by Iris. Two fishing vessels were reported lost in the vicinity of the island during her passage. Entering the East China Sea, satellite pictures revealed her large eye to be filling with clouds and a general weakening appearance was noted during the 15th. As Iris' track began to bend towards the north, around the mid-tropospheric high centered east of Honshu, she dropped below typhoon strength during the 16th.

Commencing gradual acceleration at a speed of 20 kt. with the approach of a short-wave trough in the westerlies, Iris' center moved ashore on the western Korean coast near Kaesong, accompanied by winds of minimal tropical storm force, shortly after 0600 GMT on the 17th. Continuing to cross northern Korea, Iris emerged from the eastern coast near Wonsan some 6 hours later. Iris began to transform into an extratropical system as she drew a front moving off Manchuria into her circulation on the 18th. Subsequently, she accelerated to the northeast across the Sea of Japan, crossing Hokkaido late that day.

Meteorological extremes on the western coast of Korea were reported at Kunsun Air Base, which recorded maximum sustained winds of 46 kt., with a peak gust of 64 kt. (0646 GMT) as the storm center passed 25 miles to the west on the 17th.

Newspaper reports from Korea indicated two persons were killed and hundreds were left homeless on Cheju Island. A barge carrying six persons sank in the sea off Tangsan-gun. All but three were rescued.

LOUISE

Louise's initial stages were detected by satellite in the west central Philippine Sea northeast of Samar Island on August 31. She generated to tropical storm strength just north of Luzon late on September 2d. On the 3d, the circulation appeared to be intensifying further, as the British ship SHEAF TYNE, 30 miles to the north of Louise's center, reported 60-kt. winds in squalls at 0000 GMT.

Emerging into the South China Sea, the storm tracked westward at 9 to 10 kt., under the influence of a developing mid-tropospheric anticyclone over southern China. Louise reached minimal typhoon force by 0000 GMT on the 5th, about 55 miles south of Pratas, as reconnaissance aircraft reported a central pressure of 986 mb. She remained a relatively small typhoon before landfall on the Luichow Peninsula at midday of the 8th, as 30-kt. winds did not appear to extend much beyond 100 miles, as evidenced by ship reports. Wanglan Island in Hong Kong, however, did report 31-kt. winds and gusts to 43 kt. as Louise passed 150 miles south of the colony on the 5th.

After a brief traverse of the Gulf of Tonkin, Louise, with winds of tropical storm strength, landed near Haiphong, North Vietnam, early on the 7th, weakened to a low-pressure area, and dissipated over northern Laos.

MARGE

Five days after the demise of Louise, Marge entered the South China Sea on September 12 as a tropical depression. Following her transit of northern Luzon, Marge quickly developed to tropical storm strength 125 miles northwest of Cape Bolinao. As steering currents were essentially unchanged over southern China, Marge was destined to follow the wake of her sister Louise by striking North Vietnam 2½ days later.

Maintaining a forward speed of 11 kt., Marge intensified steadily after entering the open waters of the South China Sea, reaching typhoon force as she passed 200 miles south of Hong Kong early on the 13th. The minimum central pressure that was measured during her lifetime, 964 mb., was reported later in the day at 0900 GMT by reconnaissance aircraft. Marge, like Louise, was characterized by a small circulation limited to 150 miles in diameter. Striking central Hai-nan Island late on the 13th with winds estimated near 80 kt., Marge emerged into the Gulf of Tonkin with tropical storm force some 12 hours later. Eventual landfall was accomplished 60 miles north of Ninh, North Vietnam, late on the 14th. Subsequently, Marge dissipated rapidly inland over the highlands of Laos.

NORA

Nora, the most intense tropical cyclone of the season, was the first of three typhoons during October to be spawned within the Yap-Guam island area. After an abnormal absence of tropical cyclone activity during the last 2 weeks of September, aircraft reconnaissance of a depression 200 miles north of the Palau Islands revealed the presence of tropical storm Nora. On October 2d, Nora's track became erratic for the next 48 hours as she gained strength to typhoon force. Setting out on a northwesterly to westerly course late on the 4th, she began a rapid intensification and crossed the supertyphoon threshold some 24 hours later. On the 6th, Nora's central pressure had reached extreme proportions, as evidenced by the 0020 GMT reconnaissance measurement of 877 mb. This tied the minimum pressure previously on record of 877 mb., as measured by aircraft dropsonde in the eye of typhoon Ida on September 24th, 1958. Observers reported at this time a tight circular eye, 8 miles in diameter, enclosed by a panoramic wall cloud with tops rising up to about 30,000 feet. A maximum 700-mb. flight level wind of 150 kt., accompanied by severe turbulence, was recorded during penetration of the storm core.

Nora remained at supertyphoon strength for over 24 hours, attaining maximum winds of 160 kt., until she veered to a northwestward track 225 miles east of Manila. This was in response to weakening of the subtropical ridge by a shortwave trough approaching the Yellow Sea. The typhoon tracked offshore of northeastern Luzon on the 7th, with her center crossing the coast briefly east of Aparri late that day, with maximum winds estimated at 95 kt.

Gale-force winds were experienced at several locations along Luzon's western coastline, as Nora emerged into the Balintang Channel of the Luzon Strait. Vigan and Laoag City reported gusts to 56 kt. and 50 kt., respectively, on the 8th. Earlier, at 1830 GMT on the 7th, the port area at Manila registered gusts to 68 kt. Nora brought moderate to heavy rains to northern Luzon, as Vigan recorded 10.3 inches and Bagio City received 13.3 inches during a 24-hour period. The heavy rainfall inflicted widespread damage, as many rivers and streams were flooded and numerous landslides were reported. These conditions were responsible for six deaths and 20 missing. Damage to crops and to public and private property was estimated at over $2 million. As a minimal typhoon, Nora continued to move in a northwesterly direction through the Luzon Strait at 6 to 8 kt. and tracked 60 miles southwest of Kaohsiung by midday of the 9th.

A peak gust of 68 kt. was registered at Tungchi, Pescadores Islands, as Nora's center passed 65 miles south of the station. Following the periphery of a mid-tropospheric high centered east of the Ryukyu Islands, Nora continued on course, making landfall on the China coast near Quemoy Island early on the 10th. Rapidly weakening, the storm quickly dissipated inland over Fukien Province late that day.

Heavy rains, up to 20.6 inches at Sinkong for 20 hours were recorded in the mountainous region of Taiwan. Many sections of highways were made impassible by numerous landslides and several bridges and rail lines sections were washed out. Twelve storm-related deaths and 28 missing were reported in Taiwan, while some 300 homes were totally destroyed and 160 badly damaged. Newspapers indicated about 1,000 persons were made homeless.

At sea, Nora played havoc with shipping, as she navigated the Taiwan Strait. The Philippine 3,483-ton freighter ASIAN MARINER sank just south of the Pescadores Islands. All 38 crewmen were rescued. Less fortunate was the 3,724-ton Greek freighter BALTIC KLIF, which capsized and sank about 80 miles southwest of the Pescadores. Three of the crew drowned, with several missing and presumed lost. The missile frigate USS WARDEN rescued the crew of the Taiwanese fishing vessel JAI TAI NR3, which was floundering in the high seas after its forward section split lengthwise. One crew member of the total complement of eigth was lost to the sea.

OPAL

Opal spent her 5-day lifetime in the South China Sea, before finally coming ashore on the South Vietnam coastline on October 8th.

Generating to tropical storm strength on the 4th, some 75 miles northwest of Nanshan Island, Opal progressed northwestward for the next 36 hours attaining typhoon intensity 150 miles east of Tuy Hoa. During the next 24 hours, Opal displayed erratic movement, describing a backwards "S," as she came under the influence of typhoon Nora's circulation 800 miles to the east in the Philippine Sea. As Nora began to veer to a northwesterly heading late on the 6th, Opal commenced a westerly track bearing down on the South Vietnam coastline. Dropping below typhoon status, Opal reached landfall north of Qui Nhon as a weak tropical storm early on the 8th and finally dissipated over the highlands region.

Opal was only the third typhoon to form within the South China Sea in October since 1945. The most recent was Iris in 1970.

PATSY

With typhoon Nora approaching Luzon and Opal in the South China Sea, the third typhoon of the month was detected by satellite in its formative stages just west of Guam.

The pre-Patsy system dumped 5.3 inches of rain on Guam over a 2-day period, causing some local flooding on the island, as she began her trek into the Philippine Sea. Evidence that Patsy was intensifying was provided by satellite on the 7th, revealing her organizing cloud structure. Patsy took a track north of Nora, as a strong mid-tropospheric suptropical ridge dictated a west-northwesterly course at 7 to 12 kt.

Patsy grew in strength as her central pressure plummeted on the 9th. At her height, the minimum pressure reported by reconnaissance aircraft was 893 mb., at 0020 GMT on the 10th. At this time, winds of 140 kt. were packed around Patsy's extremely tight 5-mile diameter eye, marking her as the third supertyphoon of the season. Patsy, however, was an abnormally small storm for its strength, as gale-force winds, at a maximum, were limited to distances of 125 miles in the north and east quadrants. Reconnaissance aircraft penetrating from the west did not encounter 35-kt. winds until within 30 miles of the center. Description of the eye by crew members indicated it was not the classic area of relative calm: "The sea state was marked by winds of 130 kt. converging to the center. Huge, churning waves approximately 2 miles long, with water sprays that looked like the 'rooster tail' of a high-speed hydroplane, were frequently seen converging to the center."

Late on the 10th, after dropping below supertyphoon strength, Patsy began to deteriorate rapidly, as upper tropospheric outflow from the typhoon became stifled. Within 24 hours, Patsy's winds decreased to tropical storm forces, as she approached the northern coast of Luzon. Satellite pictures revealed that the cirrus canopy had detached to the southwest of the center, indicating further weakening. As a depression, she skirted the coastline of Luzon on the 12th, eventually merging with a circulation system in the South China Sea late that day. On a westerly course, she briefly regained storm strength for a short period on the 13th before dissipating off the coast of South Vietnam near Hue the following day.

RUTH

The last typhoon of the year first appeared as a disturbed area of weather on satellite pictures, south of Guam, as Patsy was reaching her peak intensity in the Philippine Sea. Developing from a circulation in the monsoon trough, Ruth traveled on a general westward heading at a quick pace of 15 kt., reaching tropical storm force late on the 11th, 190 miles north of Yap. The storm was guided along the southern periphery of the subtropical ridge on a path somewhat parallel to Patsy's track, but further south, as the upper-air sterring pattern remained essentially unchanged. Ruth continued below typhoon strength for 3 days, until late on the 14th, when she was nearing Catanduanes Island in the Philippines. Aircraft reconnaissance indicated her central pressure had dropped to 982 mb., and winds of 65 kt. were observed in the eastern quadrant of her circulation.

During the next 20 hours, Ruth's central pressure fell markedly, as she took aim on the central Luzon coastline and slowly accelerated in forward speed. Reconnaissance aircraft observed a minimum reading of 961 mb. in her eye a few hours before landfall, near the town of Baler, on the 15th. Transiting the center section of Luzon's rugged mountain terrain in less than 12 hours, Ruth emerged on the west coast, south of Cape Bolinao, just below typhoon strength.

The maximum peak gust recorded at Baler was 95 kt. from the north, at 1355 GMT, while Casiguran, 50 miles further north on the coast, experienced a gust to 98 kt. 3 hours later. Rainfall amounts during 24-hour periods of up to 9.5 inches occurred at Baler, while Cabanatuan City, located further inland in the Pampanga River Valley, registered 12.2 inches.

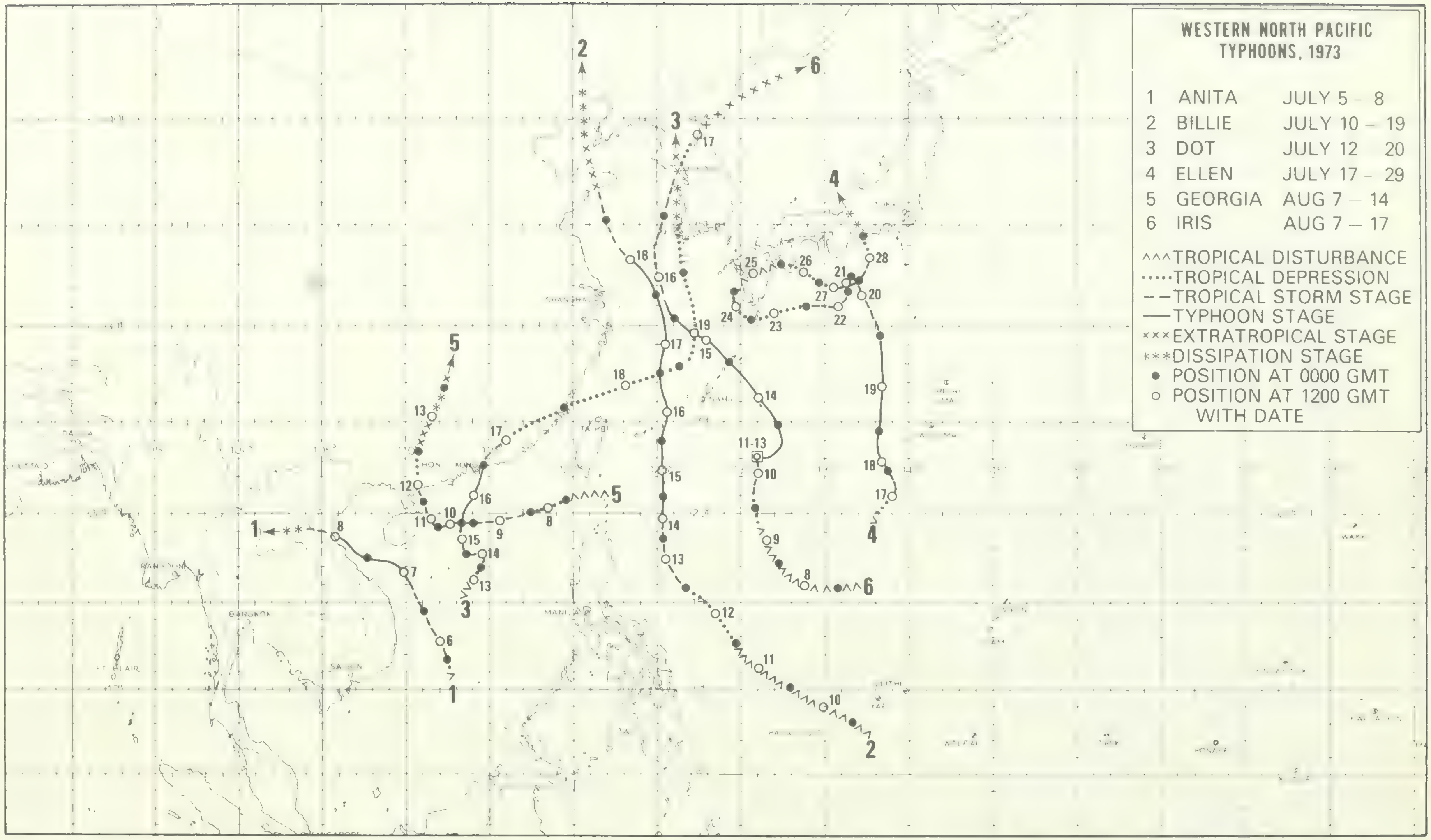
The Philippine Red Cross reported 90 percent of the houses and other public buildings in Baler were destroyed and 100 percent of its crops damaged. In addition, rain-swollen rivers washed out bridges and flooded several municipalities in central Luzon. Ruth left in its wake 27 dead and 23 missing, in addition to some 9,000 houses destroyed. Damage estimates exceeded $5 million.

Setting course for the Paracel Island group, Ruth regained typhoon intensity within 12 hours after reaching the South China Sea. An unidentified vessel passed close to the storm's center 80 miles west of Bolinao Point, at 0600 GMT on the 16th, experiencing easterly winds of 60 kt., with a pressure of 986.6 mb. Ruth continued to be guided on a westerly course by a high that dominated southeastern China. The typhoon continued to grow in intensity as she neared Hai-nan Island and reached her peak of 90-kt. winds by midday of the 17th, as reconnaissance aircraft reported that the minimum sea-level pressure near her center had dropped to 957 mb. at 0955 GMT. Five hours later, a meteorological station on one of the Paracel Islands reported 80 kt., 10 minute average, and 970.8 mb., as Ruth's center passed 30 miles to the north at 1500 GMT.

Earlier in the day at 0600 GMT, the Indian cargo ship VISHVA VIKRAM passed 80 miles southeast of the center and encountered 70-kt. winds and 997.1-mb. pressure. A Japanese tanker, GINKO MARU, some 120 miles northwest of Ruth's eye, reported 50-kt. winds at the same synoptic time.

Ruth turned toward the northwest the following day and crossed western Hai-nan Island, weakening to tropical storm strength late that day. After a brief passage across the Gulf of Tonkin, tropical storm Ruth landed on the North Vietnam coast 50 miles northwest of Haiphong and dissipated over Kwangsi Province in southern China, late on the 19th.

Ruth was the last tropical storm of the season to reach typhoon intensity. This was the earliest on record that a typhoon season has come to a close, at least since World War II.


WESTERN NORTH PACIFIC
TYPHOONS, 1973
1 ANITA JULY 5 - 8
2 BILLIE JULY 10 – 19
3 DOT JULY 12 20
4 ELLEN JULY 17 - 29
5 GEORGIA AUG 7 – 14
6 IRIS AUG 7 – 17
^^^TROPICAL DISTURBANCE
·····TROPICAL DEPRESSION
– –TROPICAL STORM STAGE
—TYPHOON STAGE
×××EXTRATROPICAL STAGE
***DISSIPATION STAGE
● POSITION AT 0000 GMT
○ POSITION AT 1200 GMT WITH DATE
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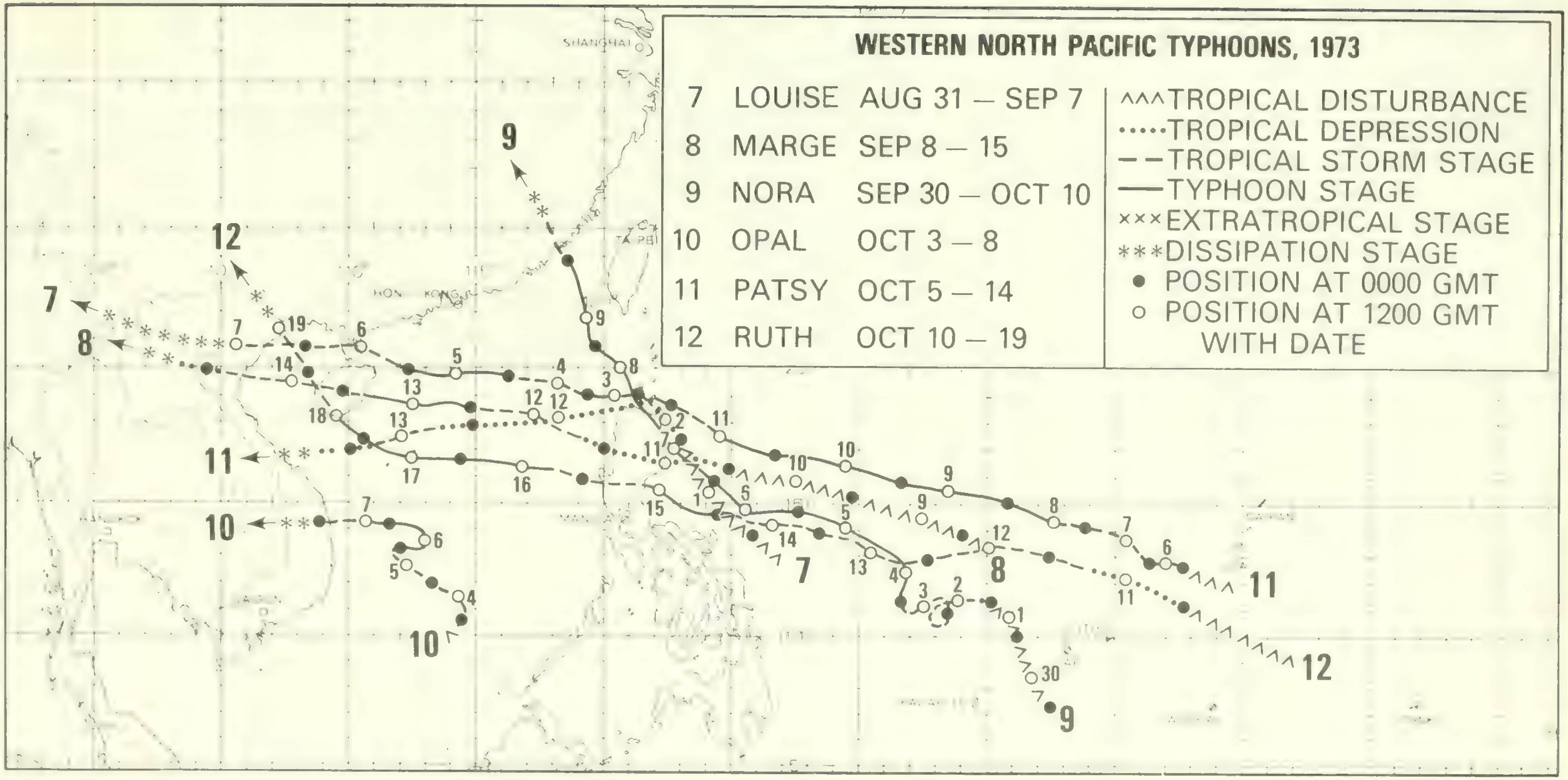
SHANGHAI
HONG KONG
MANILA
BANGKOK
SAIGON
RANGOON
PT BLAIR
SINGAPORE
TAIPEI
11-13


WESTERN NORTH PACIFIC TYPHOONS, 1973
7 LOUISE AUG 31 — SEP 7
8 MARGE SEP 8 — 15
9 NORA SEP 30 — OCT 10
10 OPAL OCT 3 — 8
11 PATSY OCT 5 — 14
12 RUTH OCT 10 — 19
^^^TROPICAL DISTURBANCE
·····TROPICAL DEPRESSION
— —TROPICAL STORM STAGE
——TYPHOON STAGE
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∗∗∗DISSIPATION STAGE
● POSITION AT 0000 GMT
○ POSITION AT 1200 GMT WITH DATE
SHANGHAI
TAIPEI
HONG KONG
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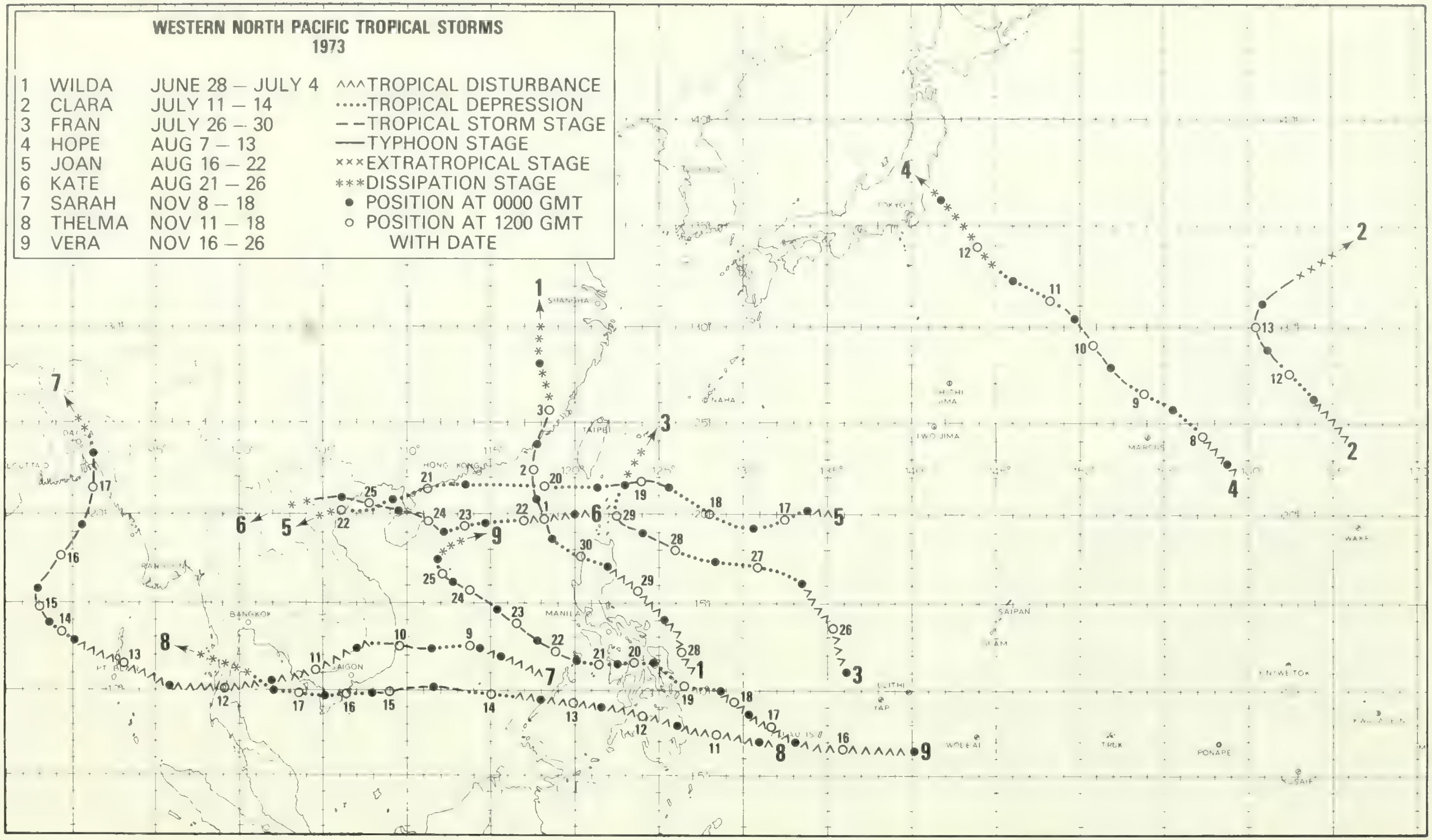

WESTERN NORTH PACIFIC TROPICAL STORMS
1973
1 WILDA JUNE 28 — JULY 4
2 CLARA JULY 11 — 14
3 FRAN JULY 26 — 30
4 HOPE AUG 7 — 13
5 JOAN AUG 16 — 22
6 KATE AUG 21 — 26
7 SARAH NOV 8 — 18
8 THELMA NOV 11 — 18
9 VERA NOV 16 — 26
^^^TROPICAL DISTURBANCE
·····TROPICAL DEPRESSION
– –TROPICAL STORM STAGE
——TYPHOON STAGE
×××EXTRATROPICAL STAGE
∗∗∗DISSIPATION STAGE
● POSITION AT 0000 GMT
○ POSITION AT 1200 GMT WITH DATE
SHANGHAI
TOKYO
NAHA
TAIPEI
HONG KONG
MANILA
BANGKOK
SAIGON
IWO JIMA
MARCUS
SAIPAN
GUAM
ENIWETOK
WAKE
YAP
ULITHI
WOLEAI
TRUK
PONAPE
KUSAIE

Table 1. --Frequency of tropical storms (including typhoons) by months and years*

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1945	0	0	0	1	1	2	5	7	6	1	3	0	26
1946	0	0	1	0	1	2	3	2	3	1	2	0	15
1947	0	0	1	0	1	1	3	3	5	6	6	1	27
1948	1	0	0	0	2	2	2	5	5	4	3	2	26
1949	1	0	0	0	0	1	5	3	6	1	3	2	22
1950	0	0	0	0	1	2	3	2	3	3	3	1	18
1951	0	0	1	2	1	1	1	2	2	4	1	2	17
1952	0	0	0	0	0	3	3	4	5	6	3	4	28
1953	0	1	0	0	1	2	2	6	3	4	3	1	23
1954	0	0	1	0	1	0	1	6	4	3	3	0	19
1955	1	0	1	1	0	1	6	3	3	4	1	1	22
1956	0	0	1	2	0	1	2	5	5	2	3	1	22
1957	2	0	0	1	1	1	1	3	5	4	3	0	21
1958	1	0	0	0	1	3	5	3	3	3	2	1	22
1959	0	1	1	1	0	0	3	6	6	4	2	2	26
1960	0	0	0	1	1	3	3	10	3	4	1	1	27
1961	1	1	1	1	3	2	5	4	6	5	1	1	31
1962	0	1	0	1	2	0	6	7	3	5	3	2	30
1963	0	0	0	1	1	3	4	3	5	5	0	3	25
1964	0	0	0	0	2	2	7	9	7	6	6	1	40
1965	2	2	1	1	2	3	5	6	7	2	2	1	34
1966	0	0	0	1	2	1	5	8	7	3	2	1	30
1967	1	0	2	1	1	1	6	8	7	4	3	1	35
1968	0	0	0	1	1	1	3	8	3	6	4	0	27
1969	1	0	1	1	0	0	3	4	3	3	2	1	19
1970	0	1	0	0	0	2	2	6	4	5	4	0	24
1971	1	0	1	3	4	2	8	4	6	4	2	0	35
1972	1	0	0	0	3	1	7	4	6	4	3	1	30
1973	0	0	0	0	0	1	6	6	2	3	3	0	21
Total	13	7	13	20	33	44	115	147	133	109	77	31	742
Avg.	.45	.24	.45	.69	1.14	1.52	3.97	5.07	4.59	3.76	2.66	1.07	25.59

Table 2. --Frequency of tropical storms reaching typhoon intensity by months and years*

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1945	0	0	0	0	0	1	2	5	3	1	1	0	13
1946	0	0	1	0	1	1	3	1	3	1	2	0	13
1947	0	0	0	0	1	1	0	3	4	5	4	1	19
1948	1	0	0	0	2	0	2	2	4	1	2	1	15
1949	1	0	0	0	0	1	3	3	3	1	1	1	14
1950	0	0	0	0	1	1	1	2	1	3	2	1	12
1951	0	0	1	2	1	1	1	2	2	3	1	2	16
1952	0	0	0	0	0	3	1	3	3	4	3	2	19
1953	0	1	0	0	1	1	2	4	2	4	1	1	17
1954	0	0	0	0	1	0	1	4	4	2	3	0	15
1955	1	0	1	1	0	1	5	3	3	2	1	1	19
1956	0	0	1	1	0	0	2	4	5	1	3	1	18
1957	1	0	0	1	1	1	1	2	5	3	3	0	18
1958	1	0	0	0	1	3	4	3	3	3	1	1	20
1959	0	0	0	1	0	0	1	5	3	3	2	2	17
1960	0	0	0	1	0	2	2	8	0	4	1	1	19
1961	0	0	1	0	2	1	3	3	5	3	1	1	20
1962	0	0	0	1	2	0	5	7	2	4	3	0	24
1963	0	0	0	1	1	2	3	3	3	4	0	2	19
1964	0	0	0	0	2	2	6	3	5	3	4	1	26
1965	1	0	0	1	2	2	4	3	5	2	1	0	21
1966	0	0	0	1	2	1	3	6	4	2	0	1	20
1967	0	0	1	1	0	1	3	4	4	3	3	0	20
1968	0	0	0	1	1	1	1	4	3	5	4	0	20
1969	1	0	0	1	0	0	2	3	2	3	1	0	13
1970	0	1	0	0	0	1	0	4	2	3	1	0	12
1971	0	0	0	3	1	2	6	3	5	3	1	0	24
1972	1	0	0	0	1	1	5	3	4	4	3	0	22
1973	0	0	0	0	0	0	4	3	2	3	0	0	12
Total	8	2	6	17	24	31	76	103	94	83	53	20	517
Avg.	.28	.07	.21	.59	.83	1.07	2.62	3.55	3.24	2.86	1.83	.69	17.83

*Prior to 1970, the month of occurrence may have been determined by the date the first warning was issued.

Table 3.--1973 Western North Pacific Tropical Storms and Typhoons

Name	Intensity	Date	Maximum surface wind (kt)+	Minimum observed sea level pressure(mb)	Deaths*	Missing*	Principal areas affected
Wilda	TS	June 28-July 4	60	982	---	---	Philippines, China
Anita	TY	July 5-8	70	980	---	---	North Vietnam
Clara	TS	July 11-14	50	998	---	---	Remained over water
Billie	STY	July 10-19	130	916	---	---	Shantung Peninsula, China
Dot	TY	July 12-20	85	978	1	---	Hong Kong, China
Ellen	TY	July 17-29	105	941	---	---	Japan, as depression
Fran	TS	July 26-30	40	1002	---	---	Remained over water
Georgia	TY	August 7-14	70	976	---	---	Hai-nan, southern China
Hope	TS	August 7-13	45	996	---	---	Remained over water
Iris	TY	August 7-17	85	972	2	3	Ryukyus, Korea
Joan	TS	August 16-22	45	990	---	---	Over water except as depression
Kate	TS	August 21-26	60	983	---	---	Hai-nan, North Vietnam
Louise	TY	Aug. 31-Sept. 7	75	974	---	---	Philippines, Luichow Peninsula
Marge	TY	Sept. 8-15	80	964	---	---	Philippines, Hai-nan, North Vietnam
Nora	STY	Sept. 30-Oct. 10	160	877	22	48	Philippines, Taiwan, China
Opal	TY	Oct. 3-8	75	968	---	---	South Vietnam
Patsy	STY	Oct. 5-14	140	893	---	---	Philippines
Ruth	TY	Oct. 10-19	90	957	27	23	Philippines, Hai-nan
Sarah[x]	TS	Nov. 8-12	55	984	50	---	South Vietnam
Thelma	TS	Nov. 11-18	55	991	---	---	South Vietnam
Vera	TS	Nov. 16-26	50	990	75	58	Philippines, as depression
					177	132	

+ Estimate over water (period--1 min)

* Statistics recorded as available

[x] Moved into Bay of Bengal on Nov. 13 and became Tropical Cyclone 37-73

TS - Tropical Storm; TY - Typhoon; STY - Supertyphoon

FLOOD STAGE

YEAR 1972

The following sections, which would normally appear in this issue of the Climatological data, have been delayed. They will appear as delayed data in a sebsequent issue which normally carries late reports:

General Summary of Flood Losses - 1972

Annual Flood Losses for United States

Estimated Flood Losses - 1972

Loss of Life and Property in the United States from Floods 1925 - 1972

Distribution of Estimated Flood Losses - Charts

Losses in Individual Severe Floods since July 1902

Flood Damage Estimates by States - 1955-1972

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

YEAR 1973

R. J. Haley, Office of Hydrology

Monetary losses from flooding in the United States during 1973, when finally tabulated, are expected to be the second highest ever sustained. Total damage for the year will porbably be as high as $1.7 billion. This figure has been exceeded only by losses during 1972 when flooding from Hurricane "Agnes" devastated large areas in the eastern U. S.

The most significant event was the spring flooding in the Mississippi Valley resulting in losses of more than $1 billion.

Following is a brief summary by months of the most significant flooding during the year. A summary of flood events resulting in loss of life and/or monetary losses appears in the monthly issues of this publication.

JANUARY

Severe flooding occurred in the central coastal basins in California. The lower Russian River basin received 12 inches of rain from the 8th to the 12th, and more than 11 inches from the 15th to the 18th. The greatest damage occurred in Marin County where water backed up into low lying areas due to the heavy runoff and very high tides. Preliminary estimates of total damage were put at $10 million. Flash flooding in San Luis Obispo County during a storm on the 18th, which produced rainfall totals approaching 9 inches, resulted in nearly $5 million damage. About $4 million of this occurred in the city of San Luis Obispo, CA. One life was lost.

Heavy crop damage was reported along the lower Ohio River, in the lower Mississippi River basin along the main stem Mississippi River in the Missouri Bootheel region, and in tributary basins in the State of Mississippi.

FEBRUARY

Widespread and extensive flooding occurred in the Carolinas during February. Some North Carolina streams reached the highest level in 20 years. In South Carolina, Black Creek reached the highest stage in over 90 years near Florence. Damage from the Carolina flooding ran into the millions of dollars.

Severe flooding occurred in New Jersey in the Raritan River basin and in the Trenton area from overflow of Assunpink Creek. State Civil Defense officials placed total damage estimates at $10 to $12 million, mostly to residential property.

MARCH

The month of March saw the beginning of the historic flood on the Mississippi River, which was to persist in some areas into June. By the end of the month, the Mississippi was above flood level from Clinton, IA, to Donaldsonville, LA, a distance of more than 1,300 miles. Flooding also occurred at stations upstream to Wabasha, MN, during the month. Major flooding occurred along the lower Missouri, the lower Ohio, and many other tributary streams in the Mississippi Valley. Record flooding occurred on some tributaries of the Tennessee River in Tennessee. Total damage in the Mississippi System during March was estimated at more than $160 million, with Missouri, Illinois, Tennessee, and Mississippi sustaining the greatest losses.

Major flooding occurred in the East Gulf Drainage in Mississippi and Alabama. Record high stages were observed on portions of the Tombigbee River. Damage estimates were placed at more than $35 million.

APRIL

The principal flood event during April was the continuation of the severe overflow that began in March along the Mississippi main stem and lower portions of tributary streams in the Mississippi Valley. This flooding was aggravated by additional periods of heavy rainfall from the middle to the end of April. The Mississippi River rose to record high levels from the vicinity of Burlington, IA, to Cape Girardeau, MO, and the highest stages since 1950 were recorded at many stations below the mouth of the Ohio River. Record high levels were observed also on the lower portions of the Wapsipinicon, the Iowa, the Skunk Rivers in Iowa, the lower Rock River in Illinois, and on a portion of the lower Missouri River in Missouri. Diversions from the Mississippi River (which began thru the Bonnet Carre Spillway on the 8th, thru the Old River Control on the 15th, and thru the Morganza Spillway on the 17th) prevented serious flooding on the extreme lower Mississippi. Some tributaries experienced serious flooding due to backwater from the Mississippi. One such was the Yazoo River in Mississippi which could not drain and formed a lake 60 miles long and about 40 miles wide.

Millions of acres of rich farmland were inundated throughout the Mississippi Valley. Tens of thousands of persons were evacuated from their homes. The entire population of the community of Oakland Mills, IA, on the Skunk River, was evacuated. Damage to roads, buildings, and bridges was extensive.

Severe flooding occurred also in Maine on the St. John and on the Penobscot Rivers. The St. John River reached a record high level at Ft. Kent, ME. Damage estimates were placed at more than $4 million, and one life was lost.

MAY

The severe flooding in the Mississippi Valley, which had its beginning during March, persisted in some areas thru May. During the prolonged overflow the Mississippi River experienced flooding from Wabasha, MN, to New Orleans, LA, a distance of more than 1,700 miles. The highest stages of record were observed at many points along the central reach of the Mississippi. The major crest at Cape Girardeau, MO, occurred on May 1 when a stage of 45.6 feet was observed. This was 13.6 feet above the 32-foot flood stage and exceeded by more than 3 feet the previous record crest of 42.5 feet which occurred in 1844. The highest stage since 1945 was reported on the lower Mississippi at Red River Landing, LA. On the Atchafalaya River, the highest crest in 70 years of record was observed at Morgan City, LA, when the river rose to 13.7 feet, 6.7 feet above flood level.

Serious flooding occurred along the South Platte River and tributaries in the vicinity of Denver, CO, following 4 inches of rain falling on ground saturated from snowmelt and previous rains. River gages were washed out at Kersey and Ft. Lupton, CO, and the highest stages of record are believed to have occurred at Kersey and Weldona, CO. Preliminary damage estimates were placed at more than $50 million.

Severe flooding in the headwater areas of the New River in North Carolina and Virginia resulted in 7 deaths and near $8 million damage. The French Broad River basin in western North Carolina experienced severe flooding and flash flooding with 12 lives lost due to drowning and $30 million damage estimated.

JUNE

June saw the end of the historic flood in the Mississippi River system. Serious flooding occurred in New England and other eastern states, and severe flooding on some Texas streams.

The flooding in the Mississippi Valley was of record proportions, both in terms of stages reached and of duration. At St. Charles, MO, the Missouri River was above flood stage for 72 days. The Mississippi River was in flood for 76 days at St. Louis, MO, the Ohio River at Cairo, IL, for 97 days, and the Illinois River at Beardstown, IL, for 126 days. Estimates by the Corps of Engineers place damage from this flooding at nearly $1.2 billion. Nearly 16 million acres were inundated, and more than 50,000 persons were forced from their homes by the flood waters.

At the end of the month 3 to 6 inches of rain fell over many areas in the Lake Champlain drainage in Vermont. This produced severe flooding which resulted in more than $16 million damage. More than 800 persons were evacuated from their homes at Montpelier, VT, where the Winooski River reached the second highest stage of record. Severe flooding occurred also late in the month on other New England streams following rainfall which ranged from 2.5 inches to as much as 9 inches over the region. Hundreds of persons were evacuated from their homes in more than a score of communities, a total of 11 persons lost their lives, and property damage of near $64 million was sustained.

The late June storm produced serious flooding in the Delaware River basin which caused 3 deaths and more than $8 million damage, while at least $1 million damage was sustained in the Susquehanna Basin. In other areas in the east coast States, preliminary estimates of $10 million damage were reported due to flooding along eastern North Carolina streams, a record flood on the Black River in South Carolina caused 3 deaths and nearly $1 million damage, and more than $1 million damage occurred from overflow of other South Carolina rivers. Also, in the East Gulf Drainage, more than $2.5 million damage occurred in the Chattahoochee Basin in Fulton and DeKalb counties in Georgia.

In Texas more than $11 million in property damage was reported in the Neches River basin following three periods of heavy rainfall with 45,000 acres inundated. Flooding in the Trinity River basin covered 112,000 acres with heavy property damage totaling almost $30 million. And in the San Jacinto River Basin, the worst flooding in 25 years caused 10 deaths and as much as $62.5 million damage, $50 million of which occurred in Harris county alone. During this flooding well over 2,000 homes sustained major damage and hundreds of others received minor damage; 80 mobile homes were destroyed and many more received major damage.

JULY

Flooding in the San Antonio, Guadalupe, and Frio River basins in Texas was of near record proportions in some areas. Widespread rural areas were inundated. Considerable damage to personal property resulted, especially in the smaller watersheds. One death occurred on Cibolo Creek and another on Leon Creek. In the Tornillo, TX, vicinity, several arroyos which flow into the Rio Grande flooded 6,000 acres of land with well over a $1 million damage to crops and irrigation systems. Two deaths and more than $5 million damage occurred in the lower Connecticut Valley of Vermont and central lakes region of New Hampshire. Three deaths occurred from flash flooding on Tom's Brook, a minor tributary of the Shenandoah River in Virginia. Serious flooding occurred in Iowa along the Raccoon River (which rose to a record high level at Van Meter) and along the Des Moines River just below the mouth of the Raccoon. An estimated $1 million damage occurred in the vicinity of Charleston, WV, during flash flooding that resulted from 5 inches of rain in two hours.

AUGUST

Severe flooding with record crest stages, extensive damage and 6 fatalities occurred in the Passaic and Raritan River basins in New Jersey during early August. In addition, 34 persons were injured and more than 1,000 persons were evacuated from their homes. Among the communities most seriously affected were Plainfield, Bound Brook, Middlesex Borough, Dunellen, Maplewood, Orange, and South Orange. Rainfall amounts ranged from 2.5 inches to more than 9 inches. Damage was estimated at $67 million. This same storm caused severe flash flooding in the Schuylkill River basin in Pennsylvania where damage totalled $1.5 million.

Record flooding in the Yadkin River basin in North Carolina caused extensive damage to commercial and industrial property, as well as damage to highways, bridges, and agriculture. Total losses were put at more than $900,000.

SEPTEMBER

The most significant flooding occurred in the Kansas River basin of Kansas and Nebraska. Rainfall totals for the month ranging from 200 to 600 percent of normal produced the highest stages and the most serious overflow since 1951. Nearly 250,000 acres were inundated. Damage was heavy to agriculture, and to public, industrial, and commercial property with preliminary estimates of losses put at almost $19 million. Two flood-related fatalities were reported. The storms which produced this major flooding also caused about $4 million damage in the lower Missouri River and tributaries.

Heavy flooding also occurred in portions of the Arkansas Basin in Kansas, from Kinsley to Great Bend, and from Hutchinson to Oxford. More than 90,000 acres were flooded and damage in excess of $8 million was sustained, more than half of which was to agriculture.

Several million dollars of agricultural damage resulted from the overflow of Oak and and Willow Creeks following torrential rainfall in the vicinity of Bottineau, ND, early in September. Flash flooding along Reedy Fork Creek and Little River caused extensive damage totalling $4.6 million to a shopping center in Laurens, SC, about mid-month.

Significant flooding occurred in Texas in the Neches, Trinity, and Guadalupe River Basins. Four deaths were reported, 3 in the San Antonio area and 1 near Cestohowa. Damage to all classes of property totalled more than $10 million, about $3 million of which was sustained in Bexar County and San Antonio.

OCTOBER

Severe and widespread flooding occurred over a large area in the central Midwest during early October, involving the Kansas, Lower Missouri, and Arkansas River basins. Some areas in Missouri were still in the process of recovering from the severe flooding during the previous month when an early October storm brought renewed flooding. New record high crests were established on the Little Blue River at Fairbury, NE, and at Hanover, KS, on the Big Blue River at Beatrice, NE, and at Blue Rapids, KS, and on Soldier Creek near Topeka, KS. The highest stages since the record 1951 crests were observed in some other parts of the basin, on the Solomon, Saline, and lower Smoky Hill Rivers. There was extensive damage to residential, agricultural, and other property. Elsewhere in the lower Missouri Basin, from Rulo, NE, to the mouth, heavy damage occurred along Nebraska and northern Missouri tributaries, as well as along the main stem of the Missouri. Preliminary estimates for tributary basins were put at $23.2 million with 290,000 acres flooded; and along the main stem Missouri, $41.8 million with 373,000 acres flooded. Probably 80 percent or more of the reported losses was to agriculture.

Severe flash flooding and record to near-record high river stages resulted from record 24-hour rainfall over a portion of the Arkansas River basin on the 10th-11th. Enid, OK, received 15.68 inches in 12 hours, and 75 percent of this occurred in a 4-hour period. Unofficial amounts of 20 inches were noted in a special survey of the area. The crest at Tonkawa, OK, on Salt Fork exceeded the previous record set in 1923, while those at Blackwell, OK, on the Chikaskia River and at Ralston, OK, on the Arkansas were only slightly lower than the 1923 levels. Other communities affected, all in Oklahoma, included Waynoka, Dover, Guthrie, and Perkins on the Cimarron River, and Ponca City on the Arkansas River. Property damage along the main stem,Arkansas alone,was estimated at $10 million with an additional $20 million to agriculture.

Moderate flooding in Texas in the Sabine, Trinity, Guadalupe, Nueces, and Colorado Basins caused more than $1 million damage. And $1.5 million damage occurred along Carlanna Creek in extreme southeastern Alaska when a earthen dam failed following a heavy rainfall.

NOVEMBER

Flooding during November was comparatively light although a few small basins experienced serious overflow. Flash flooding which occurred in several counties along the West Virginia-Kentucky border resulted in damage totalling approximately $750,000 and major flooding in the upper Cumberland River Basin in southeast Kentucky caused at least $2 million damage.

Otherwise, the most significant flooding occurred in Oregon where more than $2 million damage was sustained in the Pudding and Tualatin Basins, and $366,000 in the Oregon coastal basins.

DECEMBER

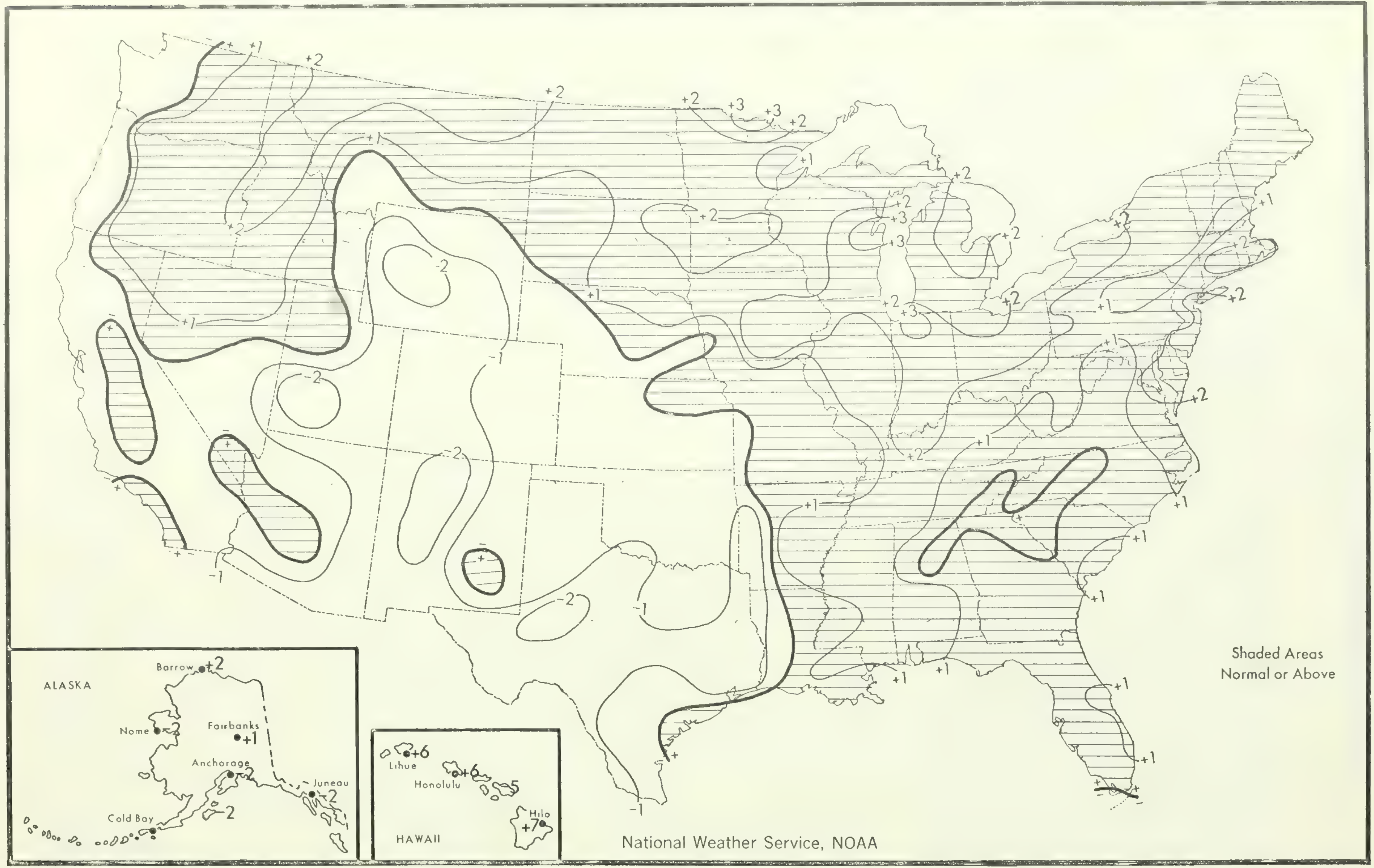
Three seperate storms produced major flooding on several New England streams in December. The second greatest flooding since 1936 occurred on the Kennebec and the Androscoggin Rivers in Maine where, in addition to more than $5 million damage, there were two lives lost. In New Hampshire damage was estimated at $2 million on the Pemigewasset River and on Beaver Brook. There was one flood-related fatality reported in Vermont.

Flooding in New Jersey necessitated the evacuation of 550 families in the cities of Lodi, Garfield, Elmwood Park, Fairfield, and Oakland. Flooding along Perkiomen Creek in eastern Pennsylvania drove 150 families from their homes.

Record overflow occurred in the Greenbrier River basin in West Virginia. Greenbrier County experienced the worst flooding in 55 years. Significant agricultural damage occurred in several areas, especially on streams in Alabama, Mississippi, and Arkansas.

An Ice jam on the lower Rock River in Illinois backed up water for more than 7 miles causing overflow which caused about $500,000 damage.

Chart I. Departure from Normal of Annual Temperature (°F) at Surface, 1973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Normal or Above
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Barrow +2
Nome -2
Fairbanks +1
Anchorage -2
Juneau -2
Cold Bay
-2
HAWAII
Lihue +6
Honolulu +6
+5
Hilo +7
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+3
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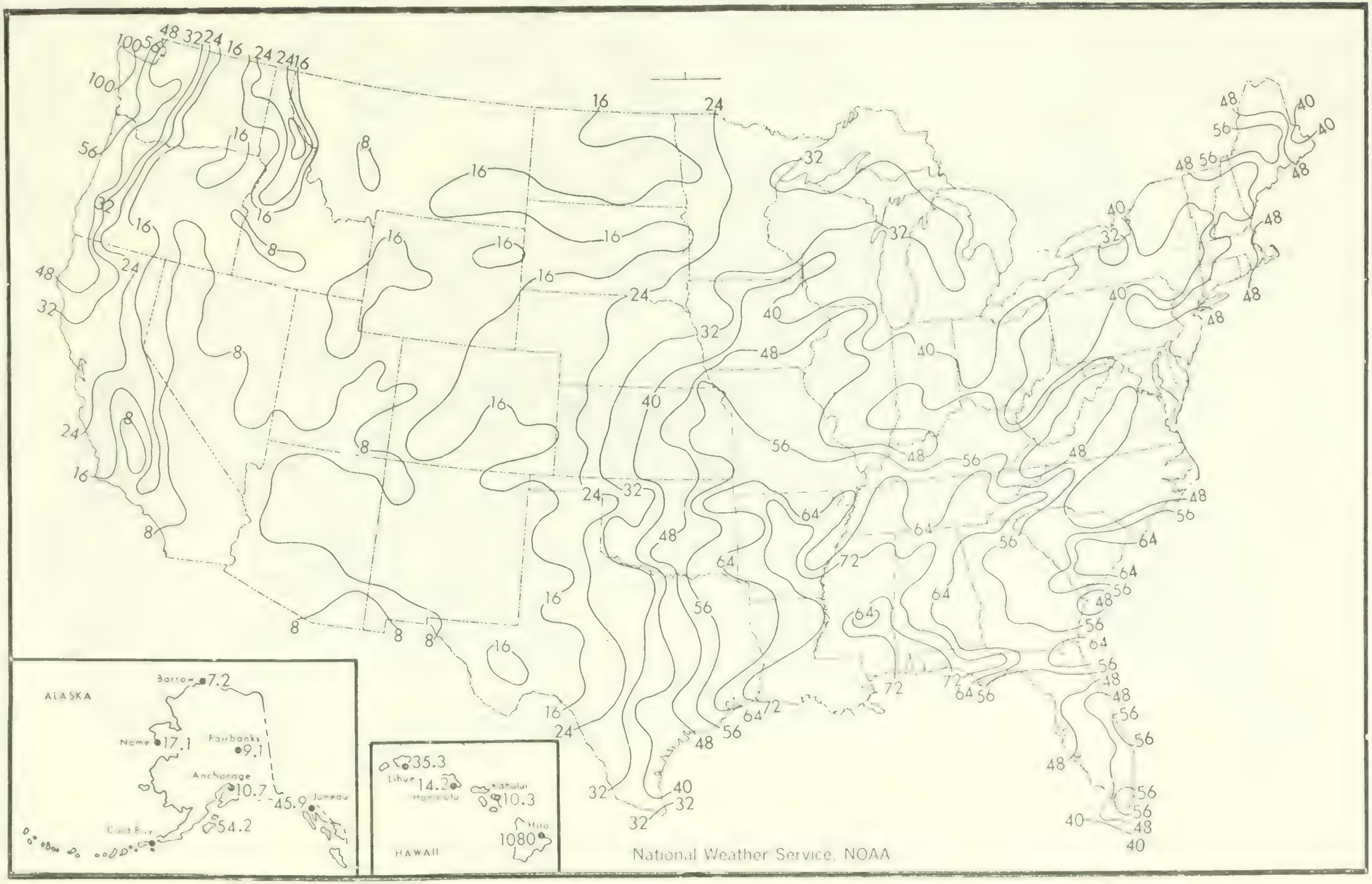
Chart II. Total Annual Precipitation (inches), 1973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Fairbanks 9.1
Anchorage 10.7
Juneau 45.9
54.2
Cold Bay
HAWAII
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Kahului
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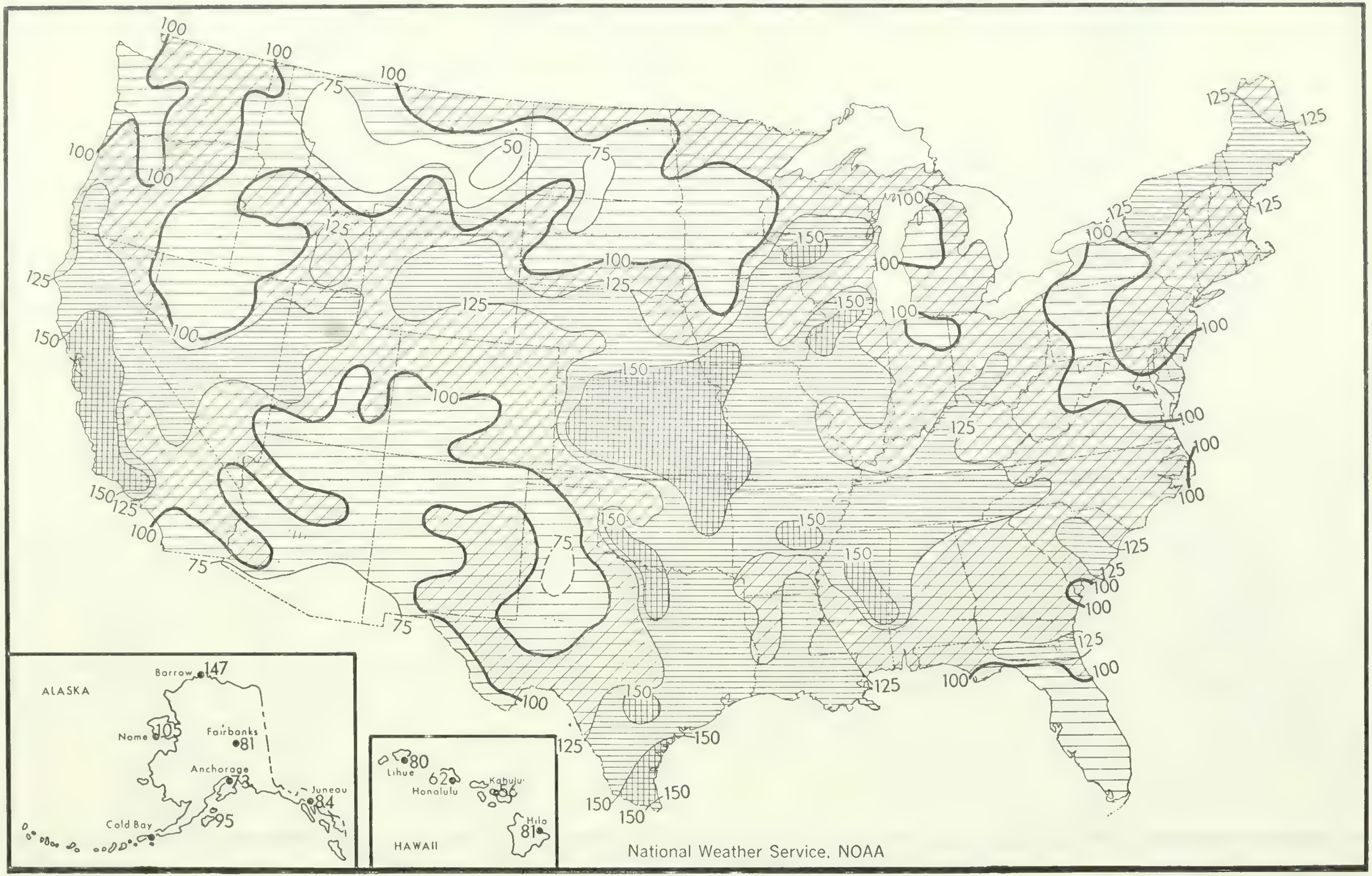
Hilo
1080

National Weather Service, NOAA

Chart III. Percentage of Normal Annual Precipitation, 1973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Nome
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Fairbanks
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Anchorage
73
Juneau
84
Cold Bay
95
HAWAII
Lihue
80
62
Honolulu
Kahului
56
Hilo
81

National Weather Service, NOAA

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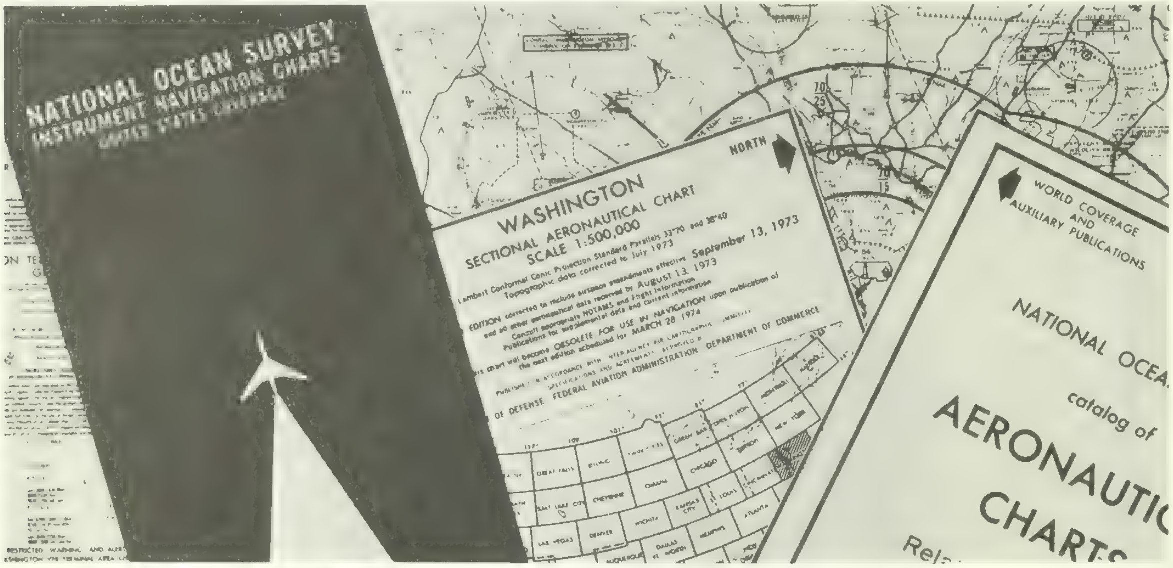
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